



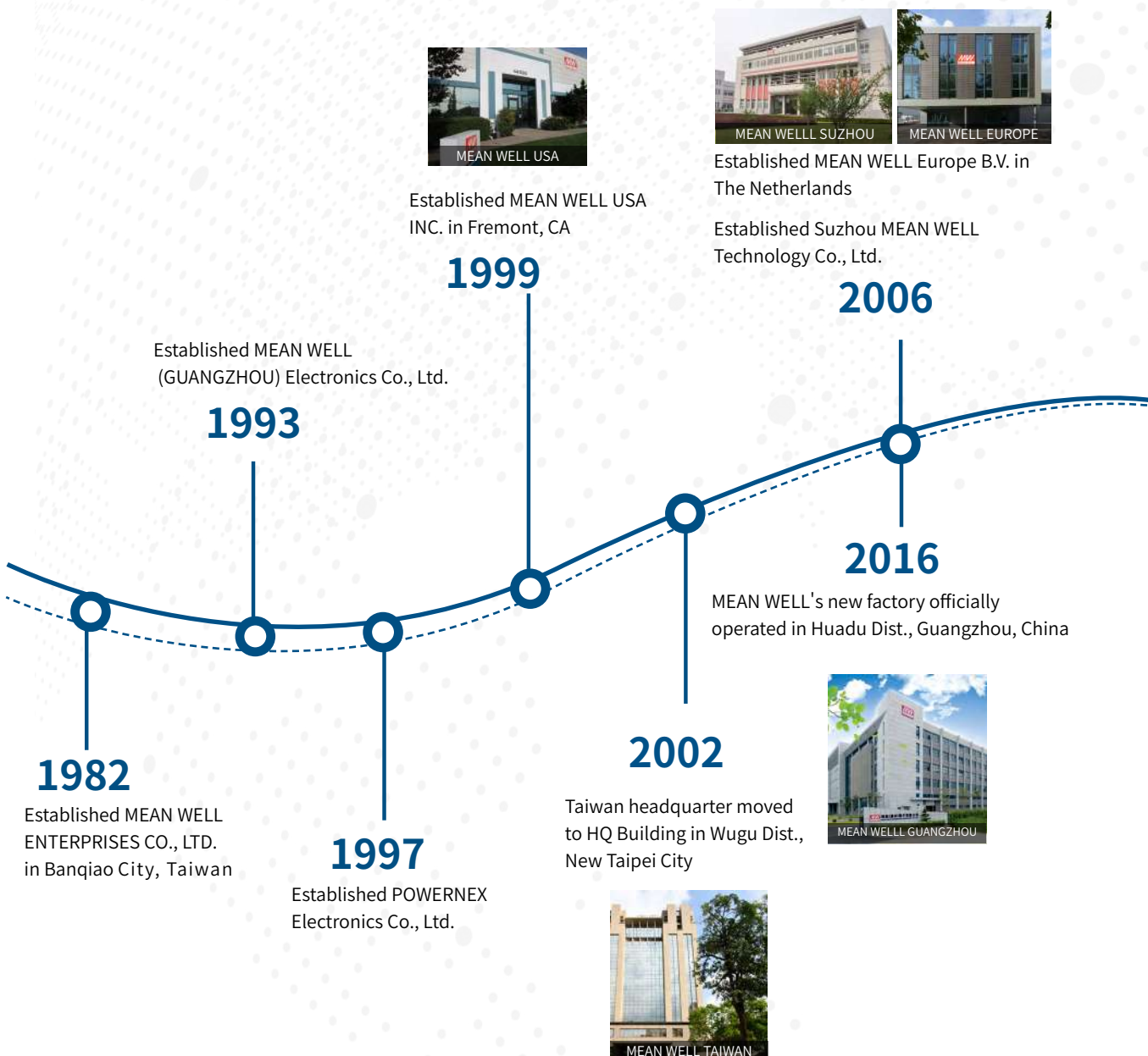
*Your Reliable Power Partner*  
**Standard Switching Power Supply Manufacturer**



# Group Overview

Founded in 1982, MEAN WELL is one of the world's few manufacturers dedicated to standard power supply products. It is ranked the 4th in global power supply (DC output) makers according to a report by Micro Technology released in March, 2021.

MEAN WELL has been working as a "reliable partner" with customers, suppliers, contractors, and employees to build long lasting mutual trust relationships based on the spirit of "good intentions." The product lines include AC/DC power supplies, LED drivers, AC/DC battery chargers, DC/DC converters, DC/AC inverters. We have over 10,000 standard models widely used in medical, automation, communication, LED lighting, moving sign, and office automation fields.



MEAN WELL Smart Park officially operated in Suzhou, China  
 SDG Take-off year  
 SDG Group (MEAN WELL / POWERNEX / SHARE WELL) aims to establish more ESG companies.  
 Established MEAN WELL Malaysia Sdn. Bhd.  
 Established Suzhou SHARE WELL Tech. Co., Ltd  
 Established Suzhou SHARE WELL SMD Technology Co., Ltd.  
 Established Suzhou SHARE WELL Magnetic Technology Co., Ltd.  
 Established Suzhou CHENG WELL Precision Technology Co., Ltd.  
 Established Powernex Management Consulting Co., Ltd.  
 Established Powernex Precision Technology Co., Ltd.

Consolidated revenue of US\$1 billion  
 (approximately RMB 7 billion)

Established MEAN WELL International Co., Ltd, in Seoul, Korea

Established MEAN WELL ASEAN Regional Office in Kuala Lumpur, Malaysia

Established MEAN WELL Russia Representative Office in Saint-Petersburg

Established Guangzhou SHARE WELL Investment Co., Ltd.



Established SUZHOU SHARE WELL CERTIFICATION CO., LTD.



## Historical Evolution: 1982—2023→



# Competitiveness



## Product

Up to 10,000 models with adding 10% new products and phasing out 5% old products every year.



## Quality

High reliability and quality indicator – 10% lower.



## Cost

High cost-performance products, stable material price due to integration.



## Delivery

24-hour delivery for small amount order, 14-day delivery for frequent purchase standard products.



## Service

Service in 24 hours is offered by MEAN WELL Group and our distributors.



## Reliable Relationship

75% of total revenue and purchases come from customers and suppliers with more than 15 years transaction.



# Standard Power Supply Solution

## 2 Main Stream Product Lines



Enclosed Type



LED Driver

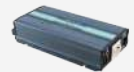
## 6 Niche Product Lines



DIN Rail Type



Battery Charger



DC/AC Inverter



DC/DC Converter



Adaptor



On Board Type

## 3+N System solutions



KNX Product



DALI-2 Controller



CMU2 Control and Monitor Unit



19" Rack Power

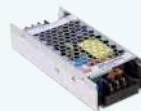


Modular Power



System Power

## VFD Variable Frequency Drive



Enclosed Type



PCB Type

# INDEX

## AC-DC Enclosed



The Premium Series



The Best Cost-Performance

### Without PFC

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# LRS Series 35~600W Low profile Single Output Enclosed Type



LRS-200 LRS-150 LRS-100 LRS-75 LRS-35/50  
LRS-200N2 LRS-150F LRS-100N2



LRS-350-600  
LRS-350-600N2



## Features

- Withstand 300 VAC surge input for 5 sec
- **1U low profile (30~41mm)**
- Withstand 5G vibration test
- High operating temperature up to 70°C
- Protections: Short Circuit/Overload/Over Voltage/Over Temp. (LRS-150~600)
- Cooling by free air convection (LRS-35~200)
- **Provide 200% peak power (LRS-100N2/200N2/350N2/600N2)**
- Forced air cooling by built-in DC fan (350~600W)
- Operating altitude up to 5000 meters
- Long MTBF, 1500k~3300k hrs all series
- LED indicator for power on
- 3 years warranty

## Models



Model No.	LRS-35	LRS-50	LRS-75	LRS-100	LRS-100N2	LRS-150F	LRS-150
Vin	85~264VAC	85~264VAC	85~264VAC	85~264VAC	85~264VAC	85~264VAC	115/230VAC by switch
Vout /Iout	5V, 0~7A	3.3V, 0~10A	5V, 0~14A	3.3V, 0~20A	12V, 0~8.5A	5V, 0~22A	12V, 0~12.5A
	12V, 0~3A	5V, 0~10A	12V, 0~6A	5V, 0~18A	24V, 0~4.5A	12V, 0~12.5A	15V, 0~10A
	15V, 0~2.4A	12V, 0~4.2A	15V, 0~5A	12V, 0~8.5A	36V, 0~2.8A	15V, 0~10A	24V, 0~6.5A
	24V, 0~1.5A	15V, 0~3.4A	24V, 0~3.2A	15V, 0~7A	48V, 0~2.3A	24V, 0~6.5A	36V, 0~4.3A
	36V, 0~1A	24V, 0~2.2A	36V, 0~2.1A	24V, 0~4.5A		36V, 0~4.3A	48V, 0~3.3A
	48V, 0~0.8A	36V, 0~1.45A	48V, 0~1.6A	36V, 0~2.8A		48V, 0~3.3A	
Dimension (mm)	99x82x30		99x97x30	129x97x30		159x97x30	

Model No.	LRS-200	LRS-200N2	LRS-350	LRS-350N2	LRS-450	LRS-600	LRS-600N2
Vin	115/230VAC by switch						
Vout /Iout	3.3V, 0~40A	12V, 0~17A	3.3V, 0~60A	12V, 0~29A	5V, 0~75A	5V, 0~100A	12V, 0~50A
	4.2V, 0~40A	24V, 0~8.8A	4.2V, 0~60A	24V, 0~14.6A	12V, 0~37.5A	12V, 0~50A	24V, 0~25A
	5V, 0~40A	36V, 0~5.9A	5V, 0~60A	36V, 0~9.7A	15V, 0~30A	15V, 0~40A	36V, 0~16.6A
	12V, 0~17A	48V, 0~4.4A	12V, 0~29A	48V, 0~7.3A	24V, 0~18.8A	24V, 0~25A	48V, 0~12.5A
	15V, 0~14A		15V, 0~23.2A		36V, 0~12.5A	27V, 0~22.2A	
	24V, 0~8.8A		24V, 0~14.6A		48V, 0~9.4A	36V, 0~16.6A	
	36V, 0~5.9A		36V, 0~9.7A			48V, 0~12.5A	
	48V, 0~4.4A		48V, 0~7.3A				
Dimension (mm)	215x115x30		215x115x30		225x124x35	225x124x41	



450~1500W Medium/High Power Enclosed Type

SE Series



SE-1500

SE-1000

SE-600

SE-450



SE Spec

## Features

- Protections: Short Circuit/Overload/Over Voltage/Over Temp.
- Forced air cooling by built-in DC fan
- Built-in remote sense function
- With DC\_OK signal output, built-in remote ON-OFF control (SE-1000/1500)
- LED indicator for power on
- 2 years warranty

## Models



Model No.	SE-450	SE-600	SE-1000	SE-1500
Vin	115/230VAC by switch			180~264VAC
Vout /Iout	3.3V, 0~75A	5V, 0~100A	5V, 0~150A	5V, 0~300A
	5V, 0~75A	12V, 0~50A	9V, 0~100A	12V, 0~125A
	12V, 0~37.5A	15V, 0~40A	12V, 0~83.3A	15V, 0~100A
	15V, 0~30A	24V, 0~25A	15V, 0~66.7A	24V, 0~62.5A
	24V, 0~18.8A	27V, 0~22.2A	24V, 0~41.7A	27V, 0~55.6A
	36V, 0~12.5A	36V, 0~16.6A	48V, 0~20.8A	48V, 0~31.3A
	48V, 0~9.4A	48V, 0~12.5A		
Dimension (mm)	225x124x50	247x127x63.5	278x127x63.5	278x177.8x63.5

\* Highly recommended to use LRS-450/600 for SE-450/600 replacement

# G3 Series

## 15~150W Miniwatt Multi-Output Enclosed Type



RS-150  
RD/ID/T/Q-125

RS-100  
RD/ID/T/Q-85

RS-75  
RD/ID/T/Q-65

RS-50  
RD/ID/T/Q-50

RS-35  
RD-35

RS-25

RS-15



G3 Spec

## Features

- Universal full range input: 88~264 VAC
- All using 105°C long life electrolytic capacitors
- Protections: Short Circuit / Overload /Over Voltage / Over Temp. (RS-15)
- Withstand 300VAC surge input for 5 sec.
- Withstand 5G vibration
- High operating temperature up to 70°C
- Miniature size
- Cooling by free air convection
- LED indicator for power on
- 3 years warranty

## Models

### Single Output



Model No.	RS-15	RS-25	RS-35	RS-50	RS-75	RS-100	RS-150
Vout /Iout	3.3V, 0~3A	3.3V, 0~6A	3.3V, 0~7A	3.3V, 0~10A	3.3V, 0~15A	3.3V, 0~20A	3.3V, 0~30A
	5V, 0~3A	5V, 0~5A	5V, 0~7A	5V, 0~10A	5V, 0~12A	5V, 0~16A	5V, 0~26A
	12V, 0~1.3A	12V, 0~2.1A	12V, 0~3A	12V, 0~4.2A	12V, 0~6A	12V, 0~8.5A	12V, 0~12.5A
	15V, 0~1A	15V, 0~1.7A	15V, 0~2.4A	15V, 0~3.4A	15V, 0~5A	15V, 0~7.0A	15V, 0~10A
	24V, 0~0.625A	24V, 0~1.1A	24V, 0~1.5A	24V, 0~2.2A	24V, 0~3.2A	24V, 0~4.5A	24V, 0~6.5A
	48V, 0~0.313A	48V, 0~0.57A	48V, 0~0.8A	48V, 0~1.1A	48V, 0~1.6A	48V, 0~2.3A	48V, 0~3.3A
Dimension (mm)	62.5x51x28	78x51x28	99x82x36	99x97x36	129x98x38	159x97x38	199x98x38

### Dual Output

Model No.	Output Number	RD-35A	RD-35B	RD-3513	RD-50A	RD-50B
Vout /Iout	CH1	5V, 0~4A	5V, 0~4A	13.5V, 0~2A	5V, 0~6A	5V, 0~6A
	CH2	12V, 0~1A	24V, 0~1.3A	-13.5V, 0~1.5A	12V, 0~3A	24V, 0~2A
Dimension (mm)		99x82x36			99x97x36	

Model No.	Output Number	RD-65A	RD-65B	RD-85A	RD-85B	RD-125A	RD-125B
Vout /Iout	CH1	5V, 0~8A	5V, 0~8A	5V, 0~10A	5V, 0~10A	5V, 0~15A	5V, 0~10A
	CH2	12V, 0~4A	24V, 0~3A	12V, 0~5A	24V, 0~2.5A	12V, 0~10A	24V, 0~5A
Dimension (mm)		129x98x38		159x97x38		199x98x38	

Note: Output isolation model available: RID-50/65/85 series (Please refer to the specification for details)

RT-125  
RQ-125RT-85  
RQ-85RT-65  
RQ-65RT-50  
RQ-50

G3 Spec

## Models

### Dual Output



Model No.	Output Number	RD-125-1224	RD-125-2412	RD-125-1248	RD-125-4812
Vout / Iout	CH1	12V, 0~7A	24V, 0~5A	12V, 0~7A	48V, 0~2.5A
	CH2	24V, 0~5A	12V, 0~7A	48V, 0~2.5A	12V, 0~7A
Dimension (mm)		199x98x38			

Model No.	Output Number	RD-125-2448	RD-125-4824	RD-125-1205	RD-125-2405
Vout / Iout	CH1	24V, 0~4A	48V, 0~2.5A	12V, 0~10.5A	24V, 0~5.3A
	CH2	48V, 0~2.5A	24V, 0~4A	5V, 0~3A	5V, 0~3A
Dimension (mm)		199x98x38			

Note: Output isolation model available: RID-125 series (Please refer to the specification for details)

### Quad Output

Model No.	Output Number	RQ-50B	RQ-50C	RQ-50D	RQ-65B	RQ-65C	RQ-65D
Vout / Iout	CH1	5V, 0~6A	5V, 0~6A	5V, 0~6A	5V, 0~8A	5V, 0~8A	5V, 0~8A
	CH2	12V, 0~1.5A	15V, 0~1.5A	12V, 0~1.5A	12V, 0~3A	15V, 0~3A	12V, 0~3A
	CH3	-5V, 0~1A	-5V, 0~1A	24V, 0~1A	-5V, 0~1A	-5V, 0~1A	24V, 0~1.5A
	CH4	-12V, 0~1A	-15V, 0~1A	-12V, 0~1A	-12V, 0~1A	-15V, 0~1A	-12V, 0~1A
Dimension (mm)		99x97x36			129x98x38		

Model No.	Output Number	RQ-85B	RQ-85C	RQ-85D	RQ-125B	RQ-125C	RQ-125D
Vout / Iout	CH1	5V, 0~10A	5V, 0~10A	5V, 0~10A	5V, 0~12A	5V, 0~12A	5V, 0~12A
	CH2	12V, 0~4A	15V, 0~4A	12V, 0~4A	12V, 0~4.5A	15V, 0~4A	12V, 0~4A
	CH3	-5V, 0~1A	-5V, 0~1A	24V, 0~1.5A	-5V, 0~1A	-5V, 0~1A	24V, 0~2.5A
	CH4	-12V, 0~1A	-15V, 0~1A	-12V, 0~1A	-12V, 0~1A	-15V, 0~1A	-12V, 0~1A
Dimension (mm)		159x97x38			199x98x38		

Note: Triple output models: RT-50/65/85/125 have no -5V or -12V (Please refer to the specification for details)

# RSP Series

75~500W Low/Medium Power Enclosed Type  
(with PFC function)



RSP-200 RSP-150 RSP-100 RSP-75



RSP-500 RSP-320



RSP Spec

## Features

- Universal full range input: 90~264 VAC
- Active PFC function
- 1U Low profile
- Cooling by free air convection (RSP-75~200)
- Forced air cooling by built-in DC fan(RSP-320/500)
- Built-in constant current limiting circuit (RSP-75/100/150)
- Remote ON/OFF control(RSP-75/100/150/500)
- Remote sense/DC OK signal(RSP-500)
- LED indicator for power on
- Protections: Short Circuit/Overload/Over Voltage/Over Temp.
- 3 years warranty

## Models



Model No.	RSP-75	RSP-100	RSP-150	RSP-200	RSP-320	RSP-500
Vout / Iout	3.3V, 0~15A	3.3V, 0~20A	3.3V, 0~30A	2.5V, 0~40A	2.5V, 0~60A	3.3V, 0~90A
	5V, 0~15A	5V, 0~20A	5V, 0~30A	3.3V, 0~40A	3.3V, 0~60A	4V, 0~90A
	7.5V, 0~10A	7.5V, 0~13.5A	7.5V, 0~20A	4V, 0~40A	4V, 0~60A	5V, 0~90A
	12V, 0~6.3A	12V, 0~8.5A	12V, 0~12.5A	5V, 0~40A	*5V, 0~60A	12V, 0~41.7A
	13.5V, 0~5.6A	13.5V, 0~7.5A	13.5V, 0~11.2A	7.5V, 0~26.7A	7.5V, 0~40A	15V, 0~33.4A
	15V, 0~5A	15V, 0~6.7A	15V, 0~10A	12V, 0~16.7A	12V, 0~26.7A	24V, 0~21A
	24V, 0~3.2A	24V, 0~4.2A	24V, 0~6.3A	13.5V, 0~14.9A	13.5V, 0~23.8A	27V, 0~18.6A
	27V, 0~2.8A	27V, 0~3.8A	27V, 0~5.6A	15V, 0~13.4A	15V, 0~21.4A	48V, 0~10.5A
	48V, 0~1.6A	48V, 0~2.1A	48V, 0~3.2A	24V, 0~8.4A	24V, 0~13.4A	
				27V, 0~7.5A	27V, 0~11.9A	
			36V, 0~5.56A	36V, 0~8.9A		
			48V, 0~4.2A	48V, 0~6.7A		
Dimension (mm)	159x97x30	179x99x30	199x99x30	215x115x30	215x115x30	230x127x40.5

\* RSP-320-5CC with conformal coating is suitable for LED moving sign applications, MOQ required.



# 750~3200W High Power Enclosed Type (with PFC function)

# RSP Series



RSP-2400/3000

RSP-1500



RSP-2000

RSP-1000

RSP-750

RSP-1600



RSP Spec

## Features

- 1U low profile(41mm): RSP-750/1000/1600/2000
- Active PFC function
- Forced air cooling by built-in DC fan
- High power density up to 25W/in<sup>3</sup>(RSP-1600)
- Output voltage programmable: Widest up to 40~125%
- Constant current level ICC programmable (RSP-750/1600 only)
- Built-in current sharing up to 3 units (RSP-2400/3000),4 units (RSP-1000/1500/2000)or 6 units (RSP-1600)
- Built-in remote sense & remoteON/OFF control
- Built-in auxiliary power, DC OK signal
- OTP alarm signal output (RSP-1600/2000)
- Optional conformal coating
- Protections: Short Circuit/Overload/ Over Voltage/Over Temp.
- 5 years warranty

## Models



Model No.	RSP-750	RSP-1000	RSP-1500	RSP-1600
Vin	90~264VAC	90~264VAC	90~264VAC	90~264VAC
Vout / Iout	5V, 0~100A	12V, 0~60A	5V, 0~240A	12V, 0~125A
	12V, 0~62.5A	15V, 0~50A	12V, 0~125A	24V, 0~67A
	15V, 0~50A	24V, 0~40A	15V, 0~100A	27V, 0~59A
	24V, 0~31.3A	27V, 0~37A	24V, 0~63A	36V, 0~44.5A
	27V, 0~27.8A	48V, 0~21A	27V, 0~56A	48V, 0~33.5A
	48V, 0~15.7A		48V, 0~32A	
Dimension (mm)	250x127x41	295x127x41	278x127x83.5	300x85x41

Model No.	RSP-2000	RSP-2400	RSP-3000
Vin	90~264VAC	180~264VAC	180~264VAC
Vout / Iout	12V, 0~100A	12V, 0~166.7A	12V, 0~200A
	24V, 0~80A	24V, 0~100A	24V, 0~125A
	48V, 0~42A	48V, 0~50A	48V, 0~62.5A
Dimension (mm)	295x127x41	278x177.8x63.5	278x177.8x63.5

# NSP Series

1600~3200W High Power Enclosed Type  
(with PFC function)



NSP-1600

NSP-3200



NSP Spec

## Features

- Universal full range input: 90~264 VAC
- Active PFC function
- Forced air cooling by built-in DC fan
- Output voltage programmable: Widest up to 40~125%
- Built-in intelligent fan speed control
- Protections: Short Circuit/Overload/Over Voltage/Over Temp.
- Built-in remote ON-OFF control/remote sense/auxiliary power
- DC OK signal/OTP alarm signal
- 5 years warranty

## Models



Model No.	NSP-1600	NSP-3200
Vout / Iout	12V, 0~125A	24V, 0~133A
	24V, 0~67A	48V, 0~67A
	36V, 0~44.5A	
	48V, 0~33.5A	
Dimension (mm)	300x85x41	325.8x107x41



PSP-600



PSPA-1000



## Features

- Built-in active PFC function
- Protections: Short Circuit/Overload/Over Voltage/Over Temp.
- Forced air cooling by built-in DC fan
- With DC OK signal output
- Current sharing up to 2400W(PSP-600); 4000W (PSPA-1000)
- Built-in remote sense/remote ON-OFF control
- 3 years warranty (PSP-600)
- 5 years warranty (PSPA-1000)

## Models



Model No.	PSP-600	PSPA-1000
Vin	88~264VAC	90~264VAC
Vout / Iout	5V, 0~80A	12V, 0~80A
	12V, 0~50A	15V, 0~64A
	13.5V, 0~44.5A	24V, 0~42A
	15V, 0~40A	48V, 0~21A
	24V, 0~25A	
	27V, 0~22.2A	
	48V, 0~12.5A	
Dimension (mm)	170x120x93	170x120x93

# HRP Series

75~1000W High Reliability Enclosed Type  
(with PFC function)



HRP(G)-1000 HRP(G)-600 HRP(G)-450 HRP(G)-300 HRP(G)-200 HRP(G)-150 HRP-100 HRP-75



## Features

- Withstand 300 VAC surge input for 5 sec.
- Built-in active PFC function
- Protections: Short Circuit/Overload/Over Voltage/Over Temp.(Optional for HRP-75/HRP-100)
- Built-in constant current limiting circuit
- Built-in remote sense function (HRP-150)
- Built-in 5V / 0.3A standby output (HRPG Series)
- DC OK signal output ( $\geq 200W$ )
- Current sharing function (HRPG-600-24/36/48,HRPG-1000)
- Cooling by free air ( $\leq 200W$ )
- Forced air cooling by built-in DC fan ( $\geq 300W$ )
- LED indicator for power on
- **5 years warranty**

## Models



Model No.	HRP-75	HRP-100	HRP□-150	HRP□-200
Vin	85~264VAC	85~264VAC	85~264VAC	85~264VAC
Vout / Iout	3.3V, 0~15A	3.3V, 0~20A	3.3V, 0~30A	3.3V, 0~40A
	5V, 0~15A	5V, 0~17A	5V, 0~26A	5V, 0~35A
	7.5V, 0~10A	7.5V, 0~13.5A	7.5V, 0~20A	7.5V, 0~26.7A
	12V, 0~6.3A	12V, 0~8.5A	12V, 0~13A	12V, 0~16.7A
	15V, 0~5A	15V, 0~7A	15V, 0~10A	15V, 0~13.4A
	24V, 0~3.2A	24V, 0~4.5A	24V, 0~6.5A	24V, 0~8.4A
	36V, 0~2.1A	36V, 0~2.9A	36V, 0~4.3A	36V, 0~5.7A
	48V, 0~1.6A	48V, 0~2.2A	48V, 0~3.3A	48V, 0~4.3A
Dimension (mm)	129x98x38	159x97x38	159x97x38	199x98x38

Model No.	HRP□-300	HRP□-450	HRP□-600	HRPG-1000
Vin	85~264V	85~264V	85~264V	90~264V
Vout / Iout	3.3V, 0~60A	3.3V, 0~90A	3.3V, 0~120A	12V, 0~80A
	5V, 0~60A	5V, 0~90A	5V, 0~120A	15V, 0~64A
	7.5V, 0~40A	7.5V, 0~60A	7.5V, 0~80A	24V, 0~42A
	12V, 0~27A	12V, 0~37.5A	12V, 0~53A	48V, 0~21A
	15V, 0~22A	15V, 0~30A	15V, 0~43A	
	24V, 0~14A	24V, 0~18.8A	24V, 0~27A	
	36V, 0~9A	36V, 0~12.5A	36V, 0~17.5A	
	48V, 0~7A	48V, 0~9.5A	48V, 0~13A	
Dimension (mm)	199x105x41	218x105x41	218x105x63.5	218x105x63.5

□=blank, G; blank: basic function, G: with 5Vsb & no load <0.5~0.75W





HRP-150N3

HRP-300N3

HRP-600N3

HRPG-1000N3



HRP-N3  
Spec

## ■ Features

- Universal full range input: 85~264 VAC
- Withstand 300 VAC surge input for 5 sec
- Built-in active PFC function, PF > 0.95
- **350% peak power capability**
- High efficiency up to 94%
- Withstand 5G vibration
- Protections: Short Circuit/Overload/  
Over Voltage/Over Temp.
- Cooling by free air convection (HRP-150N3)
- Built-in cooling fan ON/OFF control  
(HRP-300N3/600N3/1000N3)
- Built-in constant current limiting circuit
- Built-in remote sense function
- **5 years warranty**

## ■ Models



Model No.	HRP-150N3	HRP-300N3	HRP-600N3	HRPG-1000N3
Vout / Iout	12V, 0~13A	12V, 0~27A	12V, 0~53A	12V, 0~80A
	24V, 0~6.5A	24V, 0~14A	24V, 0~27A	24V, 0~42A
	36V, 0~4.3A	36V, 0~9A	36V, 0~17.5A	36V, 0~28A
	48V, 0~3.3A	48V, 0~7A	48V, 0~13A	48V, 0~21A
Dimension (mm)	159x97x38	199x105x41	218x105x63.5	218x105x61.5

# DPU/PHP Series 3200/3500W High Power (with PFC function)



DPU-3200



PHP-3500



Optional  
(Order No: HS-656)



DPU Spec



PHP Spec

## ■ DPU-3200 Features

- Universal full range input: 90~264 VAC
- High efficiency up to 94.5%
- Forced air cooling by built-in DC fan
- Output voltage and constant current level programmable
- **Active current sharing up to 16000W (4+1)**
- Protections: Short Circuit/Overload/Over Voltage/Over Temp.
- Optional PMBus or CANBus protocol
- Optional conformal coating
- **5 years warranty**

## ■ PHP-3500 Features

- Universal full range input: 90~264 VAC
- High efficiency up to 96%
- **Fanless design, water-cooled power supply**
- Slim and Low Profile (60 mm)
- Output voltage and constant current level programmable
- OVC III operating altitude up to 3000 meters
- Active current sharing up to 14000W (24V & 48V models)
- Optional PMBus or CANBus protocol
- Protections: Short Circuit/Overload/Over Voltage/Over Temp.
- Optional conformal coating
- **Optional cold plate for effortless implementation**
- **5 years warranty**

## ■ Models



Model No.	DPU-3200	PHP-3500
Vout / Iout	24V, 0~133A	24V, 0~145A
	48, 0~67A	48, 0~73A
Dimension (mm)	325.8x107x41	380x141.4x60



RST-5000



RST-10000



RST Spec

## Features

- 3 phase input: 3-wire/ $\Delta$ 196~305 VAC or 4-wire/Y340~530 VAC
- Built-in active PFC function
- High efficiency up to 92.5%
- Protections: Short Circuit/Overload/Over Voltage/Over Temperature/Fan Alarm
- Forced air cooling by built-in DC fan
- Output voltage and constant current level programmable
- Built-in current sharing up to 4 units
- Built-in remote sense and ON/OFF control
- Built-in 12V/0.1A auxiliary output
- Alarm signal output
- 5 years warranty

## Models



Model No.	RST-5000	RST-10000
Vout / Iout	24V, 0~200A	24V, 0~400A
	36V, 0~138A	36V, 0~276A
	48V, 0~105A	48V, 0~210A
Dimension (mm)	460x211x83.5	540x424x83.5

# QP Series

Quad Output Enclosed Type (with PFC function)



## Features

- Universal full range input: 90~264 VAC
- Protections: Short Circuit/Overload/Over Voltage/Over Temp. (Optional for QP-150)
- Forced air cooling by built-in DC fan
- Built-in active PFC function
- CH1 & 2 can be adjustable from -5%~+10% (QP-200/320)
- CH1 & 2 remote sense function (QP-200/320)
- With PG and PF signal output (QP-200/320)
- 3 years warranty

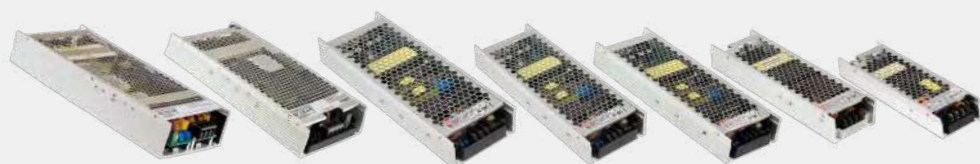
## Models



Model No.	Output Number	QP-150B	QP-150C	QP-150D	QP-150F	QP-150-3A	QP-150-3B	QP-150-3C	QP-150-3D
Vout / Iout	CH1	5V 3~15A	5V 3~15A	5V 3~15A	5V 3~15A	5V 3~15A	5V 3~15A	5V 3~15A	5V 3~15A
	CH2	12V 0.4~5A	15V 0.4~4A	12V 0~5A	15V 0~5A	3.3V 0~15A	3.3V 0~15A	3.3V 0~15A	3.3V 0~15A
	CH3	-12V 0.3~2A	-15V 0.3~2A	24V 0.4~3A	24V 0.4~3A	12V 0.4~5A	12V 0.4~5A	15V 0.4~5.0A	24V 0.3~3A
	CH4	-5V 0~1A	-5V 0~1A	-12V 0~1A	-15V 0~1A	-5V 0~1A	-12V 0~1A	-15V 0~1.0A	-12V 0~1A
Dimension (mm)	199x99x50								

Model No.	Output Number	QP-200D	QP-200F	QP-320D	QP-320F
Vout / Iout	CH1	5V, 3.0~20A	5V, 3~20A	5V, 2.5~20A	5V, 2.5~20A
	CH2	12V, 0~7A	15V, 0~6.0A	12V, 0~10A	15V, 0~10A
	CH3	24V, 0.4~6A	24V, 0.4~6A	24V, 0.2~5A	24V, 0.2~5A
	CH4	-12V, 0~1A	-15V, 0~1A	-12V, 0.2~2A	-15V, 0.2~1.6A
Dimension (mm)	215x115x50		215x115x50		



200~2500W Fanless Power Supply(with PFC function) **UHP Series**

UHP-2500

UHP-1500

UHP-1000

UHP-750

UHP-500

UHP-350

UHP-200



UHP Spec

## Features

- Universal full range input: 90~264 VAC
- Withstand 300VAC surge input for 5 sec
- Filled with half glue, dustproof and anti-vibration (except UHP-2500)
- Slim width and low profile
- Built-in active PFC function
- 150% peak load capacity (100ms, UHP-200~500)
- Fanless design, free air convection
- Output voltage and constant current level adjustable ( $\geq 1000W$ )
- Protections: Short Circuit/Overload/Over Voltage/Over Temp.
- Optional PMBus or CANBus protocol(UHP-1500/2500)
- Redundancy function(UHP-R Series)/remote ON-OFF control ( $\geq 1000W$ )
- DC OK active signal/LED indicator for power on
- 3 years warranty(UHP-200~750)
- 5 years warranty(UHP-1000/1500/2500)

## Models

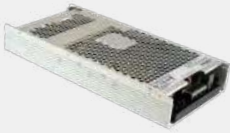


Model No.	UHP-200□	UHP-350□	UHP-500□	UHP-750	UHP-1000	UHP-1500	UHP-2500
Vout / Iout	3.3V, 0~40A	3.3V, 0~60A	4.2V, 0~80A	12V, 0~60A	12V, 0~80A	24V, 0~62.5A	24V, 0~104.2A
	4.2V, 0~40A	4.2V, 0~60A	5V, 0~80A	24V, 0~31.3A	24V, 0~42A	48V, 0~31.5A	36V, 0~69.4A
	5V, 0~40A	5V, 0~60A	12V, 0~41.7A	36V, 0~21A	36V, 0~28A		48V, 0~52.1A
	12V, 0~16.7A	12V, 0~29.2A	15V, 0~33.4A	48V, 0~15.7A	48V, 0~21A		
	15V, 0~13.4A	15V, 0~23.4A	24V, 0~20.9A				
	24V, 0~8.4A	24V, 0~14.6A	36V, 0~13.9A				
	36V, 0~5.6A	36V, 0~9.75A	48V, 0~10.45A				
	48V, 0~4.2A	48V, 0~7.3A	55V, 0~8.9A				
	55V, 0~3.6A	55V, 0~6.3A					
Dimension (mm)	194x55x26	220x62x31	233x81x31	237x100x41	240x115x41	290x140x41	310x140x60

□=blank, R blank:Enclosed R:Built-in DC OK active signal and redundant function .

# High Voltage Models

## 1500W~3000W DC High Voltage Output Power Supply (with PFC function)



UHP-1500-HV



PHP-3500-HV



HEP-2300-HV



CSP-3000



Spec

### UHP/PHP Features

- Slim type with fanless design
- Built-in active PFC function
- Output voltage and constant current level programmable
- Optional PMBus or CANBus protocol
- Built-in remote switch/DC OK signal/Auxiliary power output
- Protection type: Short Circuit/Overload/Over Voltage/Over Temp.
- Optional water-cooled plate cooling device (PHP-3500HV)
- **5 years warranty**

### HEP Features

- Universal full range input: 90~305 VAC
- Built-in active PFC function, high efficiency up to 95.5%
- **Fanless design**, conduction natural convection heat dissipation
- Aluminum case and filling with heat-conducted silicone
- Withstand **10G** vibration test
- -40~+70°C wide operating range
- **Built-in CANBus/PMBus protocol selectable**
- Output voltage and constant current level programmable
- With DC\_OK signal output, built-in remote ON-OFF control
- 12V/0.5A auxiliary power output
- LED indicator for power on
- Protection: Short Circuit/Overload/Overvoltage/Over Temp.
- **6 years warranty**

### CSP Features

- Active PFC function
- High efficiency up to 93%
- Protection: Short Circuit/Overload/Overvoltage/Over Temp.
- Forced air cooling by built-in DC fan
- Output voltage and constant current level programmable
- Current sharing up to 3 units
- Remote ON-OFF control/Auxiliary Power/ DC\_OK signal output
- Optional conformal coating
- **5 years warranty**

### Models



Model No.	UHP-1500-HV	PHP-3500-HV	HEP-2300-HV	CSP-3000
Vin	90~264VAC	90~264VAC	90~305VAC	180~264VAC
Vout / Iout	115V, 0~13A	115V, 0~25.2A	115V, 0~20A	120V, 0~25A
	230V, 0~7A	230V, 0~15.2A	230V, 0~10.6A	250V, 0~12A
	380V, 0~4.5A	380V, 0~9.2A	380V, 0~6.9A	400V, 0~7.5A
	380E: 0~3.95A			
Dimension (mm)	290x140x41	380x141.4x60	375x280x88	199x98x38

# 7.5KW~30KW DC High Voltage Output Power Supply (with PFC function)

# High Voltage Models



## RST/SHP Features

- Water / forced air cooling selectable (RST-7K5/SHP-10K)
- Forced air cooling (RST-15K/SHP-30K)
- Built-in CANBus/Optional PMBus protocol/MODBus-RTU/RS-485(SHP)
- Output voltage adjustable range: Widest up to 1~120% (RST)
- Active current sharing up to 28.5KW(RST)
- Active current sharing up to 120KW (SHP)
- Output voltage and constant current level programmable
- Built-in ON/OFF control/Alarm signal output
- DC OK active signal & Built-in 12V auxiliary power(SHP-10K/30K)
- Protections: Short Circuit/Overload/Over Voltage/Over Temp.
- 5 years warranty

## Models



Model No.	RST-7K5-HV	RST-15K-HV	SHP-10K-HV	SHP-30K-HV
Vin	3Ø3W 196~305VAC or 3Ø4W 340~530VAC		3Ø3W 340~530VAC	
Vout / Iout	115V, 0~65A	115V, 0~130A	55V, 0~150A	55V, 0~450A
	230V, 0~34.5A	230V, 0~69A	115V, 0~87A	115V, 0~261A
	380V, 0~22.5A	380V, 0~45A	230V, 0~46.2A	230V, 0~139A
			380V, 0~30A	380V, 0~90A
Dimension (mm)	460x211x83.5	540x424x83.5	460x211x83.5	540x424x83.5

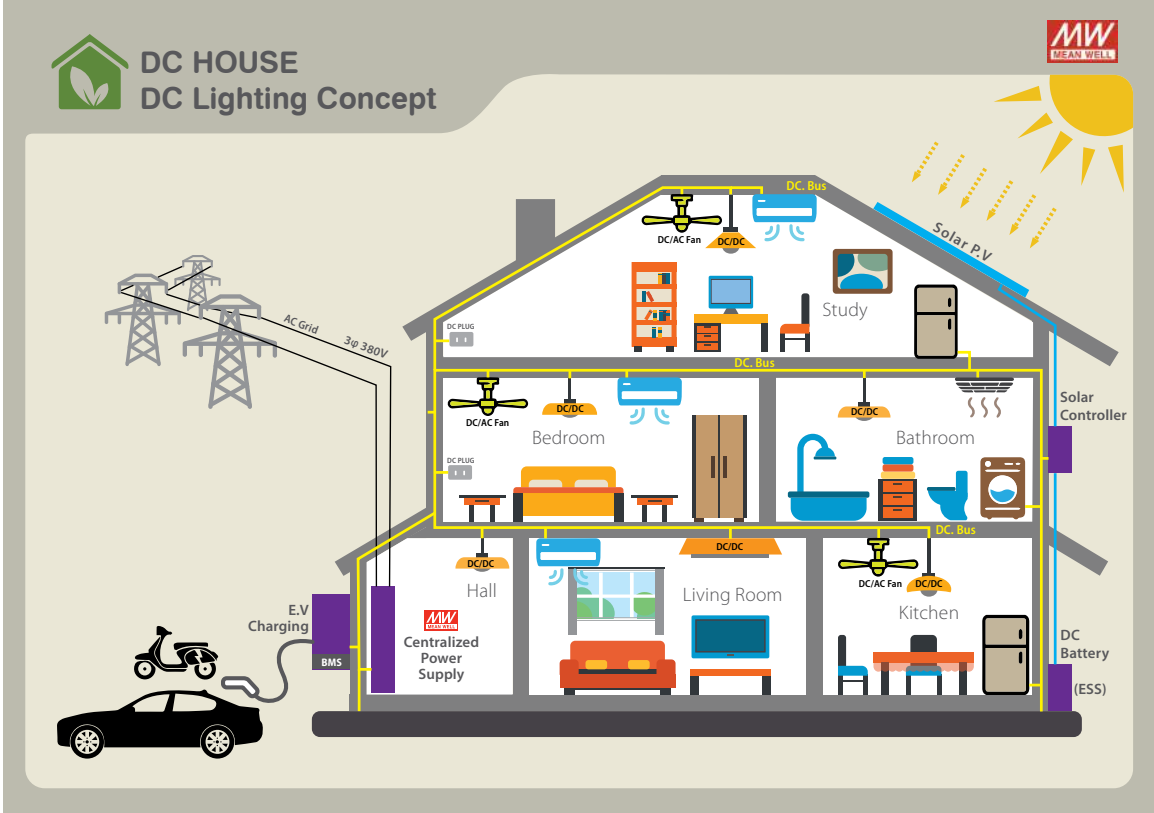
Note: The SHP-30K-HV series is under development, expected to be launched in Q4 of 2023.

# DC Hous

As increases in energy costs and demands to reduce fossil-based emissions are accelerating a worldwide call for clean energy and efficient power consumption, the DC House is far beyond a concept but necessary infrastructure. MEAN WELL is proud to introduce a new DC centralized bus for indoor device applications to reduce power loss issue.

With nearly four decades of experience in power supply design and manufacturing, MEAN WELL provides power solutions for DC centralized bus and DC lighting applications with complete enclosed type and DC to DC LED driver product portfolios. The DC centralized bus is easily integrated into a renewable energy system to reduce power consumption and total cost.

Please refer to the below diagram for a brand new “DC WORLD”.



## DC Centralized Bus for Lighting Application Selection Guide

Voltage Catalog	Front-end (AC to DC Enclosed type)	Back-end (DC to DC LED driver)	Dimming function
Low Voltage bus (48V)	UHP-1500(1Ø3W) RST-5000/10000 (3Ø4W) SHP-10K(3Ø3W)	NLDD-H series LDDS-HWB series LDD-H-DA series	<ul style="list-style-type: none"> <li>· PWM</li> <li>· 0-10V</li> <li>· DALI</li> </ul>
High Voltage bus (380V)	UHP-1500(1Ø3W) RST-7K5/15K (3Ø4W) SHP-10K(3Ø3W)	NHDD series	<ul style="list-style-type: none"> <li>· PWM</li> <li>· Dim with DAP-04 for DALI system</li> </ul>

Note: For detail LED Driver specification, please refer our LED power supply catalog.



NHDD-40

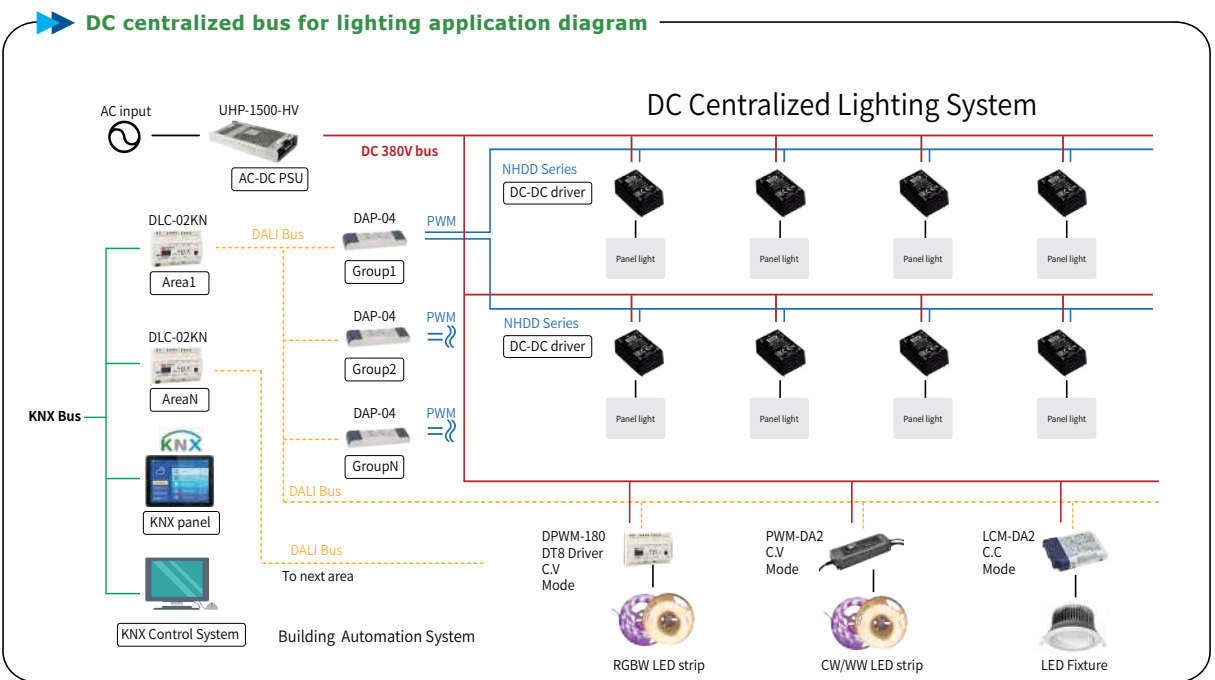


## Features

- Constant current mode output
- For 380 Vdc BUS lighting luminaire
- Driver on Board (DoB) Solution available
- Plastic housing and Fully encapsulated
- Built- in PWM dimming and Remote ON/OFF control
- Protections: Short Circuit/Over Temperature
- 5 years warranty



Model No.	NHDD-40
Vout	360~420V
Dimension (mm)	32.1x20.5x12.5



# SPV/ERDN Series

SPV 150~300W Programmable Enclosed Type  
ERDN 20A/40A Enclosed Redundancy Module



SPV-150



SPV-300



ERDN20



ERDN40



## SPV Features

- Universal full range input: 88~264 VAC
- Built-in active PFC function
- Cooling by free air convection (SPV-150)
- Forced air cooling by built-in DC fan (SPV-300)
- **Output voltage programmable from 20~110% by 1~5.5VDC external control signal**
- Built-in remote ON-OFF control
- Built-in fan speed control (SPV-300)
- Protections: Short Circuit/Overload/Over Voltage/Over Temp.
- 3 years warranty

## ERDN Features

- **Support 1+1 and N+1 redundancy system**
- 2 channels input and 1 output
- Suitable for redundancy operation of 5V (ERDN20 Only)/12V/24V/48V system
- Output current 20A & 40A
- Cooling by free air convection
- -40~+80°C wide operating range(>+60°C derating)
- Built-in 2 channels DC OK signal and alarm relay contact
- LED indicator for power on
- 3 years warranty

## Models



Model No.	SPV-150	SPV-300
Vout / Iout	12V, 0~12.5A	12V, 0~25A
	24V, 0~6.25A	24V, 0~12.5A
	48V, 0~3.125A	48V, 0~6.25A
Dimension(mm)	215x115x50	215x115x50



Model No.	ERDN20-□				ERDN40-□		
	5	12	24	48	12	24	48
Vin	4.5~6VDC	9~14VDC	19~29VDC	36~60VDC	9~14VDC	19~29VDC	36~60VDC
Input / Iout	2x10A/20A				2x20A/40A		
Dimension(mm)	82x99x36				97x99x36		

□=5, 12, 24, 48

□=12, 24, 48





## Features

- Universal full range input: 85~264 VAC
- **Medical safety approved (2x MOOP)**
- Built-in active PFC function
- Withstand 300VAC surge input for 5 secs.
- Protections: Short Circuit/Overload/Over Voltage/Over Temp.
- Built-in constant current limiting circuit
- Built-in remote sense function/remote ON-OFF control (MSP-200/300/4500/600/1000)
- Current sharing up to 4 units (MSP-600-24/36/48, MSP-1000)
- No load power consumption < 0.5W~0.8W
- Stand by 5V@0.3A (MSP-200/300/4500/600/1000)
- Built-in DC OK signal (MSP-300/4500/600/1000)
- **5 years warranty**

## Models



Model No.	MSP-100	MSP-200	MSP-300	MSP-450	MSP-600	MSP-1000
Vout / Iout	3.3V, 0~20A	3.3V, 0~40A	3.3V, 0~60A	3.3V, 0~90A	3.3V, 0~120A	12V, 0~80A
	5V, 0~17A	5V, 0~35A	5V, 0~60A	5V, 0~90A	5V, 0~120A	15V, 0~64A
	7.5V, 0~13.5A	7.5V, 0~26.7A	7.5V, 0~40A	7.5V, 0~60A	7.5V, 0~80A	24V, 0~42A
	12V, 0~8.5A	12V, 0~16.7A	12V, 0~27A	12V, 0~37.5A	12V, 0~53A	48V, 0~21A
	15V, 0~7A	15V, 0~13.4A	15V, 0~22A	15V, 0~30A	15V, 0~43A	
	24V, 0~4.5A	24V, 0~8.4A	24V, 0~14A	24V, 0~18.8A	24V, 0~27A	
	36V, 0~2.9A	36V, 0~5.7A	36V, 0~9A	36V, 0~12.5A	36V, 0~17.5A	
	48V, 0~2.2A	48V, 0~4.3A	48V, 0~7A	48V, 0~9.5A	48V, 0~13A	
Dimension (mm)	159x97x38	199x98x38	199x105x41	218x105x41	218x105x63.5	218x105x63.5

# HDR Series

15~150W Step Shape DIN Rail Power



HDR-15

HDR-30

HDR-60

HDR-100

HDR-150



HDR Spec

## Features

- Universal full range input: 85~264 VAC (277 VAC operational)
- Isolation Class II
- DIN Rail: TS-35/7.5 or TS-35/15
- Cooling by free air convection
- Protections: Short Circuit/Overload/Over Voltage
- No load power consumption <0.3W
- Class 2 power unit/Pass LPS (HDR-15/30/60/100)
- Over voltage category III
- DC output voltage adjustable
- LED indicator for power on
- 3 years warranty

## Models



Model No.	HDR-15	HDR-30	HDR-60	HDR-100	HDR-100-N	HDR-150
Vout / Iout	5V, 0~2.4A	5V, 0~3A	5V, 0~6.5A	12V, 0~7.1A	12V, 0~7.5A	12V, 0~11.3A
	12V, 0~1.25A	12V, 0~2A	12V, 0~4.5A	15V, 0~6.13A	15V, 0~6.5A	15V, 0~9.5A
	15V, 0~1A	15V, 0~2A	15V, 0~4A	24V, 0~3.83A	24V, 0~4.2A	24V, 0~6.25A
	24V, 0~0.63A	24V, 0~1.5A	24V, 0~2.5A	48V, 0~1.92A	48V, 0~2.1A	48V, 0~3.2A
	48V, 0~0.32A	48V, 0~0.75A	48V, 0~1.25A			
Dimension (mm)	17.5x90x54.5	35x90x54.5	52.5x90x54.5	70x90x54.5	70x90x54.5	105x90x54.5

HDR-100: 92W max., pass LPS

HDR-100-xxN: 100W max., non-LPS with a wide output adjustable range



MDR-10

MDR-20

MDR-40

MDR-60

MDR-100



MDR Spec

## Features

- Universal full range input: 85~264 VAC
- **Class I power unit**
- DIN Rail: TS-35/7.5 or TS-35/15
- Cooling by free air convection
- Protections: Short Circuit/Overload/Over Voltage
- Built-in active PFC and over temp. protection (MDR-100)
- **Div 2 Hazardous Locations T4 (MDR-40/60)**
- No load power consumption <0.75~1W
- DC OK signal output (MDR-10/20)
- DC OK relay contact (MDR-40~100)
- DC output voltage adjustable (MDR-20~100)
- LED indicator for power on
- 3 years warranty

## Models



Model No.	MDR-10	MDR-20	MDR-40	MDR-60	MDR-100
Vout / Iout	5V, 0~2A	5V, 0~3A	5V, 0~6A	5V, 0~1A	12V, 0~7.5A
	12V, 0~0.84A	12V, 0~1.67A	12V, 0~3.33A	12V, 0~5A	24V, 0~4A
	15V, 0~0.67A	15V, 0~1.34A	24V, 0~1.7A	24V, 0~2.5A	48V, 0~2A
	24V, 0~0.42A	24V, 0~1A	48V, 0~0.83A	48V, 0~1.25A	
Dimension (mm)	22.5x90x100	22.5x90x100	40x90x100	40x90x100	55x90x100

### HDR vs. MDR

Difference Series	Casing Type	Protection Classes	Over Voltage Category	Working Temp.
HDR	Step Shape	Class II	OVC III	-30~+70°C
MDR	Ultra Slim	Class I	-----	-20~+70°C

# SDR Series

75~960W High Performance DIN Rail Power



## Features

- Universal AC input / Full range(SDR-75~480)  
180~264 VAC input only (SDR-960)
- DIN Rail: TS-35/7.5 or TS-35/15
- High efficiency up to **94%**
- Cooling by free air convection
- Protections: Short Circuit/Overload/  
Over Voltage/Over Temp.
- **130%~150%** peak load capability
- DC output voltage adjustable
- **Current sharing** (7+1 for SDR-480P, 3+1 for SDR-960)
- Built-in DC OK relay contact (Except for SDR-75)
- Built-in constant current limiting circuit
- **Comply with SEMI-F47**
- EN61000-6-2 (EN50082-2) industrial immunity level
- UL508(industrial control equipment) approved
- 3 years warranty

## Models



Model No.	SDR-75	SDR-120	SDR-240	SDR-480□	SDR-960
Vin	88~264VAC	88~264VAC	88~264VAC	90~264VAC	180~264VAC
Vout / Iout	12V, 0~6.3A	12V, 0~10A	24V, 0~10A	24V, 0~20A	24V, 0~40A
	24V, 0~3.2A	24V, 0~ 5A	48V, 0~5A	48V, 0~10A	48V, 0~20A
	48V, 0~1.6A	48V, 0~2.5A			
Dimension (mm)	32x125.2x102	40x125.2x113.5	63x125.2x113.5	85.5x125.2x128.5	110x125.2x150

□=blank, P ; Blank: basic function, P: with parallel function



NDR-75 NDR-120 NDR-240 NDR-480



EDR-75 EDR-120 EDR-150



NDR Spec



EDR Spec

## Features

- Universal full range input:90~264 VAC
- DIN Rail: TS-35/7.5 or TS-35/15
- Built-in active PFC (NDR-240/480)
- Cooling by free air convection
- Protections: Short Circuit/Overload/Over Voltage/Over Temp.
- DC output voltage adjustable
- Built-in constant current limiting circuit
- EN61000-6-2 (EN50082-2) industrial immunity level
- UL508 (industrial control equipment) approved
- LED indicator for power on
- 3 years warranty (NDR Series)
- 2 years warranty (EDR Series)

## Models



Model No.	NDR-75	NDR-120	NDR-240	NDR-480
Vout / Iout	12V, 0~6.3A	12V, 0~10A	24V, 0~10A	24V, 0~20A
	24V, 0~3.2A	24V, 0~5A	48V, 0~5A	48V, 0~10A
	48V, 0~1.6A	48V, 0~2.5A		
Dimension (mm)	32x125.2x102	40x125.2x113.5	63x125.2x113.5	85.5x125.2x128.5



Model No.	EDR-75	EDR-120	EDR-150
Vout / Iout	12V, 0~6.3A	12V, 0~10A	24V, 0~6.5A/0~5.2A
	24V, 0~3.2A	24V, 0~5A	
	48V, 0~1.6A	48V, 0~2.5A	
Dimension (mm)	32x125.2x102	40x125.2x113.5	40x125.2x113.5

## EDR vs. NDR

Difference Series	EMI	Working Temp.	Warranty
EDR	Class A	-20~+60 C	2 years
NDR	Class B	-20~+70 C	3 years

# WDR/TDR Series

WDR 60~480W Single-Phase Wide Input DIN Rail  
 TDR 240~960W Three-Phase Wide Input DIN Rail



WDR-60 WDR-120 WDR-240 WDR-480



TDR-240 TDR-480 TDR-960



WDR Spec



TDR Spec

## WDR Features

- Single or two phase ultra wide input range 180~550VAC
- DIN Rail: TS-35/7.5 or TS-35/15
- Built-in active PFC (WDR-240/480)
- Built-in constant current limiting circuit
- Cooling by free air convection
- Protections: Short Circuit/Overload/Over Voltage/Over Temp.
- DC output voltage adjustable
- EN61000-6-2 (EN50082-2) industrial immunity level
- Built-in DC OK relay contact
- Over voltage category III (WDR-60)
- 3 years warranty

## TDR Features

- 3-phase, 340~550VAC wide range input (2-phase operation possible)
- Slim width with 63~110 mm
- DIN Rail: TS-35/7.5 or TS-35/15
- Built-in active PFC function (TDR-480/960)
- Built-in passive PFC function (TDR-240)
- High efficiency up to 94.5%
- Cooling by free air convection
- Protections: Overload/Over Voltage/Over Temp.
- DC output voltage adjustable
- UL508 / UL61010-1 Industrial control equipment approved
- Current sharing up to 3840W (3+1) for TDR-960
- Built-in DC OK relay contact (optional for TDR-480)
- 3 years warranty

## Models



Model No.	WDR-60	WDR-120	WDR-240	WDR-480
Vout / Iout	5V, 0~10A	12V, 0~10A	24V, 0~10A	24V, 0~20A
	12V, 0~5A	24V, 0~5A	48V, 0~5A	48V, 0~10A
	24V, 0~2.5A	48V, 0~2.5A		
	48V, 0~1.25A			
Dimension (mm)	32x125.2x102	40x125.2x113.5	63x125.2x113.5	85.5x125.2x128.5



Model No.	TDR-240	TDR-480	TDR-960
Vout / Iout	24V, 0~10A	24V, 0~20A	24V, 0~40A
	48V, 0~5A	48V, 0~10A	48V, 0~20A
Dimension (mm)	63x125.2x113.5	85.5x125.2x128.5	110x125.2x150





## ■ DRA Features

- Universal full range input: 90~264 VAC
- DIN Rail: TS-35/7.5 or TS-35/15
- **Output current adjustable through external 1~10VDC or PWM signal or resistance**
- Cooling by free air convection
- Protections: Overload/Over Voltage/Over Temp.
- Pass LPS
- DC output voltage adjustable
- LED indicator for power on
- 3 years warranty

## ■ DRDN Features

- **Support 1+1 and N+1 redundancy system**
- DIN Rail: TS-35/7.5 or TS-35/15
- Output current 20A & 40A
- Suitable for redundancy operation of 12V/24V/48V system
- 2 channels input and 1 output
- -40~+80°C ultra wide operation temp. (>+60°C derating)
- Built-in 2 channels DC OK signal and alarm relay contact
- LED indicator for power on
- 3 years warranty

## ■ Models



Model No.	DRA-40	DRA-60
Vout / Iout	12V, 0~3.34A	12V, 0~5A
	24V, 0~1.7A	24V, 0~2.5A
Dimension (mm)	40x90x100	40x90x100



Model No.	DRDN20-□	DRDN40-□
Rated Voltage/ Current	12V, 0~20A	12V, 0~40A
	24V, 0~20A	24V, 0~40A
	48V, 0~20A	48V, 0~40A
Dimension (mm)	32x125.2x102	55x125.2x113.5

□=12, 24, 48

# DBUF/DUPS Series

DBUF 20A/40A DIN Rail Buffer Module  
DUPS 20A/40A DIN Rail Uninterruptible DC-UPS Module



## DBUF Features

- Buffering with electrolytic capacitors instead of lead acid batteries
- Buffering time: 350ms@20A; 250ms@40A
- Suitable for 24 VDC systems
- Buffer mode selectable by switch:
  - Fixed mode at 22VDC
  - Dynamic mode for  $V_{in}-1VDC$
- Support parallel connection to extend buffering time
- -25~+75°C wide operating temperature
- LED indicator for signal status
- 3 years warranty

## DUPS Features

- Uninterruptible DC-UPS controller
- Parallel connection to DC BUS (Power supply+DC-UPS Module+Batteries+Load)
- Suitable for 24V system, up to 40A
- 2A Battery charging current
- Allows 4AH~135AH lead-acid various battery capacities
- Complete diagnostic and monitoring for DC BUS OK, battery discharge, battery fail
- Protections: Battery Reverse Polarity / Short Circuit(By internal fuse) /Battery Discharge / Over Discharge Current
- Cooling by free air convection
- LED indicator for signal status
- 3 years warranty

## Models



Model No.	DBUF20-24	DBUF40-24
DC Operating Voltage Range	22~29VDC	22~29VDC
Buffer Time	350ms@20A	250ms@40A
	700ms@10A	500ms@20A
	45s@0.1A	42s@0.1A
Dimension (mm)	63x125.2x114.9	63x125.2x114.9



Model No.	DUPS20	DUPS40
DC BUS Voltage	24~29VDC	24~29VDC
DC BUS Current	20A	40A
Dimension (mm)	40x125.2x113.5	63x125.2x113.5



ICL-16R



ICL-28R



ICL-16L



ICL-28L



ICL Spec

## Features

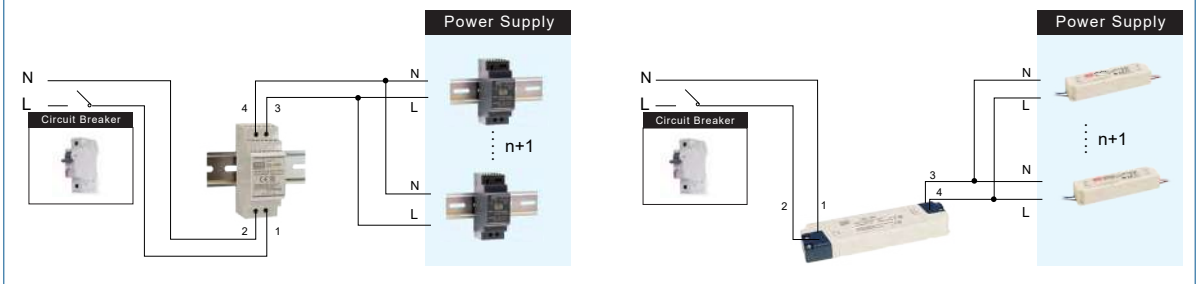
- ICL-16R/L: 23A inrush current limiting, 16A continuous
- ICL-28R/L: 48A inrush current limiting, 28A continuous
- 180~264VAC input
- Integrated bypass relay, no simple NTC
- Internal thermal protection
- DIN Rail: TS-35/7.5 or 15 (ICL-16R/28R)
- -30~+70°C wide operating temperature
- Over voltage category III
- Operating altitude up to 5000 meters
- 3 years warranty

## Models



Model No.	ICL-16R	ICL-16L	ICL-28R	ICL-28L
Inrush Current	16A	16A	28A	28A
Type.	DIN Rail	Terminal Block	DIN Rail	Terminal Block
Dimension (mm)	35x90x54.5(WxHxD)	175x42x24(LxWxH)	52.5x90x54.5(WxHxD)	175x42x24(LxWxH)

## Example of Application



For the number of power supplies being able to be connected to ICL-16R/L and ICL-28R/L, please refer to the installation manual.

# MPM Series 5~90W Medical PCB-Mounted Module



MPM-05/10



MPM-15/20



MPM-30



MPM-30-xST



MPM-45/65/90



MPM-45/65/90-xST



MPM Spec

## Features

- Universal full range input: 85~264 VAC
- Fully isolated plastic case
- **Medical safety approved (2xMOPP)**
- Suitable for **BF** application with appropriate system consideration
- Protections: Short Circuit/Overload/Over Voltage/Over Temp.
- **Extremely low leakage current**
- No load power consumption <0.075~0.1W
- EMI class B for class II configuration
- **-40~+85°C** wide range working temperature
- Miniature size, high power density
- Provide 110% peak power for 10 secs.
- Glue filling,dustproof, waterproof, shockproof
- No minimum load required
- 3 years warranty

## Models



Model No.	MPM-05	MPM-10	MPM-15	MPM-20
Vout / Iout	3.3V, 1.25A	3.3V, 2.5A	3.3V, 3.5A	3.3V, 4.5A
	5V, 1A	5V, 2A	5V, 3A	5V, 4A
	12V, 0.42A	12V, 0.85A	12V, 1.25A	12V, 1.8A
	15V, 0.33A	15V, 0.67A	15V, 1A	15V, 1.4A
	24V, 0.23A	24V, 0.42A	24V, 0.63A	24V, 0.9A
Dimension (mm)	45.7x25.4x21.5	45.7x25.4x21.5	52.4x27.2x24	52.4x27.2x24

Model No.	MPM-30-x□	MPM-45-x□	MPM-65-x□	MPM-90-x□
Vout / Iout	3.3V, 6A	5V, 8A	5V, 10A	12V, 6.7A
	5V, 6A	12V, 3.75A	12V, 5.42A	15V, 5.67A
	12V, 2.5A	15V, 3A	15V, 4.33A	24V, 3.75A
	15V, 2A	24V, 1.88A	24V, 2.71A	48V, 1.88A
	24V, 1.3A	48V, 0.94A	48V, 1.36A	
	48V, 0.63A			
Dimension (mm)	PCB mounting: 69.5x39x24 Screw I/O: 91x39.5x28.5	PCB mounting:87x52x29.5 Screw I/O: 109x52x33.5		

□ = Blank, ST; Blank: PCB mounting, ST: Screw terminal style



MFM-05/10



MFM-15/20



MFM-30



MFM Spec

## Features

- Universal full range input: 80~264VAC
- Cheap bare board
- **Medical safety approved (2xMOPP)**
- Suitable for **BF** application
- Protections: Short Circuit/Overload/Over Voltage/Over Temp. (Except for MFM-30)
- **Extremely low leakage current**
- No load power consumption < 0.075~0.1W
- EMI class B for Class II configuration
- **-40~+85°C** wide range working temp.
- Miniature size, high power density
- Provide 110% peak power for 10 secs.
- No minimum load required
- 3 years warranty

## Models



Model No.	MFM-05	MFM-10	MFM-15	MFM-20	MFM-30
Vout / Iout	3.3V, 1.25A	3.3V, 2.5A	3.3V, 3.5A	3.3V, 4.5A	3.3V, 6A
	5V, 1A	5V, 2A	5V, 3A	5V, 4A	5V, 6A
	12V, 0.42A	12V, 0.85A	12V, 1.25A	12V, 1.8A	12V, 2.5A
	15V, 0.33A	15V, 0.67A	15V, 1A	15V, 1.4A	15V, 2A
	24V, 0.23A	24V, 0.42A	24V, 0.63A	24V, 0.9A	24V, 1.3A
Dimension (mm)	42x22.3x20.5	42x22.3x20.5	49x23.8x23	49x23.8x23	65.5x35x23

## Product Roadmap of Universal PCB

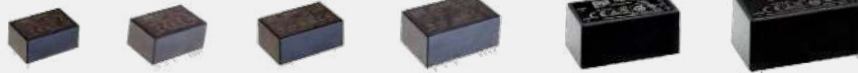
ITE: EPS/EPP Series; Medical: RPS/D/T Series;  
ITE + Medical + Home Appliances: LOP Series

3" x 2"	<p>EPS-25/35 EPS-45S/65S RPS-30/45/65</p>	<p>EPP-120S RPS-120S</p>				
4" x 2"	<p>EPS-45/65 RPS/D/T-60</p>	<p>EPP-100 EPS-120 RPS-120</p>	<p>EPP-150 EPP-200 RPS-200 LOP-200</p>	<p>LOP-300</p>		
5" x 3"	<p>RD/T-45/65 RPS/D/T-75</p>	<p>PPT-125 RPS/T-160</p>	<p>EPP-300 RPS-300</p>	<p>EPP-400 RPS-400 LOP-400</p>	<p>EPP-500 RPS-500 LOP-500</p>	<p>LOP-600</p>

Note: The LOP-200~600 series is under development, expected to be launched in Q4 of 2023.

# IRM Series

## 1~90W Industrial PCB-Mounted Module



IRM-01/02    IRM-01S/02S    IRM-03    IRM-03S    IRM-05/10    IRM-15/20



IRM-30    IRM-30-xST    IRM-45/60/90    IRM-45/60/90-xST



IRM Spec

## Features

- Universal full range input: 85~305VAC
- Fully isolated plastic case
- No load power consumption < 0.075~0.3W
- Miniature size, high power density
- Protections: Short Circuit/Overload/Over Voltage
- Cooling by free air convection
- Isolation Class II
- OVC III (IRM-30~90)
- EMI BS EN/EN 55032 Class B, without additional components
- Glue filling, dustproof, waterproof, 5G vibration test
- High operating temperature up to +85°C
- Pass LPS
- (Except for IRM45/60-5 & IRM-90)
- PCB, chassis or screw terminal mounting version (IRM-30~90ST)
- 3 years warranty

## Models



Model No.	IRM-01-x□	IRM-02-x□	IRM-03-x□	IRM-05	IRM-10	IRM-15
Vout / Iout	3.3V, 0~0.3A	3.3V, 0~0.6A	3.3V, 0~0.9A	3.3V, 0~1.25A	3.3V, 0~2.5A	3.3V, 0~3.5A
	5V, 0~0.2A	5V, 0~0.4A	5V, 0~0.6A	5V, 0~1A	5V, 0~2A	5V, 0~3A
	9V, 0~0.111A	9V, 0~0.222A	9V, 0~0.333A	12V, 0~0.42A	12V, 0~0.85A	12V, 0~1.25A
	12V, 0~0.083A	12V, 0~0.167A	12V, 0~0.25A	15V, 0~0.33A	15V, 0~0.67A	15V, 0~1A
	15V, 0~0.067A	15V, 0~0.133A	15V, 0~0.2A	24V, 0~0.23A	24V, 0~0.42A	24V, 0~0.63A
	24V, 0~0.042A	24V, 0~0.083A	24V, 0~0.125A			
Dimension (mm)	PCB: 33.7x22.2x15 SMD: 33.7x22.2x16		PCB: 37x24x15 SMD: 37x24x16	45.7x25.4x21.5		52.4x27.2x24

□=Blank, S    Blank: PCB mounting style    S: SMD type

Model No.	IRM-20	IRM-30-x□	IRM-45-x□	IRM-60-x□	IRM-90x□
Vout / Iout	3.3V, 0~4.5A	5V, 0~6A	5V, 0~8A	5V, 0~10A	12V, 0~6.7A
	5V, 0~4A	12V, 0~2.5A	12V, 0~3.8A	12V, 0~5A	15V, 0~6.23A
	12V, 0~1.8A	15V, 0~2A	15V, 0~3A	15V, 0~4A	24V, 0~3.75A
	15V, 0~1.4A	24V, 0~1.3A	24V, 0~1.9A	24V, 0~2.5A	48V, 0~1.88A
	24V, 0~0.9A	48V, 0~0.63A	48V, 0~0.94A	48V, 0~1.25A	
Dimension (mm)	52.4x27.2x24	PCB mounting: 69.5x39x24 Screw I/O: 91x39.5x28.5		PCB mounting: 87x52x29.5    Screw I/O: 109x52x33.5	

□=Blank, ST    Blank: PCB mounting style    ST: Screw terminal style

# 30~200W Single Output Medical PCB Type

# RPS Series



RPS-30/45/65  
(3"x 2")



RPS-120S  
(3"x 2")



RPS-60  
(4"x 2")



RPS-120  
(4"x 2")



RPS-200  
(4"x 2")



RPS-75  
(5"x 3")



RPS-160  
(5"x 3")



RPS-120/200-x-C



## Features

- 3" x 2", 4" x 2", 5" x 3" compact size
- Class I or Class II configuration
- Medical safety approved (2xMOPP)
- Built-in Active PFC (RPS-120S/160/200)
- Suitable for BF application with appropriate system consideration
- Extremely low leakage current
- Built-in Power Good/Power Fail signal output (RPS-160)
- Remote voltage compensation function (RPS-160 5~15V)
- No load power consumption < 0.1W~0.75W
- Protections: Short Circuit/Overload/Over Voltage/Over Temp.(120~200W)
- 12V auxiliary output (RPS-120/200)
- 5V/0.8A auxiliary power output (RPSG-160)
- LED indicator for power on (Except for RPS-60)
- 110~125% peak load capability
- 3 years warranty

## Models



3" x 2"				
Model No.	RPS-30 (Convection/Peak 10 sec.)	RPS-45 (Convection/Peak 10 sec.)	RPS-65 (Convection/Peak 10 sec.)	RPS-120S (Convection/Peak 10 sec.)
Vin	80~264VAC	80~264VAC	80~264VAC	80~264VAC
Vout / Iout	3.3V, 6A / 6.6A	3.3V, 8A / 8.8A	3.3V, 10A / 11A	12V, 9.5A / 11.8A
	5V, 6A / 6.6A	5V, 8A / 8.8A	5V, 10A / 11A	15V, 7.6A / 9.5A
	7.5V, 4A / 4.4A	7.5V, 5.4A / 5.95A	7.5V, 8A / 8.8A	24V, 5A / 6.25A
	12V, 2.5A / 2.75A	12V, 3.8A / 4.18A	12V, 5.42A / 5.96A	27V, 4.44A / 5.55A
	15V, 2A / 2.2A	15V, 3A / 3.3A	15V, 4.34A / 4.77A	48V, 2.5A / 3.125A
	24V, 1.25A / 1.375A	24V, 1.9A / 2.1A	24V, 2.71A / 2.98A	
	48V, 0.625A / 0.687A	48V, 0.94A / 1.03A	48V, 1.36A / 1.49A	
Dimension (mm)	76.2x50.8x24	76.2x50.8x24	76.2x50.8x24	76.2x50.8x28

4" x 2"			5" x 3"		
Model No.	RPS-60 (Convection/Peak 10 sec.)	RPS-120-x□ (Convection/10CFM)	RPS-200-x□ (Convection/10CFM)	RPS-75 (Rated / 23.5CFM)	RPS-160 (Convection/20.5CFM)
Vin	90~264VAC	80~264VAC	80~264VAC	90~264VAC	90~264VAC
Vout / Iout	3.3V, 10A / 11A	12V, 7A / 10A	12V, 11.7A / 16.7A	3.3V, 15A / 20A	5V, 20A / 30A
	5V, 10A / 11A	15V, 5.6A / 8A	15V, 9.4A / 13.4A	5V, 14A / 18.7A	12V, 9.1A / 12.9A
	12V, 5A / 5.5A	24V, 3.5A / 5A	24V, 5.9A / 8.4A	12V, 6.3A / 8.3A	15V, 7.3A / 10.3A
	15V, 4A / 4.4A	27V, 3.15A / 4.5A	27V, 5.3A / 7.5A	15V, 5A / 6.7A	24V, 4.6A / 6.5A
	24V, 2.5A / 2.75A	48V, 1.75A / 2.5A	48V, 3A / 4.2A	24V, 3.2A / 4.2A	48V, 2.3A / 3.25A
	48V, 1.25A / 1.375A			36V, 2.1A / 2.8A	
				48V, 1.6A / 2.1A	
Dimension (mm)	101.6x50.8x29	PCB:101.6x50.8x29 Case:103.4x62x40	PCB:101.6x50.8x29 Case:103.4x62x40	127x76.2x31	127x76.2x34.6

□=Blank, -C Blank:PCB type (standard) -C:Enclosed type (optional)  
 ○=Blank, G Blank:Without 5Vsb G:With 5Vsb & no load power consumption < 0.5W



# RPS Series

300~500W Single Output Medical PCB Type



RPS-300  
127x76.2x35mm  
(5"x 3")

RPS-400  
127x76.2x35mm  
(5"x 3")

RPS-500  
127x76.2x41mm  
(5"x 3")

RPS-300-x-C  
RPS-400-x-C  
RPS-500-x-C  
130x86x43mm

RPS-400-x-TF  
RPS-500-x-TF  
130x86x66.5mm

RPS-400-x-SF  
RPS-500-x-SF  
160x86x43mm

## Features

- 5"×3" compact size
- Built-in Active PFC
- Medical safety approved (2x MOPP)
- Suitable for BF application with appropriate system consideration
- Class I or Class II configuration
- Protections: Short Circuit/Overload/Over Voltage/Over Temp.
- Extremely low leakage current
- Built-in P.G & P.F signal output and remote sense function
- No load power consumption < 0.5W by PS-ON only
- 12V for external FAN supply
- 5V/1A standby output
- LED indicator for power on
- PCB, Enclosed, Enclosed with top FAN / Side FAN
- Various installation options
- 3 years warranty

## Models



Model No.	5"×3"		
	RPS-300-x○ (Convection / 20.5CFM)	RPS-400-x□ (Convection/25CFM)	RPS-500-x□ (Convection/25CFM)
Vout / Iout	12V, 16.67A / 25A	12V, 20.8A / 33.3A	12V, 26.7A / 41.6A
	15V, 13.33A / 20A	15V, 16.7A / 26.7A	15V, 21.3A / 33.3A
	24V, 8.33A / 12.5A	18V, 13.9A / 22.3A	18V, 17.8A / 27.8A
	27V, 7.4A / 11.12A	24V, 10.5A / 16.7A	24V, 13.4A / 20.8A
	48V, 4.17A / 6.25A	27V, 9.3A / 14.9A	27V, 11.9A / 18.5A
		36V, 7A / 11.2A	36V, 8.9A / 13.9A
		48V, 5.3A / 8.4A	48V, 6.7A / 10.4A

○=Blank,-C Blank:PCB type -C:Enclosed type  
 □=Blank,-C,TF,SF Blank: PCB type -C: Enclosed type TF: Enclosed type with fan on the top  
 SF: Enclosed type with fan on the side



RPD/T-60  
101.6x50.8x29mm  
(4"x2")



RPD/T-75  
127x76.2x31mm  
(5"x3")



RPT-160  
127x76.2x34.6mm  
(5"x3")



RPT-160-C  
127x76.2x34.6mm  
(Optional)



MPQ-200  
177.8x107.2x35.5mm  
(7"x 4.2")



Spec

## Features

- 4"x 2"、5"x 3" Compact Size
- Class I or Class II configuration
- Medical safety approved (2xMOPP)
- Built-in Active PFC (RPT-160、MPQ-200)
- Suitable for BF application
- Extremely low leakage current
- Built-in P.G & P.F signal output (RPT-160)
- No load power consumption <0.1W~0.75W
- Protections: Short Circuit/Overload/Over Voltage/Over Temp.(RPT-160)
- 5V/0.8A standby output (RPTG-160)
- LED indicator for power on (Only RPT-160/MPQ-200)
- 3 years warranty

## Models

### Dual Output



Model No.	Output Number	RPD-60A	RPD-60B	RPD-75A	RPD-75B
Vout / Iout	CH1	5V, 0.5~5.5A	5V, 0.5~3.85A	5V, 1~9.5A	5V, 1~6.8A
	CH2	12V, 0.1~2.2A	24V, 0.1~1.65A	12V, 0.3~4A	24V, 0.2~2.7A

### Triple Output

Model No.	Output Number	RPT-60A	RPT-60B	RPT-60C	RPT-60D	RPT-6003
Vout / Iout	CH1	5V, 0.5~4.4A	5V, 0.5~4.4A	5V, 0.5~4.4A	5V, 0.5~3.85A	3.3V, 0.5~5.5A
	CH2	12V, 0.1~2.2A	12V, 0.1~2.2A	15V, 0.1~0.65A	24V, 0.1~1.1A	5V, 0.3~3.3A
	CH3	-5V, 0.1~0.55A	-12V, 0.1~0.55A	-15V, 0.1~0.55A	12V, 0.1~0.55A	12V, 0.1~0.77A

Model No.	Output Number	RPT-75A	RPT-75B	RPT-75C	RPT-75D	RPT-7503
Vout / Iout	CH1	5V, 0.6~8A	5V, 0.6~8A	5V, 0.6~8A	5V, 0.6~7A	3.3V, 0.7~7A
	CH2	12V, 0.2~4A	12V, 0.2~4A	15V, 0.1~3A	24V, 0.1~2A	5V, 0~8A
	CH3	-5V, 0.1~1A	-12V, 0.1~1A	-15V, 0.1~1A	12V, 0.1~1A	12V, 0~1.5A

Model No.	Output Number	RPT□-160A○	RPT□-160B○	RPT□-160C○	RPT□-160D○
Vout / Iout	CH1	5V, 0.6~14A	5V, 0.6~14A	5V, 0.6~14A	5V, 0.3~11A
	CH2	12V, 0.2~5.5A	12V, 0.2~5A	15V, 0.1~3.6A	12V, 0.2~5A
	CH3	-5V, 0.1~1A	-12V, 0.1~1A	-15V, 0.1~1A	24V, 0.15~1.2A

□=Blank, G Blank:basic function G:with 5Vsb/0.8A & no load power consumption< 0.75W

○=Blank, -C Blank:PCB type (standard) -C:Enclosed type (optional)

### Quad Output

Model No.	Output Number	MPQ-200B	MPQ-200C	MPQ-200D	MPQ-200F
Vout / Iout	CH1	5V, 3~18A	5V, 3~18A	5V, 3~18A	5V, 3~18A
	CH2	12V, 0.7~8.4A	15V, 0.5~6A	24V, 0.3~3.6A	24V, 0.3~3.3A
	CH3	-5V, 0~2.4A	-5V, 0~2.4A	12V, 0~2.4A	15V, 0~2.4A
	CH4	-12V, 0~2.4A	-15V, 0~2.4A	-12V, 0~2.4A	-15V, 0~2.4A

# EPS Series

## 5~120W Single Output Industrial PCB Type



PS-05  
(2.95"x1.57")



EPS-15  
(2.5"x1.8")



EPS-25/35  
(3"x2")



EPS-45S/65S  
(3"x2")



EPS-45/65  
(4"x2")



EPS-45-x-C  
EPS-65-x-C  
(4"x2")



EPS-120  
(4"x2")



EPS Spec

## Features

- Universal AC input/Full range
- No load power consumption < 0.1~0.3W
- Provide 110% peak power for 10 secs.
- **Compact size**, 1U low profile
- Cooling by free air convection
- Protections: Short Circuit/Overload/Over Voltage
- Class I or Class II installations
- -30~+70°C wide range of operating temp.
- 12V/0.5A for external FAN supply (EPS-120)
- LED indicator for power on (Except for EPS-15)
- Optional Enclosed type (EPS-45/65-C)
- 3 years warranty

## Models



	2.95"x1.57"	2.5"x1.8"	3"x2"			
Model No.	PS-05	EPS-15	EPS-25	EPS-35	EPS-45S	EPS-65S
Vin	85~264VAC	85~264VAC	85~264VAC	85~264VAC	80~264VAC	80~264VAC
Vout / Iout	5V, 0~1A	3.3V, 0~3A	3.3V, 0~5A	3.3V, 0~6A	3.3V, 0~8A	3.3V, 0~10A
	12V, 0~0.45A	5V, 0~3A	5V, 0~5A	5V, 0~6A	5V, 0~8A	5V, 0~10A
	15V, 0~0.35A	7.5V, 0~2A	7.5V, 0~3.4A	7.5V, 0~4.7A	7.5V, 0~5.4A	7.5V, 0~8A
	24V, 0~0.22A	12V, 0~1.25A	12V, 0~2.1A	12V, 0~3A	12V, 0~3.8A	12V, 0~5.42A
	48V, 0~0.11A	15V, 0~1A	15V, 0~1.7A	15V, 0~2.4A	15V, 0~3A	15V, 0~4.34A
		24V, 0~0.625A	24V, 0~1.05A	24V, 0~1.5A	24V, 0~1.9A	24V, 0~2.71A
		27V, 0~0.56A	27V, 0~0.95A	27V, 0~1.3A	48V, 0~0.94A	48V, 0~1.36A
		36V, 0~0.42A	36V, 0~0.7A	36V, 0~1A		
	48V, 0~0.313A	48V, 0~0.53A	48V, 0~0.75A			
Dimension (mm)	75x40x20	63.5x45.7x24	76.2x50.8x24	76.2x50.8x24	76.2x50.8x24	76.2x50.8x24

	4"x2"		
Model No.	EPS-45-x□	EPS-65-x□	EPS-120
Vin	90~264VAC	90~264VAC	80~264VAC
Vout / Iout	3.3V, 8A	3.3V, 11A	12V, 7A
	5V, 8A	5V, 11A	15V, 5.6A
	7.5V, 5.4A	7.5V, 8A	24V, 3.5A
	12V, 3.75A	12V, 5.42A	27V, 3.15A
	15V, 3A	15V, 4.34A	48V, 1.75A
	24V, 1.9A	24V, 2.71A	
	36V, 1.25A	36V, 1.81A	
	48V, 1A	48V, 1.36A	
Dimension (mm)	PCB:101.6x50.8x29 ; Case: 103.4x62x37		101.6x50.8x29

□=Blank, -C Blank: PCB type -C: Enclosed type



EPP-120S  
(3"x2")

EPP-100  
(4"x2")

EPP-150  
(4"x2")

EPP-200  
(4"x2")

EPP-300  
(5"x3")

EPP-400  
(5"x3")

EPP-500  
(5"x3")



EPP Spec

## Features

- Universal AC input/Full range
- Built-in Active PFC
- Class I or Class II installations
- No load power consumption < 0.5W
- High efficiency up to 94%
- Protections: Short Circuit/Overload/Over Voltage/Over Temp.
- 12V for external FAN supply (EPP-300~500)
- PG signal & remote sense function (EPP-300~500)
- Operating altitude up to 5000 meters (EPP-120S~500)
- LED indicator for power on (Except for EPP-120S)
- 3 years warranty

## Models



Model No.	3"x2"		4"x2"	
	EPP-120S (Convection/Peak 10 sec.)	EPP-100 (Convection/20CFM)	EPP-150 (Convection/20CFM)	EPP-200 (Convection/10CFM)
Vin	80~264VAC	90~264VAC	90~264VAC	80~264VAC
Vout / Iout	12V, 9.5A / 11.8A	12V, 6.3A / 8.5A	12V, 8.4A / 12.5A	12V, 11.7A / 16.7A
	15V, 7.6A / 9.5A	15V, 5A / 6.67A	15V, 6.7A / 10A	15V, 9.4A / 13.4A
	24V, 5A / 6.25A	24V, 3.2A / 4.2A	24V, 4.2A / 6.25A	24V, 5.9A / 8.4A
	27V, 4.44A / 5.55A	27V, 2.8A / 3.71A	27V, 3.71A / 5.56A	27V, 5.3A / 7.5A
	48V, 2.5A / 3.125A	48V, 1.6A / 2.1A	48V, 2.1A / 3.125A	48V, 3A / 4.2A
Dimension (mm)	76.2x50.8x28	101.6x50.8x29	101.6x50.8x29	101.6x50.8x29

Model No.	5"x3"		
	EPP-300 (Convection/20.5CFM)	EPP-400 (Convection/25CFM)	EPP-500 (Convection/25CFM)
Vin	90~264VAC	80~264VAC	80~264VAC
Vout / Iout	12V, 16.67A / 25A	12V, 20.8A / 33.3A	12V, 26.7A / 41.6A
	15V, 13.33A / 20A	15V, 16.7A / 26.7A	15V, 21.3A / 33.3A
	24V, 8.33A / 12.5A	24V, 10.5A / 16.7A	18V, 17.8A / 27.8A
	27V, 7.4A / 11.12A	27V, 9.3A / 14.9A	24V, 13.4A / 20.8A
	48V, 4.17A / 6.25A	36V, 7A / 11.2A	27V, 11.9A / 18.5A
		48V, 5.3A / 8.4A	36V, 8.9A / 13.9A
			48V, 6.7A / 10.4A
		54V, 5.93A / 9.26A	
Dimension (mm)	127x76.2x35	127x76.2x35	127x76.2x41

# LOP Series

200~600W Low Profile Single Output PCB Type  
(with PFC function)



Product  
Roadmap



LOP-200  
(4"x2")



LOP-300  
(4"x2")



LOP-400  
(5"x3")



LOP-500  
(5"x3")



LOP-600  
(5"x3")

## Features

- 80~264 VAC input, with PFC function
- No load power consumption < 0.5W
- **150% peak power capability**
- **Class I or Class II installation**
- High efficiency up to **95%**
- Protections: Short Circuit/Overload/Over Voltage/Over Temp.
- **Ultra low profile design (25.4~33.5mm)**
- **-40~+80°C wide range of operating temp.**
- **OVC III**
- Operating altitude up to 5000 meters
- **IEC/EN/UL 62368-1, 60601-1, IEC/EN 60335-1, 61558 & CCC GB4943.1 approved**
- **3 years warranty**

## Models



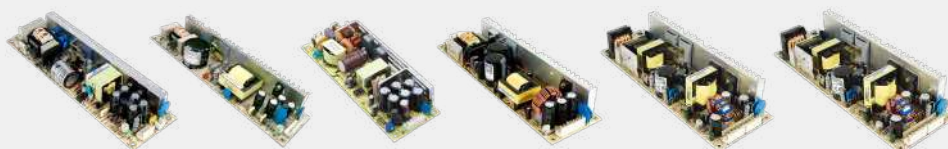
4"x2"		
Model No.	LOP-200 (Convection/10.98 CFM/Peak 3 sec.)	LOP-300 (Convection/10.98 CFM/Peak 3 sec.)
Vout / Iout	12V, 11.7A/16.7A/25A	12V, 15A/25A/37.5A
	15V, 9.4A/13.4A/20A	15V, 12A/20A/30A
	18V, 7.8A/11.1A/16.7A	18V, 10A/16.7A/25A
	24V, 5.9A/8.4A/12.5A	24V, 7.5A/12.5A/18.8A
	27V, 5.3A/7.5A/11.1A	27V, 6.7A/11.1A/16.7A
	36V, 3.9A/5.6A/8.3A	30V, 6A/10A/15A
	48V, 3A/4.2A/6.3A	36V, 5A/8.3A/12.5A
	54V, 2.7A/3.8A/5.6A	48V, 3.8A/6.3A/9.4A
Dimension (mm)	101.6x50.8x <b>25.4</b>	

5"x3"			
Model No.	LOP-400 (Convection/23 CFM/Peak 3 sec.)	LOP-500 (Convection/23 CFM/Peak 3 sec.)	LOP-600 (Convection/23 CFM/Peak 3 sec.)
Vout / Iout	12V, 20.8A/33.3A/50A	12V, 25A/41.6A/62.5A	12V, 30A/50A/75A
	15V, 16.7A/26.7A/40A	15V, 20A/33.3A/50A	15V, 24A/40A/60A
	18V, 13.9A/22.2A/33.3A	18V, 16.7A/27.8A/41.7A	18V, 20A/33.3A/50A
	24V, 10.5A/16.7A/25A	24V, 13.4A/20.8A/31.3A	24V, 16.7A/25A/37.5A
	27V, 9.3A/14.9A/22.2A	27V, 11.9A/18.5A/27.8A	27V, 14.8A/22.3A/33.3A
	36V, 7A/11.2A/16.7A	36V, 8.9A/13.9A/20.8A	36V, 11.1A/16.7A/25A
	48V, 5.3A/8.4A/12.5A	48V, 6.7A/10.4A/15.6A	48V, 8.3A/12.5A/18.8A
	54V, 4.6A/7.4A/11.1A	54V, 5.9A/9.3A/13.9A	54V, 7.4A/11.2A/16.7A
Dimension (mm)	127x76.2x <b>27.5</b>	127x76.2x <b>30.5</b>	127x76.2x <b>33.5</b>

Note: The LOP-200~600 series is under development, expected to be launched in Q4 of 2023.

50~150W Single Output Industrial PCB Type

# LPS/ELP/LPP Series



LPS-50

LPS-75

ELP-75

LPS-100

LPP-100

LPP-150



## Features

- Universal AC input/Full range
- Built-in Active PFC (LPP-100/150,ELP-75)
- Protections: Short Circuit/Overload/Over Voltage
- Optional over temperature protection(LPP-150)
- Built-in remote ON-OFF control(LPS-50/75)
- Cooling by free air convection
- 2 years warranty (LPS Series)
- 3 years warranty (LPP,ELP Series)

## Models



Model No.	LPS-50	LPS-75	ELP-75	LPS-100	LPP-100	LPP-150
Vin	90~264VAC	90~264VAC	90~264VAC	115/230 auto switch	85~264VAC	85~264VAC
Vout / Iout	3.3V, 0~10A	3.3V, 0~15A	3.3V, 15A	3.3V, 0~20A	3.3V, 0~20A	3.3V, 0~30A
	5V, 0~10A	5V, 0~15A	5V, 15A	5V, 0~20A	5V, 0~20A	5V, 0~30A
	12V, 0~4.2A	12V, 0~6.2A	12V, 6.25A	7.5V, 0~13.3A	7.5V, 0~13.5A	7.5V, 0~20A
	15V, 0~3.4A	15V, 0~5.0A	15V, 5A	12V, 0~8.4A	12V, 0~8.5A	12V, 0~12.5A
	24V, 0~2.1A	24V, 0~3.2A	24V, 3.15A	13.5V, 0~7.5A	13.5V, 0~7.5A	13.5V, 0~11.2A
	48V, 0~1.1A	48V, 0~1.56A	36V, 2.1A	15V, 0~6.7A	15V, 0~6.7A	15V, 0~10A
		48V, 1.6A	24V, 0~4.2A	24V, 0~4.2A	24V, 0~6.3A	
			27V, 0~3.8A	27V, 0~3.8A	27V, 0~5.6A	
			48V, 0~2.1A	48V, 0~2.1A	48V, 0~3.2A	
Dimension (mm)	195x55x23	222x55x30	175x60x27	222x62x32	222x62x33.6	222x75x41

# PD/RPD/PID Series 25~250W Dual Output Industrial PCB Type



PD-25  
(4.2"x2.4")

PD-45  
(5"x3")

PD-65  
(5"x3")

RPD-65  
(5"x3")

PID-250  
(8.7"x3.7")



Spec

## Features

- Universal AC input/Full range: 90~264VAC
- Built-in active PFC function (PID-250)
- Cooling by free air convection(Except for PID-250)
- Protections:Short Circuit/Overload/ Over Voltage(Only PID-250)/Over Temp.
- 2 years warranty
- 3 years warranty (PID-250)

## Models



Model No.	Output Number	PD-25A	PD-25B	PD-2505	PD-2512	PD-2515
Vout / Iout	CH1	5V, 0.2~2.5A	5V, 0.2~2A	5V, 0.1~3A	12V, 0.1~1.2A	15V, 0.1~1A
	CH2	12V, 0.1~1.5A	24V, 0.1~1A	-5V, 0.1~2.5A	-12V, 0.1~1.2A	-15V, 0.1~1A
Dimension (mm)		107x61x28				

Model No.	Output Number	PD-45A	PD-45B	PD-65A	PD-65B	RPD-65C	RPD-65D
Vout / Iout	CH1	5V, 0.4~5A	5V, 0.4~5A	5V, 0.4~7A	5V, 0.4~6.0A	12V, 0~5.8A	24V, 0~2.9A
	CH2	12V, 0.2~2.5A	24V, 0.2~1.8A	12V, 0.2~3.2A	24V, 0.2~2.6A	5V, 0~1.5A	5V, 0~1.5A
Dimension (mm)		127x76x28		127x76x42		127x76x29	

Model No.	Output Number	PID-250A	PID-250B	PID-250C	PID-250D
Vout / Iout	CH1	12V, 0~15A	24V, 0~9.4A	36V, 0~6.3A	48V, 0~4.7A
	CH2	5V, 0~5A	5V, 0~5A	5V, 0~5A	5V, 0~5A
Dimension (mm)		222x95x40			





PT-45  
(5"x3")



PT-65  
(5"x3")



PT-6503  
(5"x3")



RPT-65  
(5"x3")



PPT-125  
(5"x3")



Spec

## Features

- Universal AC input/Full range:90~264VAC
- Built-in Active PFC function (PPT-125)
- Optional L-bracket and cover (RPT-65 Series)
- Low leakage current<1mA (RPT-65 Series)
- PWM control and regulated (PPT-125)
- Protections:Short Circuit/Overload/Over Voltage (Except for RPT Series)/Over Temp.(Except for PT Series)
- 2 years warranty
- 3 years warranty (PPT-125)

## Models

### 5"x3" Triple Output



Model No.	Output Number	PT-45A	PT-45B	PT-45C
Vout / Iout	CH1	5V, 0.4~5A	5V, 0.4~5A	5V, 0.4~5A
	CH2	12V, 0.2~2.5A	12V, 0.2~2.5A	15V, 0.2~2.3A
	CH3	-5V, 0~0.5A	-12V, 0~0.5A	-15V, 0~0.5A
Dimension (mm)		127x76x28		

Model No.	Output Number	PT-65A	PT-65B	PT-65C	PT-65D	PT-6503
Vout / Iout	CH1	5V, 0.4~7A	5V, 0.4~7A	5V, 0.4~7A	5V, 0.5~5A	3.3V, 0~7A
	CH2	12V, 0.2~3.2A	12V, 0.2~3.2A	15V, 0.2~2.6A	12V, 0.2~4A	5V, 0.2~10A
	CH3	-5V, 0~0.7A	-12V, 0~0.7A	-15V, 0~0.7A	24V, 0.2~1.3A	12V, 0~1.2A
Dimension (mm)		127x76x42				

Model No.	Output Number	RPT-65E	RPT-65F	RPT-65G
Vout / Iout	CH1	12V, 0.18~5.8A	12V, 0.18~5.8A	24V, 0.09~2.9A
	CH2	5V, 0~1.5A	5V, 0~1.5A	5V, 0~1.5A
	CH3	-5V, 0~0.7A	-12V, 0~0.7A	12V, 0~0.7A
Dimension (mm)		127x76x29		

Model No.	Output Number	PPT-125A	PPT-125B	PPT-125C	PPT-125D
Vout / Iout	CH1	3.3V, 1~12.5A	5V, 1~14.38A	5V, 1~13.75A	5V, 1~8.75A
	CH2	5V, 0.8~10A	12V, 0.3~3.75A	15V, 0.25~3.13A	24V, 0.25~3.13A
	CH3	12V, 0.05~0.63A	-12V, 0.05~0.63A	-15V, 0.05~0.63A	12V, 0.05~0.63A
Dimension (mm)		127x76.2x34.6			

# GST Series

## 18~360W Global Certified Industrial Energy Saving Adaptor (Desktop Type)



GST Spec

## Features

- Global Certified
- No load power consumption <0.075W~0.5W
- 450W peak power for 3 sec.(Only GST360)
- Energy efficiency Level VI
- Complies with EISA 2007/DoE,NRCAN,Korea K-MEPS, AU/NZ MEPS,EU ErP & CoC Version 5
- 3 pole IEC320-C14 AC inlet (A-Type)
- 2 pole AC inlet (B/E/U-Type)
- Class I power unit ( $\geq 40W$ )
- Fanless design with  $-30\sim+70^{\circ}C$  wide range working temp.
- Protections: Short Circuit/Overload/Over Voltage/Over Temp.( $\geq 60W$ )
- Fully enclosed plastic case
- LED indicator for power on
- Pass LPS( $\leq 60W$ )
- 3 years warranty
- Various DC plugs & accessories available (Refer to P.52)

## Models



Model No.	GST18□	GST25□	GST36□	GST40A	GST60A	GST90A
Vin	85~264VAC	85~264VAC	85~264VAC	90~264VAC	90~264VAC	90~264VAC
Vout / Iout	5V, 0~3A	5V, 0~4A	5V, 0~4.3A	5V, 0~5A	5V, 0~6A	12V, 0~6.67A
	7.5V, 0~2A	7.5V, 0~2.93A	9V, 0~3.11A	7.5V, 0~5.34A	7.5V, 0~6A	15V, 0~6A
	9V, 0~2A	9V, 0~2.55A	12V, 0~3A	9V, 0~4.45A	9V, 0~6A	19V, 0~4.74A
	12V, 0~1.5A	12V, 0~2.08A	24V, 0~1.5A	12V, 0~3.34A	12V, 0~5A	24V, 0~3.75A
	15V, 0~1.2A	15V, 0~1.66A	48V, 0~0.75A	15V, 0~2.67A	15V, 0~4A	48V, 0~1.87A
	18V, 0~1A	18V, 0~1.38A		18V, 0~2.22A	18V, 0~3.33A	
	24V, 0~0.75A	24V, 0~1.04A		24V, 0~1.67A	24V, 0~2.5A	
	28V, 0~0.64A	28V, 0~0.89A		48V, 0~0.84A	48V, 0~1.25A	
	48V, 0~0.375A	48V, 0~0.52A				

□=A(except 36W) / B / U / E Class I —A: IEC320-C14 Class II —B: IEC320-C8 , U: American 2P E: European 2P

Model No.	GST120A	GST160A	GST220A	GST280A	GST360A	GST360B
Vin	85~264VAC	85~264VAC	85~264VAC	85~264VAC	85~264VAC	85~264VAC
Vout / Iout	12V, 0~8.5A	12V, 0~11.5A	12V, 0~15A	12V, 0~21A	12V, 0~27.5A	12V, 0~27.5A
	15V, 0~7A	15V, 0~9.6A	15V, 0~13.4A	15V, 0~17A	15V, 0~22.7A	15V, 0~22.7A
	20V, 0~6A	20V, 0~8A	20V, 0~11A	20V, 0~13A	24V, 0~15A	24V, 0~15A
	24V, 0~5A	24V, 0~6.67A	24V, 0~9.2A	24V, 0~11.67A	36V, 0~10A	36V, 0~10A
	48V, 0~2.5A	36V, 0~4.44A	36V, 0~6.1A	48V, 0~5.84A	48V, 0~7.5A	48V, 0~7.5A
		48V, 0~3.34A	48V, 0~4.6A		55V, 0~6.55A	55V, 0~6.55A

## 25W/50W Triple Output Industrial Energy Saving Adaptor (Desktop Type)

## GP Series



GP25A  
107.5x67x36mm



GP25B  
107.5x67x36mm



GP50A  
146x75.5x43mm



GP Spec

## Features

- Universal AC input/Full range: 90~264VAC
- No load power consumption <0.3W
- Energy efficiency Level VI
- Complies with EISA 2007/DoE & EU ErP
- -20~+70°C wide range working temp.
- Class I power unit (with earth pin) for A type; Class II power unit (without earth pin) for B type
- Fully enclosed plastic case
- LED indicator for power on
- Dual output available (Optional)
- 3 years warranty

## Models

### Triple Output



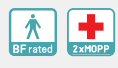
Model No.	Output Number	GP25□13A	GP25□13D	GP25□14E
Vout / Iout	CH1	5V, 0.5~2.5A	5V, 0.5~2.5A	5V, 0.5~2.5A
	CH2	12V, 0.2~1.2A	12V, 0.2~1A	15V, 0.1~0.8A
	CH3	-5V, 0.1~0.3A	-12V, 0.1~0.3A	-15V, 0.1~0.3A

Model No.	Output Number	GP50A13A	GP50A13D	GP50A14E	GP50A58F (Optional)
Vout / Iout	CH1	5V, 0~4A	5V, 0~4A	5V, 0~4A	16V, 0.4~2A
	CH2	12V, 0.3~2A	12V, 0.3~2A	15V, 0.3~1.5A	48V, 30~150mA
	CH3	-5V, 0.1~0.5A	-12V, 0.1~0.5A	-15V, 0.1~0.5A	-16V, 0.4~2A

□=A / B; A: IEC 320-C14 / Class I, B: IEC 320-C8 / Class II

# GSM Series

## 40~220W Medical Energy Saving Adaptor (Desktop Type)



### Features

- Universal AC input/Full range: 80~264VAC
- **Medical safety approved (2xMOPP)**
- Suitable for **BF** application with appropriate system consideration(Except for A-Type)
- **Extremely low leakage current**
- No load power consumption <0.075~0.3W
- Energy efficiency VI (GSM06, GSM18/25 5~9V for Level V)
- Fully enclosed plastic case
- A-Type Class I power (with earth pin)
- B-Type Class II power(without earth pin)
- Comply with EISA 2007/DoE, NRCAN, AU/NZ MEPS, EU ErP and meet CoC Version 5
- Working temperature up to **+70°C**
- LED indicator for power on(Except for GSM06/12)
- Protections: Short Circuit/Overload/Over Voltage/Over Temp.
- **3 years warranty**
- **Various DC plugs & accessories available (Refer to P.52)**

### Models



Model No.	GSM40□	GSM60□	GSM90□
Vout / Iout	5V, 0.1~5A	5V, 0.1~6A	12V, 0~6.67A
	7.5V, 0.1~5.34A	7.5V, 0.1~6A	15V, 0~6A
	9V, 0.1~4.45A	9V, 0.1~6A	19V, 0~4.74A
	12V, 0.1~3.34A	12V, 0.1~5A	24V, 0~3.75A
	15V, 0.1~2.67A	15V, 0.1~4A	48V, 0~1.87A
	18V, 0.1~2.22A	18V, 0.1~3.33A	
	24V, 0.1~1.67A	24V, 0.1~2.5A	
	48V, 0.1~0.84A	48V, 0.1~1.25A	
Dimension (mm)	125x50x31.5	125x50x31.5	145x60x32
	□=A / B (Desktop)	□=A / B (Desktop)	□=A / B (Desktop)

A: IEC320-C14 / Class I    B: IEC 320-C8 / Class II

Model No.	GSM120□	GSM160□	GSM220□
Vout / Iout	12V, 0~8.5A	12V, 0~11.5A	12V, 0~15A
	15V, 0~7A	15V, 0~9.6A	15V, 0~13.4A
	20V, 0~6A	20V, 0~8A	20V, 0~11A
	24V, 0~5A	24V, 0~6.67A	24V, 0~9.2A
	48V, 0~2.5A	48V, 0~3.34A	48V, 0~4.6A
Dimension (mm)	167x67x35	175x72x35	210x85x46
	□=A / B (Desktop)	□=A / B (Desktop)	□=A / B (Desktop)

□=A / B    A: IEC320-C14 AC / Class I    B: IEC320-C8 AC / Class II

# 5~60W Slim Industrial Energy Saving Adaptor (Wall-Mounted Type)

# GS/SGAS Series



## Features

- Slim Type, occupy one power jack only
- Universal AC input/Full range: 90~264VAC
- No load power consumption <0.075W~0.1W
- Energy efficiency VI
- Comply with EISA 2007/DoE, EU ErP, CoC Version 5
- -20~+70°C wide range working temp.
- Protections: Short Circuit/Overload/Over Voltage
- Pass LPS
- 3 years warranty
- Various DC plugs & accessories available (Refer to P.52)

## Models



Model No.	GS05U-USB	GS05E-USB	GS06U	GS06E
	5V, 0~1A	5V, 0~1A	5V, 0~1A	5V, 0~1A
Vout / Iout	/		7.5V, 0~0.8A	7.5V, 0~0.8A
			9V, 0~0.66A	9V, 0~0.66A
			12V, 0~0.5A	12V, 0~0.5A
			15V, 0~0.4A	15V, 0~0.4A
			18V, 0~0.33A	18V, 0~0.33A
			24V, 0~0.25A	24V, 0~0.25A
			48V, 0~0.125A	48V, 0~0.125A

Model No.	SGAS06□	SGAS15○	SGAS60□
	5V, 0~1A	5V, 0~2.4A	5V, 0~6A
Vout / Iout	7.5V, 0~0.8A	9V, 0~1.66A	12V, 0~5A
	9V, 0~0.66A	12V, 0~1.25A	15V, 0~4A
	12V, 0~0.5A	15V, 0~1A	24V, 0~2.5A
	15V, 0~0.4A	24V, 0~0.625A	48V, 0~1.25A
	24V, 0~0.25A		
	48V, 0~0.125A		

□=U / E      Class II — U: American 2P      E: European 2P  
 ○=A / B / U / E      Class I — A: IEC320-C14      Class II — B: IEC320-C8      U: American 2P      E: European 2P

※ The pricing and performance of NGE series are better than GS/SGAS series  
 It is highly recommended to use NGE series for new project.

# SGA Series

12~60W Industrial Energy Saving Adaptor (Wall-Mounted Type)



## Features

- Universal AC input/Full range: 90~264VAC
- No load power consumption <0.075W~0.15W
- Energy efficiency VI
- -20~60°C wide range working temp.
- 2 pole US/EU type plug, Class II power unit
- Comply with EISA 2007/DoE, EU ErP
- Protections: Short Circuit/Overload/Over Voltage
- Fully enclosed plastic case
- Pass LPS
- LED indicator for power on (Only SGA60)
- 3 years warranty
- Various DC plugs & accessories available (Refer to P.52)

## Models



Model No.	SGA12□	SGA25□	SGA40□	SGA60□
Vout / Iout	*USB:5V, 2.4A	5V, 4A	5V, 0~5A	5V, 0~6A
	P1J:5V, 2.4A	7.5V, 2.93A	9V, 0~4.44A	7.5V, 0~6A
	7.5V, 1.6A	9V, 2.77A	12V, 0~3.33A	9V, 0~5.5A
	9V, 1.33A	12V, 2.08A	15V, 0~2.66A	12V, 0~5A
	12V, 1A	15V, 1.66A	18V, 0~2.22A	15V, 0~4A
	15V, 0.8A	18V, 1.38A	24V, 0~1.67A	18V, 0~3.33A
	18V, 0.666A	24V, 1.04A	48V, 0~0.84A	24V, 0~2.5A
	24V, 0.5A	48V, 0.52A		48V, 0~1.25A
	48V, 0.25A			

□=U / E    U: American 2P    E: European 2P

\*USB Type: 5V output only

※ The pricing and performance of NGE series are better than SGA series  
It is highly recommended to use NGE series for new project.

# 12~40W AC Interchangeable Industrial Adaptor (Wall-Mounted Type)

# GE Series



GE12      70.7x40x38.8mm  
 GE18/24/30    81x43x40.5mm  
 GE40      94x48.4x40mm



GE Spec

## Features

- Universal AC input/Full range: 90~264VAC
- Interchangeable AC plugs (plug kit sold separately)
- No load power consumption <0.075W
- Energy efficiency VI
- Comply with EISA 2007/DoE, EU ErP
- Class II power (without earth pin)
- Protections: Short Circuit/Overload/Over Voltage
- Fully enclosed plastic case
- LED indicator for power on
- Pass LPS
- 2 years warranty
- Various DC plugs & accessories available (Refer to P.52)

## Models



Model No.	GE12I	GE18I	GE24I	GE30I	GE40I
Vout / Iout	5V, 0~2.A	5V, 0~2.4A	5V, 0~3A	12V, 0~2.5A	5V, 0~4A
	7.5V, 0~1.33A	7.5V, 0~1.73A	7.5V, 0~2A	15V, 0~2A	7.5V, 0~2.66A
	9V, 0~1.33A	9V, 0~2A	9V, 0~2.22A	18V, 0~1.66A	9V, 0~3.3A
	12V, 0~1A	12V, 0~1.5A	12V, 0~2A	24V, 0~1.25A	12V, 0~3.3A
	15V, 0~0.8A	15V, 0~1.2A	15V, 0~1.6A		15V, 0~2.7A
	18V, 0~0.83A	18V, 0~1A	18V, 0~1.33A		18V, 0~2.2A
	24V, 0~0.625A	24V, 0~0.75A	24V, 0~1A		24V, 0~1.67A
		48V, 0~0.375A	48V, 0~0.5A		36V, 0~1.11A
				48V, 0~0.83A	

## Interchangeable AC Plug Specifically for GE Series

AC Plug Type and Order No.					
AC Plug-AU3 (for GE40 only)	AC Plug-AU (for GE12~30)	AC Plug-UK (for GE12~40)	AC Plug-EU (for GE12~40)	AC Plug-US (for GE12~40)	AC Plug-MIX (for GE12~30) AC Plug-MIX3 (for GE40 only)
Australian Type	Australian Type	U.K. Type	European Type	U.S. Type	Mixed Four Type

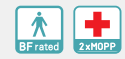
Note: The main body unit and AC plug should be ordered separately.  
 The main body needs to be used along with any one of the AC plug.

※ The pricing and performance of NGE series are better than GE series  
 It is highly recommended to use NGE series for new project.



# GEM Series

6~60W AC Interchangeable Medical Adaptor (Wall-Mounted Type)



- GEM06I
- GEM12I
- GEM18I
- GEM30I
- GEM40I
- GEM60I



## Features

- Universal AC input/Full range: 80~264VAC
- Interchangeable AC plugs (Plug kit sold separately)
- Medical safety approved (2xMOPP)
- Extremely low leakage current
- Suitable for BF application with appropriate system consideration
- No load power consumption <0.075~0.15W
- Energy efficiency Level VI (Level V for GEM06I)
- Comply with EISA 2007/DoE and EU ErP
- Class II power (without earth pin)
- -20~+70°C wide range working temp.
- Protections: Short Circuit/Overload/Over Voltage
- Fully enclosed plastic case
- IP21/IP22 Level
- 3 years warranty
- Various DC plugs & accessories available (Refer to P.52)

## Models



Model No.	GEM06I	GEM12I	GEM18I	GEM30I	GEM40I	GEM60I
Vout / Iout	*USB:5V, 0~1.2A	*USB:5V, 0~2.4A	5V, 0~3A	5V, 0~4A	5V, 0~5A	5V, 0~6A
	P1J:5V, 0~1.2A	P1J:5V, 0~2.4A	9V, 0~2A	7.5V, 0~3.33A	9V, 0~4A	7.5V, 0~6A
	6V, 0~1A	7.5V, 0~1.6A	12V, 0~1.5A	9V, 0~3.33A	12V, 0~3.33A	9V, 0~5.5A
	7.5V, 0~0.8A	9V, 0~1.33A	15V, 0~1.2A	12V, 0~2.5A	15V, 0~2.66A	12V, 0~4.5A
	9V, 0~0.66A	12V, 0~1A	18V, 0~1A	15V, 0~2A	18V, 0~2.22A	15V, 0~4A
	12V, 0~0.5A	15V, 0~0.8A	24V, 0~0.75A	18V, 0~1.66A	24V, 0~1.66A	18V, 0~3.33A
	15V, 0~0.4A	18V, 0~0.66A	48V, 0~0.375A	24V, 0~1.25A	48V, 0~0.83A	24V, 0~2.5A
	18V, 0~0.33A	24V, 0~0.5A		48V, 0~0.625A		48V, 0~1.25A
	24V, 0~0.25A	48V, 0~0.25A				
Dimension (mm)	73.9x39x48.5		75.5x39.1x56.2			

\*USB Type: 5V output only

## Interchangeable AC Plug Specifically for GEM Series

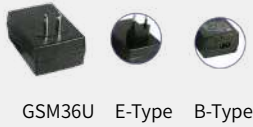
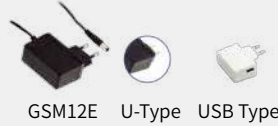
AC Plug Type and Order No.				
AC Plug-AU2	AC Plug-UK2	AC Plug-EU2	AC Plug-US2	AC Plug-MIX2
Australian Type	U.K. Type	European Type	U.S. Type	Mixed Four Type

Note: The main body unit and AC plug should be ordered separately. The main body needs to be used along with any one of the AC plug.

※ The pricing and performance of NGE series are better than GEM series. It is highly recommended to use NGE series for new project.

# 6~60W Medical Energy Saving Adaptor (Wall-Mounted Type)

# GSM Series



## Features

- Universal AC input/Full range: 80~264VAC
- **Medical safety approved (2xMOPP)**
- Suitable for **BF** application with appropriate system consideration (Except for A-Type)
- Extremely low leakage current
- No load power consumption <0.075~0.3W
- Energy efficiency Level VI (GSM06/18/25 5~9V for Level V)
- Fully enclosed plastic case
- Class I (with earth Pin): A-Type
- Class II (without earth Pin): B/U/E-Type
- Comply with EISA 2007/DoE, NRCAN, AU/NZ MEPS, EU ErP and meet CoC Version 5
- High operating temperature up to **+70°C**
- LED indicator for power on (Except for GSM06/12)
- Protections: Short Circuit/Overload/Over Voltage/Over Temp.
- **3 years warranty**
- **Various DC plugs & accessories available (Refer to P.52)**

## Models



Model No.	GSM06□	GSM12□	GSM18□	GSM25□	GSM36□	GSM60□
Vout / Iout	5V, 0~1.2A	*USB:5V, 0~2.4A	5V, 0~3A	5V, 0~4A	5V, 0~4.5A	5V, 0~6A
	6V, 0~1A	PIJ:5V, 0~2.4A	7.5V, 0~2A	7.5V, 0~2.93A	7.5V, 0~4.32A	7.5V, 0~6A
	7.5V, 0~0.8A	7.5V, 0~1A	9V, 0~2A	9V, 0~2.77A	9V, 0~4A	9V, 0~5.5A
	9V, 0~0.66A	9V, 0~1.33A	12V, 0~1.5A	12V, 0~2.08A	12V, 0~3A	12V, 0~4.5A
	12V, 0~0.5A	12V, 0~1A	15V, 0~1.2A	15V, 0~1.66A	15V, 0~2.4A	15V, 0~4A
	15V, 0~0.4A	15V, 0~0.8A	18V, 0~1A	18V, 0~1.38A	18V, 0~2A	18V, 0~3.33A
	18V, 0~0.33A	18V, 0~0.66A	24V, 0~0.75A	24V, 0~1.04A	24V, 0~1.5A	24V, 0~2.5A
	24V, 0~0.25A	24V, 0~0.5A	48V, 0~0.375A	48V, 0~0.52A	48V, 0~0.75A	48V, 0~1.25A
	48V, 0~0.25A					
Dimension (mm)	66x32x42.5	62.2x27.4x45.5	79x54x33	79x54x33	79x54x33	75.5x32x47.5
	□=U / E (Wall-mounted)	□=U / E (Wall-mounted)	□=B(Desktop) U/E(Wall-mounted)	□=B(Desktop) U/E(Wall-mounted)	□=B (Desktop) U/E(Wall-mounted)	□=U / E (Wall-mounted)

U: American 2P E: European 2P B: IEC320-C8

\*USB Type: 5V output only

※ The pricing and performance of NGE series are better than GSM-U/E series  
It is highly recommended to use NGE series for new project.

# NGE Series

12~90W AC Interchangeable Medical/ITE/Home Energy Saving Adaptor (Wall-Mounted Type)



- NGE12
- NGE18
- NGE30
- NGE45
- NGE65
- NGE90



## Features

- Interchangeable AC plugs (Originally with folded US plug; UK, EU, AU convertible)
- CN plug (Non-interchangeable)
- Universal AC input/Full range: 80~264VAC
- ITE 62368-1, medical 60601-1, household 60335-1 safety approved
- Extremely low leakage current, suitable for BF application with appropriate system consideration
- Ultra slim design(28~30mm)
- No load power consumption <0.075~0.1W
- Energy efficiency Level VII
- Complies with EISA 2007/DoE, EU ErP & CoC Version 5
- -30~+70°C wide range working temp.
- Protections: Short Circuit/Overload/Over Voltage
- IP22 Level
- 3 years warranty
- Various DC plugs & accessories available (Refer to P.52)

## Models



Model No.	NGE12	NGE18	NGE30	NGE45	NGE65	NGE90
Vout / Iout	5V, 0~2.4A	5V, 0~3A	5V, 0~4A	5V, 0~5.63A	5V, 0~7A	12V, 0~6A
	9V, 0~1.33A	9V, 0~2A	9V, 0~3.33A	9V, 0~4.5A	9V, 0~5.96A	15V, 0~6A
	12V, 0~1A	12V, 0~1.5A	12V, 0~2.5A	12V, 0~3.75A	12V, 0~4.88A	18V, 0~5A
	15V, 0~0.8A	15V, 0~1.2A	15V, 0~2A	15V, 0~3A	15V, 0~4.34A	24V, 0~3.75A
	18V, 0~0.83A	18V, 0~1A	18V, 0~1.66A	18V, 0~2.5A	18V, 0~3.62A	48V, 0~1.85A
	24V, 0~0.625A	24V, 0~0.75A	24V, 0~1.25A	24V, 0~1.88A	24V, 0~2.71A	55V, 0~1.64A
			48V, 0~0.63A	48V, 0~0.94A	48V, 0~1.36A	
Dimension (mm)	48x28x55		62x30x65			62x30x85

※Two output connectors: P1J and USB available for NGE12 x 05

## Interchangeable AC Plug Specifically for NGE Series

AC Plug Type and Order No.			
AC Plug-AU4	AC Plug-UK4	AC Plug-EU4	AC Plug-MIX4
Australian Type	U.K. Type	European Type	Mixed Three Type

The NGE series is under development, expected to be launched in Q4 of 2023.



NGE100



Product Roadmap

## Features

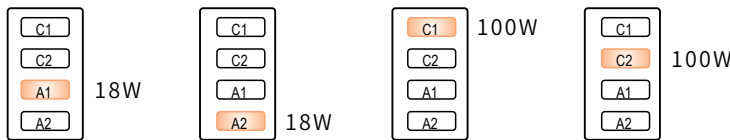
- Interchangeable AC plugs  
(Originally with folded US plug; UK, EU, AU convertible)
- CN plug (Non-interchangeable)
- Universal AC input/Full range: 90~264VAC
- Global Certified
- USB-2C2A, 4-port independent output;  
supports charging of 4 devices at the same time with max. total wattage 100W
- PD/QC 3.0 Intelligent Shunt Detection 5V/9V/12V/15V/20V
- 100W USB-C to C charger cable included
- Protections: Short Circuit/Overload/Over Voltage/Over Temp.
- Comply with EISA 2007/DoE, EU ErP, energy efficiency Level VI
- No load power consumption <0.3W
- Suitable for charging laptops, tablets, mobile phones, earphones
- Compact size: 85.5x30x62 mm
- 3 years warranty

## Recommended Configuration

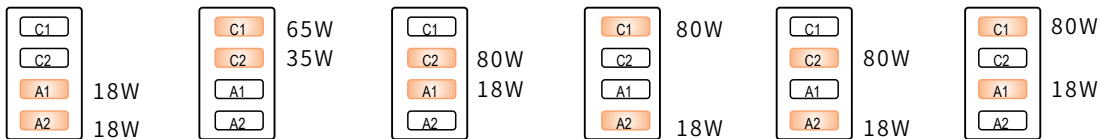


(CN-Type)

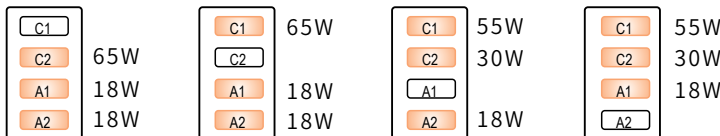
### For 1 Port



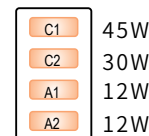
### For 2 Ports



### For 3 Ports



### For 4 Ports



※The NGE 100 series is under development, expected to be launched in Q4 of 2023.

## Application



Earphone  
5V



Mobile phone  
5V/9V



Tablet  
9V/15V



Laptop  
20V

# OWA Series

60~200W IP67 Moistureproof Industrial Adaptor



	E-Type			U-Type		
AC Input Plug						
DC Output Plug						



## Features

- IP67 design with internal encapsulated (DC connector not excluded)
- No load power consumption <0.15W
- Energy efficiency Level VI
- -40~70°C wide operating temperature
- E-Type: Comply with EU ErP; meet CoC Version 5
- U-Type: Comply with EISA 2007/DoE & NRCAN
- Class II power (without earth pin)
- Fanless design, free air convection
- Fully enclosed plastic case
- Suitable for the electronic applications at highly dusty or damp environment
- Protections: Short Circuit/Overload/Over Voltage/Over Temp.
- 5 years warranty

## Models



Model No.	OWA-60□	OWA-90□	OWA-120□	OWA-200□
Vin	90~264VAC	90~264VAC	E Type: 180~264VAC ; U Type: 90~264VAC	
Vout / Iout	12V, 0~5A	12V, 0~7.5A	E Type: 12V, 0~9.6A	E Type: 12V, 0~15A
	15V, 0~4A	15V, 0~6A	U Type: 12V, 0~10A	U Type: 12V, 0~15A
	20V, 0~3A	20V, 0~4.5A	15V, 0~8A	20V, 0~10A
	24V, 0~2.5A	24V, 0~3.75A	20V, 0~6A	24V, 0~8.3A
	30V, 0~2A	30V, 0~3A	24V, 0~5A	36V, 0~5.55A
	36V, 0~1.67A	36V, 0~2.5A	30V, 0~4A	42V, 0~4.75A
	42V, 0~1.5A	42V, 0~2.15A	36V, 0~3.4A	48V, 0~4.17A
	48V, 0~1.25A	48V, 0~1.88A	42V, 0~2.9A	54V, 0~3.71A
	54V, 0~1.12A	54V, 0~1.67A	48V, 0~2.5A	
		54V, 0~2.3A		
Dimension (mm)	130x53x35	171x63x37.5	191x63x37.5	195x68x39.5

□=E / U E: European 2P U: American 2P

# Complete Supplementary Measures - Selection of Changeable DC Plug

- Flexible solution for small quantity
- Easy modification for different size of DC plug

- Off-the-shelf and no MOQ

※ If you can't find the required DC plug in this table, please contact MEAN WELL's sales reps.

Adaptor	Changeable DC Plug	Assembly Illustration (Example)
<p><b>Model No.</b></p> <p>GST18~60 GSM06~60 GEM06~60 GE12~40 SGAS6~60 SGA12~60 GS06 OWA-60U/E</p>  <p>Standard DC Plug 2.1x 5.5x 11mm</p>	<p><b>Ordering No.</b></p> <p><b>DC PLUG-P1J-P1I</b> 2.1x 5.5x 9.5mm  <b>DC PLUG-P1J-P1M</b> 2.5x 5.5x 11mm  <b>DC PLUG-P1J-P1L</b> 2.5x 5.5x 9.5mm  <b>DC PLUG-P1J-P3A</b> 0.7x 2.35x 11mm  <b>DC PLUG-P1J-P3B</b> 1.7x 4.0x 11mm  <b>DC PLUG-P1J-P3C</b> 1.7x 4.75x 11mm  <b>DC PLUG-P1J-P4A</b> 3.4x 5.5x 11x 1mm  <b>DC PLUG-P1J-P4B</b> 4.4x 6.5x 11x 1.4mm  <b>DC PLUG-P1J-P4C</b> 5.1x 7.4x 11x 0.6mm  <hr/> <b>DC PLUG-P1J-P1IR</b> 2.1x 5.5x 9.5mm  <b>DC PLUG-P1J-P1MR</b> 2.5x 5.5x 11mm  <b>DC PLUG-P1J-P1LR</b> 2.5x 5.5x 9.5mm  <b>DC PLUG-P1J-P1JR</b> 2.1x 5.5x 11mm  <hr/> <b>DC PLUG-P1M-P1MR</b> 2.5x 5.5x 11mm  <hr/> <b>DC PLUG-P1J-R6B</b> KYCON KPPX-3P  <b>DC PLUG-P1J-R7B</b> KYCON KPPX-4P  <b>DC PLUG-P1J-R1B</b> 5PIN DIN</p>	
<p><b>Model No.</b></p> <p>GST90~120 GSM90</p>  <p>Standard DC Plug 2.5x 5.5x 11mm</p>	<p><b>Ordering No.</b></p> <p><b>DC PLUG-P1M-P1J</b> 2.1x 5.5x 11mm  <hr/> <b>DC PLUG-P1M-P1JR</b> 2.1x 5.5x 11mm  <hr/> <b>DC PLUG-P1M-R7B</b> KYCON KPPX-4P</p>	
<p><b>Model No.</b></p> <p>GST120~220 GSM120~220 OWA-90U~200U</p>  <p>KPPX-4P Equivalent</p>	<p><b>Ordering No.</b></p> <p><b>DC PLUG-R7BF-P1J</b> 2.1x 5.5x 11mm  <b>DC PLUG-R7BF-P1M</b> 2.5x 5.5x 11mm</p>	

Note : Please refer to MEAN WELL adaptor specifications for DC plug rating and compatibility.

# UMP Series

400W Configurable Modular Power



UMP-400  
250x89x37 mm

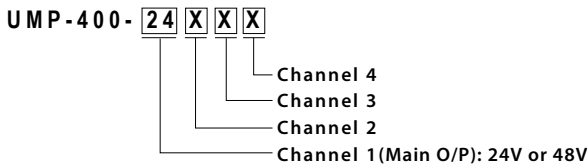


UMP Spec

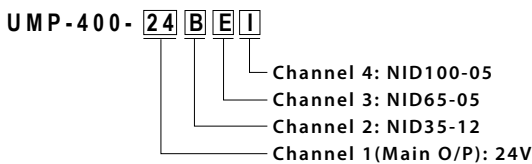
## Features

- Universal AC input/Full range: 90~264VAC
- Ultra Slim 1U profile
- **Fanless design**, 400W free air convection
- Flexible output channels with maximum 4 outputs
- Master output channel for 24V/48VDC
- **5V/12V/15V/24V DC-DC modules configurable**
- No minimum load required
- Protections: Short Circuit/Overload/Over Voltage/Over Temp.
- -30~+70°C wide operating temperature
- LED indicator for power on
- 3 years warranty

## Order Information



### Example:



Model No.	Vout / Iout	Effi.
UMP-400-24	24V, 0~16.7A	88.5%*
UMP-400-48	48V, 0~8.3A	88.5%*

- \*Cannot be assembled by users, please consult with MEAN WELL or dealer after selection
- \*Channel 2, 3, 4 are powered by Channel 1 (Decompressed), NID35/65/100-24 is only suitable for UMP-400-48
- \*Only UMP-400-24 can be configured with negative output voltage

DC-DC Model No.		Photo	Vout	Iout
A	NID35-05		5V	3.5A
B	NID35-12		12V	2.9A
C	NID35-15		15V	2.4A
D	NID35-24		24V	1.5A
E	NID65-05		5V	6.5A
F	NID65-12		12V	4.9A
G	NID65-15		15V	4.3A
H	NID65-24		24V	2.7A
I	NID100-05		5V	8A
J	NID100-12		12V	6A
K	NID100-15		15V	5.2A
L	NID100-24		24V	3.4A
M	NID35-05		-5V	3.5A
N	NID35-12		-12V	2.9A
O	NID35-15		-15V	2.4A
P	NID65-05		-5V	6.5A
Q	NID65-12		-12V	4.9A
R	NID65-15		-15V	4.3A
S	NID100-05		-5V	8A
T	NID100-12		-12V	6A
U	NID100-15		-15V	5.2A





## Features

- Universal AC input/Full range: 90~264 VAC
- Medical approval (2\*MOPP)
- Suitable for **BF** application with appropriate system consideration(Touch current < 100µA/264VAC)
- 1U low profile
- **Vout and Iout programmable**
- Built-in parallel function
- Remote ON-OFF/Auxiliary DC Output / Over Temp. Alarm/DC OK
- Cooling by thermostatically controlled fan with fan alarm function
- Protections: Short Circuit/Overload/Over Voltage/Over Temperature for All Output Modules
- **5 years warranty**



### NMS-240: 1-SLOT isolated single output (240W max.)

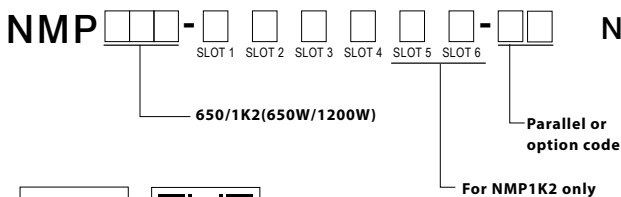
Item Code	Vout / Iout	Vdc adj.
C	5V, 0~36A	3~6V
E	12V, 0~20A	6~15V
H	24V, 0~10A	15~30V
K	48V, 0~5A	30~55V

### NMD-240: 1-SLOT isolated dual output (240W max.)

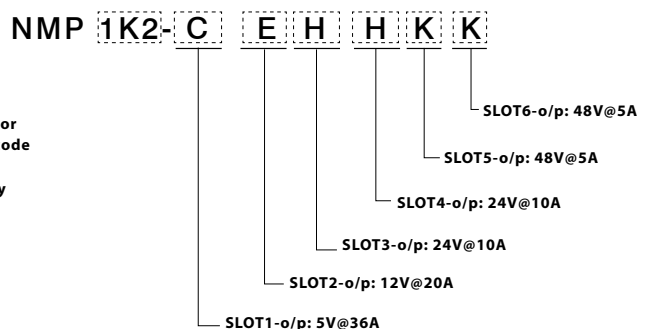
Item Code	Vout / Iout	Vdc adj.
D	30V, 0~5A	3~30V
	30V, 0~5A	3~30V

Parallel Connection Accessory	
FAP-009 (For NMS-240, 2 units)	
FAP-010 (For NMS-240, 3 units)	
NMS-240-P2/P3/P4/P5/P6 (to parallel NMS-240 in 2/3/4/5/6 modules)	
Series Connection Accessory	
FAS-005 (For 1-slot modules: NMS-240)	
Blank Plate Accessory	
Blank-NMS240	

## Output Configuration Guide



Example:



# MP450/650/1K0

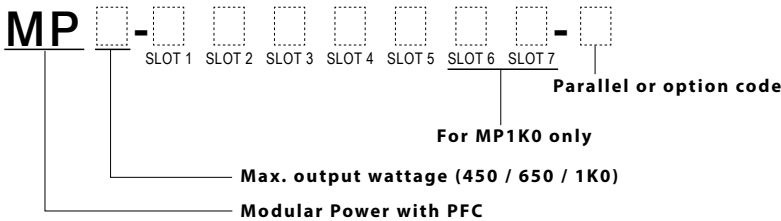
450~1000W Configurable Modular Power



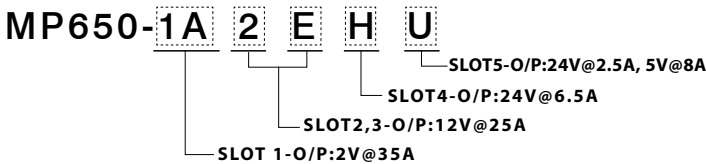
## Features

- Universal AC input/Full range: 85~264 VAC
- **Various output configuration is selectable**
- Built-in active PFC compliance to EN61000-3-2
- Built-in constant current limiting circuit for single output modules
- Remote control on each output module
- Remote sense on each single output module (MS-75~360)
- Protections: Short Circuit/Overload/ Over Voltage for all modules
- Parallel function (MS-210/300/360)
- Margining control function (MS-210/360)
- Cooling by built-in DC fan with fan alarm function
- Additional 12V/0.1A auxiliary output for remote control
- 3 years warranty

## Output Configuration Guide



### Example:



## UMP vs NMP vs MP Series

Difference Series	Wattage	Slots	Output Mod	Safety	Dimension (LxWxH)	Warranty
UMP	400W	4 channels	NID-35/65/100	62368-1	250x89x37	3 years
NMP	650W 1200W	4 slots 6 slots	NMS-240 NMD-240	62368-1+60601-1	250x89x41 250x127x41	5 years
MP	450W 600W 1000W	5 slots 5 slots 7 slots	MS-75 MS-150 MS-210 MS-300 MS-360 MD-100	62368-1	254x127x63.5 278x127x63.5 278x117.8x63.5	3 years

### ■ MS-75: 1-SLOT single output (75W max.)

Item Code	Vout / Iout	Peak Iout	Vout adj.
L	3.3V, 0~15A	17.3A	2.6~4V
M	5V, 0~15A	17.3A	4~6V
N	12V, 0~6.3A	7.3A	9~13.2V
O	15V, 0~5.A	5.8A	13.2~16.8V
P	24V, 0~3.2A	3.7A	20~26.4V
Q	48V, 0~1.6A	1.8A	40~53V

### ■ MS-150: 1-SLOT single output (150W max.)

Item Code	Vout / Iout	Peak Iout	Vout adj.
A	2V, 0~25A	30A	1.6~2.6V
B	3.3V, 0~25A	30A	2.6~4V
C	5V, 0~25A	30A	4~6V
D	7.5V, 0~18A	20.7A	6~9V
E	12V, 0~13A	15A	9~13.2V
F	15V, 0~10A	11.5A	13.2~16.8V
G	18V, 0~8.5A	9.8A	16.8~20V
H	24V, 0~6.5A	7.5A	20~26.4V
I	27V, 0~5.8A	6.7A	25~31V
J	33V, 0~4.7A	5.4A	30~40V
K	48V, 0~3.2A	3.68A	40~53V

### ■ MS-210: 1-SLOT parallelable single output (210W max.)

Item Code	Vout / Iout	Peak Iout	Vout adj.
1A	2V, 0~35A	38.5A	1.6~2.6V
1B	3.3V, 0~35A	38.5A	2.6~4V
1C	5V, 0~35A	38.5A	4~6V
1D	7.5V, 0~28A	32.2A	6~9V
1E	12V, 0~17.5A	20.1A	9~13.2V
1F	15V, 0~14A	16.1A	13.2~16.8V
1G	18V, 0~11.6A	13.4A	16.8~20V
1H	24V, 0~8.75A	10.1A	20~26.4V
1I	27V, 0~7.8A	9A	25~31V
1J	33V, 0~6.4A	7.4A	30~40V
1K	48V, 0~4.4A	5.1A	40~53V

### ■ MS-300: 2-SLOT parallelable single output (300W max.)

Item Code	Vout / Iout	Peak Iout	Vout adj.
2A	2V, 0~50A	57.5A	1.6~2.6V
2B	3.3V, 0~50A	57.5A	2.6~4V
2C	5V, 0~50A	57.5A	4~6V
2D	7.5V, 0~40A	46A	6~9V
2E	12V, 0~25A	29A	9~13.2V
2F	15V, 0~20A	23A	13.2~16.8V
2G	18V, 0~16.7A	19.2A	16.8~20V
2H	24V, 0~12.5A	14.4A	20~26.4V
2I	27V, 0~11.2A	12.9A	25~31V
2J	33V, 0~9.1A	10.5A	30~40V
2K	48V, 0~6.3A	7.2A	40~53V

### ■ MS-360: 2-SLOT parallelable single output (360W max.)









Item Code	Vout / Iout	Peak Iout	Vout adj.
3A	2V, 0~60A	69A	1.6~2.6V
3B	3.3V, 0~60A	69A	2.6~4V
3C	5V, 0~60A	69A	4~6V
3D	7.5V, 0~48A	55.2A	6~9V
3E	12V, 0~30A	34.5A	9~13.2V
3F	15V, 0~24A	27.6A	13.2~16.8V
3G	18V, 0~20A	23A	16.8~20V
3H	24V, 0~15A	17.3A	20~26.4V
3I	27V, 0~13.4A	15.5A	25~31V
3J	33V, 0~11A	12.7A	30~40V
3K	48V, 0~7.5A	8.7A	40~53V

### ■ MD-100: 1-SLOT isolated dual output (100W max.)





Item Code	Vout / Iout	Vout adj.
R	5V, 2~10A	4.75~5.5V
	5V, 0~8A	4.75~5.5V
S	5V, 2~10A	4.75~5.5V
	12V, 0~5.8A	11.4~13.2V
T	5V, 2~10A	4.75~5.5V
	15V, 0~4.7A	14.2~16.5V
U	24V, 0.5~3A	22.8~26.4V
	5V, 0~10A	4.75~5.5V
V	24V, 0.6~3A	22.8~26.4V
	12V, 0~4.7A	11.4~13.2V
W	12V, 1~5A	11.4~13.2V
	12V, 0~5.8A	11.4~13.2V
X	15V, 1~4.7A	14.2~16.5V
	15V, 0~4.7A	14.2~16.5V

\* Peak Iout : 35% duty cycle maximum within every 10 seconds.  
Average output power should not exceed the rated power.

### Parallel Connection Accessory

FAP-001 (For MS-300, 2 units)	
FAP-002 (For MS-300, 3 units)	
FAP-003 (For MS-210, 2 units)	
FAP-004 (For MS-210, 3 units)	
FAP-005 (For MS-210, 4 units)	
FAP-006 (For MS-210, 5 units)	
FAP-007 (For MS-360, 2 units)	
FAP-008 (For MS-360, 3 units)	

### Series Connection Accessory

FAS-001 (For 1-slot modules:MS-75/150, MD-100)	
FAS-002 (For 2-slot modules:MS-300)	
FAS-003 (For 1-slot modules: MS-210)	
FAS-004 (For 1-slot modules: MS-360)	

▶ Please use MP450-CNPOQ, MP650-1A2EHU, MP1K0-2C2CEKL-1.....etc. as the order code. For more detail information about technical issues, please refer to the user manual.

▶ Please refer to the user manual for more detail information about parallel connection and the parallel codes. About series connection, please contact us or your local MEAN WELL distributor for more details.

# 19" Rack Power

1000~24000W

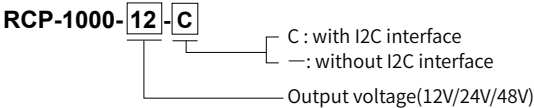


## Features

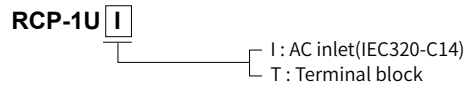
- Universal AC input/Full range: 90~264 VAC
- Built-in active PFC function
- Built-in auxiliary power
- Protections: Short Circuit/Overload/Over Voltage/Over Temp.
- Forced air cooling by built-in DC fan
- High power density up to 25W/inch<sup>3</sup>
- 1U low profile (41mm height)
- Output voltage and constant current level programmable
- Active current sharing; max. of 3 racks can be operated in parallel
- Max. parallel power:  
RCP-1000: 8KW, RCP-1600: 24KW,  
RCP-2000: 20KW
- Built-in remote ON/OFF control & remote sense function
- **Hot swap support**
- I<sup>2</sup>C serial data bus selectable; Built-in PMBus serial communication
- AC OK and DC OK signal output
- 5 years warranty

## Order Information

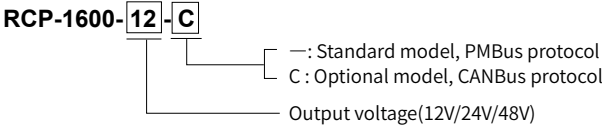
**Rectifier:**



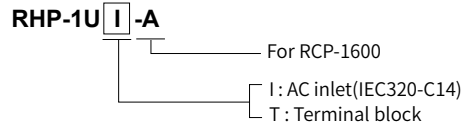
**Rack Shelf:**



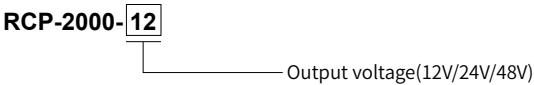
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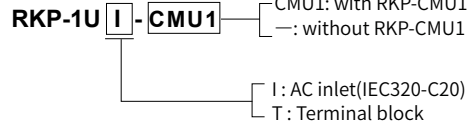
**Rack Shelf:**



**Rectifier:**



**Rack Shelf:**



## Models



Model No.	RCP-1000	RCP-1600	RCP-2000
Vout / Iout	12V,0~60A	12V,0~125A	12V,0~100A
	24V,0~40A	24V,0~67A	24V,0~80A
	48V,0~21A	48V,0~33.5A	48V,0~42A
Dimension (mm)	295x127x41 RCP-1U:483.6x350.8x44	300x85x 41 RHP-1U:440x365x44	295x127x41 RKP-1U:483.6x350.8x44



Standalone type  
70x245x164mm(3U)



Rack mount type  
70x484x132mm(3U)



## Features

- Integration on system power and power management
- 2 models in 3U 19-inch rackmount and standalone configurations
- 7" TFT LCD touch panel and buttons for easy on-site operation
- Ethernet port for on-site or remote monitoring, controlling over the system
- Support PMBus, CANBus & RS-485, RS-232 communication protocols
- Four user programmable relay outputs for conventional remote monitoring or warning
- 5 years warranty

## Description



CMU2 is a fully digitalized smart controller that can execute tasks of monitoring and controlling over power system. CMU2 implements a 7" LCD touch panel to achieve intuitive operation, and developed a brand new web monitoring page for faster and smarter management. CMU2 not only being used to monitor the operating parameters and data of PSUs, such as output voltage, output current, internal temperature, fan rpm, series number and firmware version, but also can be used to adjust output voltage and current. In addition, it can remotely control single PSU or entire power system through LAN or internet.

## Order Information

CMU2 **A** - **R** - **B** **C** **D**  
Slot1 Slot2 Slot3

Extension cards (Note 1)

- C: CANbus
- P: PMBus
- R: RS-232/RS-485/USB
- #: Blank slot

-R: Rackmount type  
Blank: Standalone

Application (Note 2)

- A: Burn-in test system (optional)
- B: Horticulture lighting (under development)
- C: Power management
- D: EV Charging (under development)
- E: Other application (to be defined)

Series name

# GC Series

30~326W Portable Green Charger



GC Spec

## Features

- Built-in active PFC function (Except for GC30)
- Class II power (Without earth pin, GC30 Series)  
Class I power (With earth pin, GC120~330 Series)
- Cooling by free air convection
- 2 pole AC inlet IEC320-C8 (GC30 Series)  
3 pole AC inlet IEC320-C14 (GC120~330 Series)
- No load power consumption < 0.5~1W
- Protections: Short Circuit/Overload/  
Over Voltage/Over Temp.
- 2 color LED indicator for charging status
- Fully enclosed plastic case
- 2 years warranty

## Models



Model No.	GC30□-P1J	GC120Axx-○	GC160Axx-○	GC220Axx-○	GC330Axx-C4P
Vin	90~264VAC	85~264VAC	85~264VAC	90~264VAC	90~264VAC
Vout / Iout	4.2V, 0~4A	13.6V, 0~7.5A	13.6V, 0~10A	13.6V, 0~13.5A	40.8V, 0~8A
	5.6V, 0~3.99A	27.2V, 0~4.42A	27.2V, 0~5.89A	27.2V, 0~8A	54.4V, 0~6A
	7.2V, 0~3A	54.4V, 0~2.21A	54.4V, 0~2.95A	54.4V, 0~4A	
	8.4V, 0~3A				
	14.3V, 0~2.09A				
	16.8V, 0~1.6A				
	28.6V, 0~1.04A				
Dimension (mm)	108x67x36	167x67x35	175x72x35	210x85x46	220x95x46

□=B / U / E

○=R7B /AD1/C4P

B: IEC320-C8, U: American 2P E: European 2P

R7B: 4 pin power din AD1: Anderson connector C4P: 4 pin Extension cord



ENP-120/180/240/360  
(Power)



ENC-120/180/240/360  
(Charger)



ENP Spec



ENC Spec

## ENP Features

- Universal AC input/Full range: 90~264VAC
- **Energy efficiency Level VI**
- No load power consumption<0.15~0.5W
- Comply with EISA 2007/DoE, NRCan, EU ErP
- 125% peak load capability
- **Fanless design**, free air convection
- Protections: Short Circuit/Overload/Over Voltage/Over Temp.
- 3 years warranty

## ENC Features

- Universal AC input/Full range: 90~264VAC
- Can charge lead-acid batteries and lithium batteries
- Built-in 3 stage **default charging curve**, programmable by SBP-001 (Refer to P.64)
- **Fanless design**, free air convection
- Built-in temperature compensation function
- Protections: Short Circuit/Over Voltage/Over Temp./Battery Under voltage/Battery Overvoltage/Battery Reverse Polarity Protection
- 3 years warranty

## Models



Model No.	ENP-120	ENP-180	ENP-240	ENP-360
Vout / Iout	13.8V, 0~8.7A	13.8V, 0~13A	13.8V, 0~17.4A	13.8V, 0~26A
	27.6V, 0~4.3A	27.6V, 0~6.5A	27.6V, 0~8.7A	27.6V, 0~13A
	55.2V, 0~2.2A	55.2V, 0~3.3A	55.2V, 0~4.4A	55.2V, 0~6.5A
Dimension (mm)	192x178x45.5			



Model No.	ENC-120	ENC-180	ENC-240	ENC-360
Vout / Iout	14.4V, 0~8A	14.4V, 0~12A	14.4V, 0~16A	14.4V, 0~24A
	28.8V, 0~4A	28.8V, 0~6A	28.8V, 0~8A	28.8V, 0~12A
	57.6V, 0~2A	57.6V, 0~3A	57.6V, 0~4A	57.6V, 0~6A
Dimension (mm)	192x178x45.5			



# NPB Series

120~1700W Ultra Wide Voltage Smart Charger

O/P Connector Type	
XLR	
AD1	
TB	



NPB-120  
NPB-240  
NPB-360



NPB-450  
NPB-450-xxNFC



NPB-750



NPB-1200



NPB-1700



NPB Spec

## NPB-120~360 Features

- Universal AC input/Full range: 90~264VAC
- Compact size, **wide output voltage range for charging**
- Fanless design (NPB-120/240)
- Fan ON/OFF control  
(Depends on internal temperature, NPB-360)
- **Charging voltage/current adjustable by VR**
- **2 or 3 stage selectable by DIP S.W**
- No load power consumption<0.5W (AC S.W off)
- **-30~+70°C wide operating temperature**
- Protections: Short Circuit/Over Voltage/Over Temp./ Battery Reverse Polarity
- **UL/EN62368-1 & EN60335-1/2-29 dual certification approved**
- Suitable for charging lead-acid batteries and lithium batteries
- Fixing accessories can be purchased separately (order NO.MHS012D)
- 3 years warranty

## NPB-450~1700 Features

- Universal AC input/Full range :90~264VAC
- **2 times wide charging voltage range, can be used for multiple battery voltages**
- **Setting parameter of charger easily via NFC interface(NPB-450-xxNFC)**
- **Intelligent detection of charging voltage**
- Programmable charging curve via SBP-001(Refer to P.64)
- Manual setting for 2/3 stage and 4 built-in charging curves via DIP S.W
- **Built-in CANbus interface for control, setting, and monitor**
- Charging current adjustable **50~100%** by VR
- **-30~+70°C wide operating temperature**
- Protections: Short Circuit/Over Voltage/Over Temp./ Battery Undervoltage/Battery Reverse Polarity (**No damage**)
- Detect charger OK and battery full signal through TTL
- Remote S.W / thermal control DC fan
- Temperature compensation function to prolong battery life (Lead-acid only)
- **UL/EN62368-1 & EN60335-1/2-29 dual certification approved**
- Suitable for charging lead-acid batteries and lithium batteries
- Carry handle accessory available(Order No.: PN-Carry handle)
- 3 years warranty

## Models



Model No.	NPB-120-□	NPB-240-□	NPB-360-□
Vout / Iout	14.4V(10.5~15.2V), 6.8A	14.4V(10.5~15.2V), 13.5A	14.4V(10.5~15.2V), 20A
	28.8V(21~30.4V), 4A	28.8V(21~30.4V), 8A	28.8V(21~30.4V), 12A
	57.6V(42~60.8V), 2A	57.6V(42~60.8V), 4A	57.6V(42~60.8V), 6A
Dimension (mm)	180x96x49		

□ = XLR ; AD1 ; TB

Model No.	NPB-450-□	NPB-750	NPB-1200	NPB-1700
Vout / Iout	14.4V(10.5~21V), 0~25A	14.4V(10.5~21V), 0~43A	14.4V(10.5~21V), 0~70A	14.4V(10.5~21V), 0~85A
	28.8V(21~42V), 0~13.5A	28.8V(21~42V), 0~22.5A	28.8V(21~42V), 0~36A	28.8V(21~42V), 0~50A
	57.6V(42~80V), 0~6.8A	57.6V(42~80V), 0~11.3A	57.6V(42~80V), 0~18A	57.6V(42~80V), 0~25A
	72V(54~100V), 0~5.5A			
Dimension (mm)	205x130x55	230x158x67	250x158x67	300x184x70

□ = Blank, NFC

※ The NPB-450-xxNFC is under development, expected to be launched in Q4 of 2023

# 450~1700W 2 in 1 Ultra Wide Voltage Charger & Constant Voltage Power Supply

# NPP Series



NPP-450



NPP-750



NPP-1200



NPP-1700



## Features

- Universal AC input/Full range: 90~264VAC
- **Charger or power supply constant voltage switchable (plug pin on the panel)**
- **2 times wide voltage output**
- Vout and Iout adjustable by VR
- 3 stage charging curve (Charging Mode)
- **-30~+70°C wide operating temperature**
- Protections: Short Circuit/Overload/Over Voltage/Over Temp.
- Remote S.W /thermal control DC fan
- Suitable for charging lead-acid batteries and lithium batteries
- **Comply with UL/EN62368-1 & EN60335-1/2-29 dual certification**
- Carry handle accessory available (Order No.: PN-Carry handle)
- 3 years warranty

## Models



Model No.	NPP-450	NPP-750	NPP-1200	NPP-1700
Vout / Iout	14.4V(10.5~21V) 12.5~25A	14.4V(10.5~21V) 21.5~43A	14.4V(10.5~21V) 35~70A	14.4V(10.5~21V) 42.5~85A
	28.8V(21~42V) 6.75~13.5A	28.8V(21~42V) 11.25~22.5A	28.8V(21~42V) 18~36A	28.8V(21~42V) 25~50A
	57.6V(42~80V) 3.4~6.8A	57.6V(42~80V) 5.65~11.3A	57.6V(42~80V) 9~18A	57.6V(42~80V) 12.5~25A
Dimension (mm)	205x130x55	230x158x67	250x158x67	300x184x70

## NPB VS. NPP Selection Guide

Functions Series	Mounting style	Product level	2 or 3 stage	Vo Adj.	Io Adj.	Built-in CANBus	O/P connector	Built-in Fan	Dimension (LxWxH,mm)
NPB-120 NPB-240 NPB-360	Portable	Basic	Adj.by DIP S.W	Adj.by VR 14.4V:10.5~15.2V 28.8V:21~30.4V 57.6V:42~60.8V	Adj.by VR 50~100%	×	T.B Anderson XLR	×	180x96x49
NPB-450 NPB-750 NPB-1200 NPB-1700	Screw Mounted	Intelligent	Adj.by DIP S.W or SBP-001 with N.B	Auto ranging or SBP-001 14.4V:10.5~21V 28.8V:21~42V 57.6V:42~80V 72V:54~100V (450W only)		√	T.B	√	205x130x55 230x158x67 250x158x67 300x184x70
NPP-450 NPP-750 NPP-1200 NPP-1700		Advanced	3-stage only	Adj.by VR 14.4V:10.5~21V 28.8V:21~42V 57.6V:42~80V 72V:54~100V (450W only)		×			205x130x55 230x158x67 250x158x67 300x184x70

# RPB/RCB/DBU/NCP

1600/3200W High Power Programmable Charger



Spec

## RPB/RCB-1600 Features

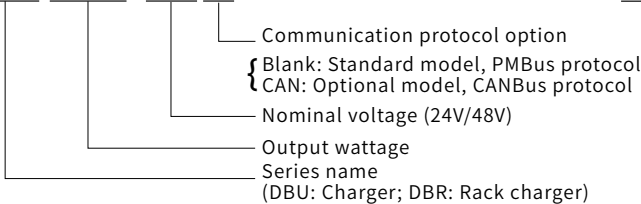
- Universal AC input/Full range: 90~264VAC
- 3 stage charging curves
- Withstand 300VAC surge input for 5 secs.
- Built-in I<sup>2</sup>C interface, PMBus protocol (CANBus protocol selectable)
- 1U low profile with( 41 mm height)
- Rack mountable, sharing up to 8000W (RCB-1600)
- Active current sharing up to 4800W (RPB-1600)
- Vout and lout programmable
- Forced air cooling by built-in DC fan
- Built-in OR-ing FET, support hot swap
- Protections: Short Circuit/Over Voltage/Over Temp./ Battery Undervoltage/Battery Disconnected
- 3 color LED loading indicator
- Optional conformal coating
- Suitable for charging lead-acid batteries and lithium batteries
- 5 years warranty

## DBU/NCP-3200 Features

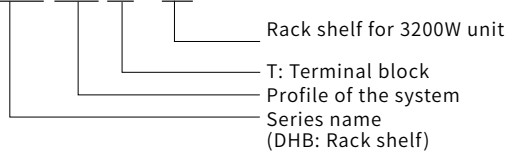
- Universal AC input/Full range: 90~264VAC
- Built-in default 3 stage charging curves and programmable curve, can be set via SBP-001(Detail refer to P.64)
- High efficiency up to 94.5%
- High power density 37W/in<sup>3</sup>
- Forced air cooling by built-in DC fan
- Vout and lout programmable
- Built-in OR-ing MOSFET, support hot swap
- Active current sharing up to 6400W (DBU-3200)/ 12800W (NCP-3200)
- Built-in I<sup>2</sup>C interface, PMBus protocol (Optional CANBus)
- Protections: Short Circuit/Over Voltage/Over Temp./ Battery Undervoltage/Battery Disconnected
- Optional conformal coating
- Suitable for charging lead-acid batteries and lithium batteries
- 5 years warranty

## Order Information

DBU-3200-24



DHP-1U T - A



## Models



Model No.	RPB-1600	RCB-1600	DBU-3200	NCP-3200
Vout / lout	14.4V, 0~100A	14.4V, 0~100A	28.8V, 0~110A	24V, 0~133A
	28.8V, 0~55A	28.8V, 0~55A	57.6V, 0~55A	48V, 0~67A
	57.6V, 0~27.5A	57.6V, 0~27.5A		380V, 0~9.6A
Dimension (mm)	300x85x41		325x107x41	NCP-3200:325x107x41 DHP-1UT:400x482.6x44



SBP-001  
165x46x23 mm



## ■ Features

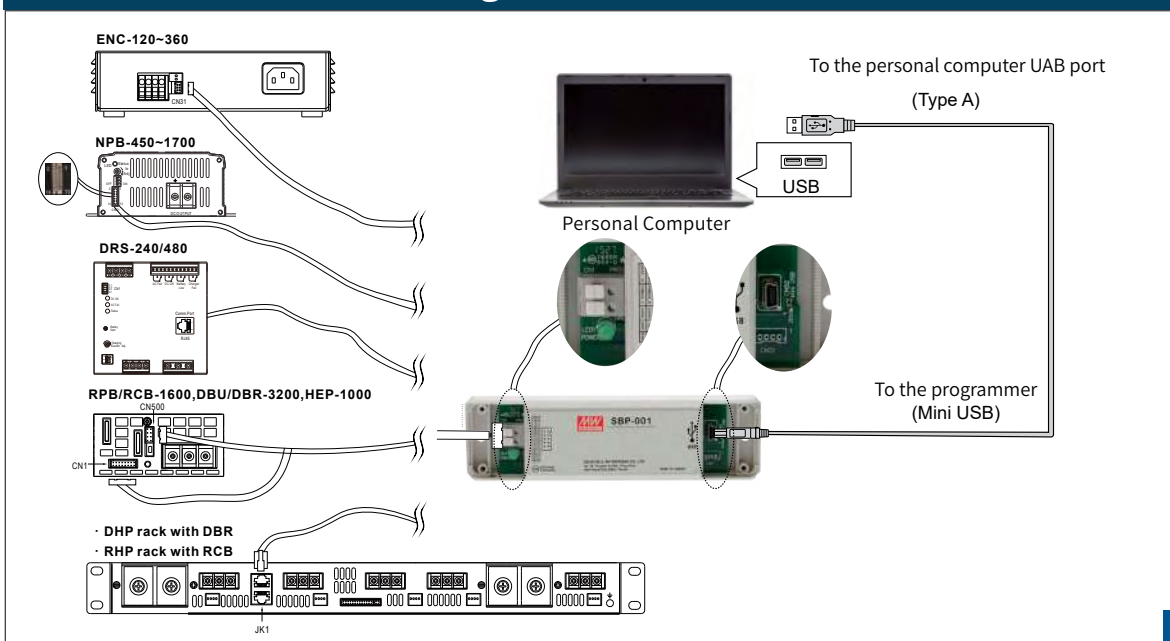
- Charging curve can be programmable when matching with MEAN WELL's Intelligent Battery Chargers
- Suitable for models:  
ENC-120/240/360, NPB-450/750/1200/1700,  
DRS-240/480, HEP-1000, HEP-2300-55,  
RPB/RCB-1600, DBU/NCP-3200
- Simple connection and configuration
- No need of battery or AC power
- LED status indicator

## ■ Description

SBP-001, a smart programmer specially designed for MEAN WELL's various programmable chargers; with adjustable settings such as Constant Current (CC), Constant Voltage (CV), Float Voltage (FV) and Tap Current (TC) etc.

To adapt the variety of batteries, users can easily adjust MEAN WELL's programmable chargers by SBP-001 smart programmer and personal computer, while complete the various charging settings via the dedicated software.

## Smart Programmer Connection



# HEP-600C/BIC-2200

Harsh Environment & Bidirectional Power Supply



HEP-600C



BIC-2200



HEP-600C Spec



BIC-2200 Spec

## HEP-600C Features

- Can charge lead-acid and lithium batteries in harsh environments
- Universal AC input/Full range: 85~264VAC
- 3 stage charging
- Built-in active PFC function
- No load power consumption<0.5W at remote OFF
- High efficiency up to 96%
- Fanless design, cooling by free air convection
- Aluminum case and filling with heat-conducted glue
- Withstand 10G vibration test
- -40 ~ +70°C wide operating range
- Operating altitude up to 5000 meters
- Output voltage and output current can be adjusted through internal potentiometer
- Protections: Short Circuit/Over Voltage/Over Temp.
- 6 years warranty

## BIC-2200 Features

- AC↔DC Bidirectional Power Supply
- Full digital design with 93% conversion efficiency for both AC/DC & DC/AC conversion
- 1U low profile
- Ultrafast switching time <1ms (AC/DC ↔ DC/AC)
- Active current sharing up to 11KW (4+1)
- <3% Low THDi in both conversion mode
- Force charging and discharging mode with CANBus model
- Protections: Anti-islanding/AC fail/DC OVP/OLP/OCP/OTP
- 5 years warranty

## Models



Model No.	HEP-600C	BIC-2200-xx□
Vout / Iout	14.4V, 0~35A	12V, 0~180A
	28.8V, 0~21A	24V, 0~90A
	57.6V, 0~10.5A	48V, 0~45A
		96V, 0~22.5A
Dimension (mm)	280x144x48.5	330x140x41

□=Blank, CAN    Blank: None protocol    CAN: CANBus protocol

# 250~3200W High Reliable True Sine Wave DC-AC Inverter **NTS Series**



NTS-250P NTS-400P 186x100.5x32 mm	NTS-300 NTS-450 210x130x55 mm	NTS-750 270x158x67 mm	NTS-1200 333x184x70 mm	NTS-1700 400x184x70 mm	NTS-2200 NTS-3200 420x270x98 mm
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## Features

- High frequency design, compact size and light weighted
- Built-in type (NTS-250P/400P)
- True sine wave output (THD<3%)
- High surge power up to **200%**
- **Fanless** design, free air convection (NTS-250P/400P/300)
- **AC output voltage and frequency selectable by DIP S.W**
- No load power consumption **<1.2~1.7W at standby saving mode** (According to models)
- **-25~+70°C** wide operating temperature
- Protections:
  - DC Input: Reverse Polarity/DC Undervoltage Alarm/
  - DC Low Voltage Shutdown/Over Voltage
  - AC Output: Short Circuit/Overload/Over Temp.
- Power ON-OFF remote control
- Remote controller (IRC1, IRC2, IRC3 accessory sold separately, suitable for 750W~3200W)
- Support RS-232 communication (750W~3200W, Cable PFF1 RJ11-RS232 sold separately)
- Built-in Tx/Rx for monitoring power inverter status (Only NTS-250P/400P)
- Carry handle accessory (Order No. PN-Carry handle, sold separately)
- Suitable for lead-acid or li-ion batteries
- **Internal PCB board with coating protection**
- 3 years warranty

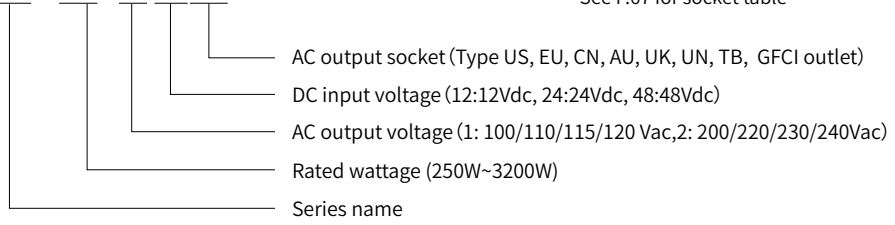
## Models



Installation	Model No.	Continue power	Input(Vdc)	Output(Vac/Hz)	Built-in Fan	AC Bypass Function
Built-in (PCB Type)	NTS-250P-xxx	250W	10~16.5Vdc 20~33Vdc 40~66Vdc	112, 124, 148 : 110Vac/60HZ 212, 224, 248 : 230Vac/50HZ  100/110/115/120Vac 200/220/230/240Vac <b>(4-stage output voltage can be adjusted through DIP S.W)</b>	X	X
	NTS-400P-xxx	450W				
External (Portable)	NTS-300-xxxxyy	300W				
	NTS-450-xxxxyy	450W				
	NTS-750-xxxxyy	750W				
	NTS-1200-xxxxyy	1200W				
	NTS-1700-xxxxyy	1700W				
	NTS-2200-xxxxyy	2200W				
	NTS-3200-xxxxyy	3200W				

## Model Encoding

**NTS - 300 - 1 12 US**



Model xxx = 112, 124, 148, 212, 224, 248  
 AC output socket yy = US, UN, GFCI, TB (for 110 Vac models)  
 = EU, UN, CN, AU, UK, TB (for 230 Vac models)  
 See P.67 for socket table

# NTU Series

1200~3200W True Sine Wave DC-AC inverter  
(Built-in AC Bypass)



NTU-1200  
333x184x70 mm



NTU-1700  
400x184x70 mm



NTU-2200  
420x270x98 mm



NTU-3200  
420x270x98 mm



NTU Spec



Landing page

## Features

- Built-in UPS function (AC Bypass)
- True sine wave output (THD<3%)
- High surge power up to 200%
- AC outout Voltage and frequency selectable by DIP S.W
- -25~+70°C wide operating temperature
- Power ON-OFF remote control
- Remote controller (IRC1,IRC2,IRC3 accessory sold separately, suitable for 1200W~3200W)
- Protections:
  - DC Input: Reverse Polarity/DC Undervoltage Alarm/DC Low Voltage Shutdown/Over Voltage
  - AC Output: Short Circuit/Overload/Over Temp.
- Support RS-232 communication (750W~3200W, cable DS-RJ11-RS232 sold separately)
- Carry handle accessory (Order No. PN-Carry handle, sold separately)
- Suitable for lead-acid or li-ion batteries
- Internal PCB board with coating protection
- 3 years warranty

## Models

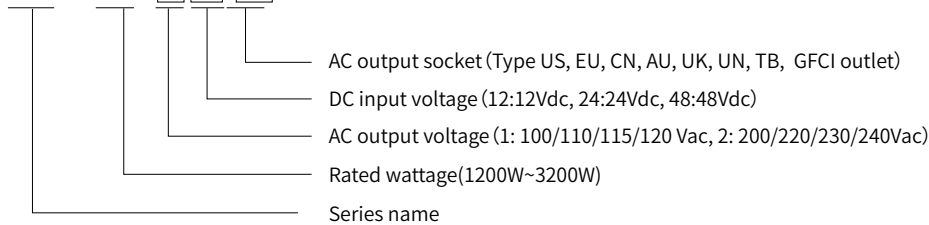


Installation	Model No.	Continue power	Input(Vdc)	Output(Vac/Hz)	Built-in Fan	AC Bypass Function
External (Portable)	NTU-1200-xxxxxy	1200W	10~16.5Vdc 20~33Vdc 40~66Vdc	112, 124, 148 : 110Vac/60HZ 212, 224, 248 : 230Vac/50HZ	✓	✓
	NTU-1700-xxxxxy	1700W		100/110/115/120Vac		
	NTU-2200-xxxxxy	2200W		200/220/230/240Vac		
	NTU-3200-xxxxxy	3200W		(4-stage output voltage can be adjusted through DIP S.W)		

Model xxx = 112, 124, 148, 212, 224, 248  
 AC output socke yy = US, UN, GFCI, TB (for 110 Vac models)  
 = EU, UN, CN, AU, UK, TB (for 230 Vac models)

## Model Encoding

NTU - 1200 - 1 12 US



MODEL	100~120Vac model				200~240Vac model					
Socket type										
	Standard	Standard	Optional	Standard	Standard	Standard	Standard	Optional	Optional	Standard
Country	USA	UNIVERSAL	USA	UNIVERSAL	EUROPE	CHINA	UNIVERSAL	U. K	AUSTRALIA	UNIVERSAL

※TYPE-TB is only applicable to NTS/NTU-2200/3200 series



# 1500/3000W True Sine Wave DC-AC Inverter (With Solar Charger)

# TN Series



TN-1500  
420x220x88 mm



TN-3000  
466.8x283x100 mm



TN Spec

## Features

- Built-in AC grid and solar dual-source charging function
- True sine wave output (THD<3%)
- High surge power up to **200%**
- Advanced digital control by microprocessor
- Output voltage/frequency selectable
- High efficiency up to 91%
- Front panel indicator for loading/battery/operation status
- High frequency design
- Protections:
  - DC Input: Reverse Polarity/DC Undervoltage Alarm/DC Low Voltage Shutdown
  - AC Output: Short Circuit/Overload/Over Temp./AC Circuit Breaker
- 3 years warranty

## Models

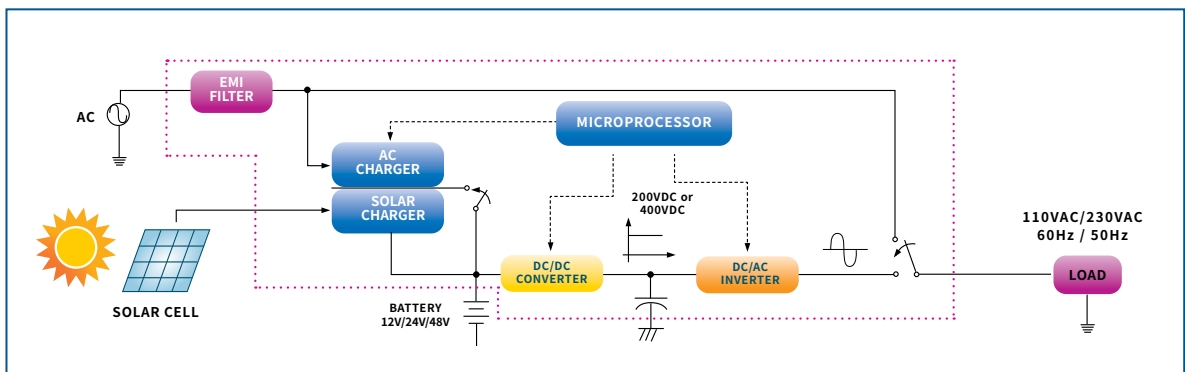


Installation	Model No.	Continue power	Input(Vdc)	Output(Vac/Hz)	Built-in Fan	AC Bypass Function
External (Portable)	TN-1500-xxxxxy	1500W	10.5~15Vdc 21~30Vdc 42~60Vdc	112, 124, 148 : 110Vac/60HZ 212, 224, 248 : 230Vac/50HZ 100/110/115/120Vac 200/220/230/240Vac <i>(4-stage output voltage can be adjusted through DIP S.W)</i>	√	√
	TN-3000-xxxxxy	3000W				

Mode xxx = 112, 124, 148, 212, 224, 248

AC output socket: y= A (US), B (EU), C (AU), D (UK), F (GFCI)

## Solar Inverter Block Diagram (Inverter with AC & Solar Charger)



# NTN Series

5KW Off-Grid True Sine Wave DC-AC Inverter  
(Built-in AC charger +AC Bypass & External MPPT Solar Charger)



NTN-5K  
460x211x83.5 mm



AC Output Side



DC Input Side



NTN Spec

## Features

- Combining AC utility, battery power source and solar charger to supply AC output
- True Sine wave output (THD<3%)
- AC utility charger up to 135A /4KW max.
- Can support external MPPT solar charger
- AC by-pass without interruption, transfer time <10ms
- High surge power up to 10KW
- Parallel synchroized operation up to 30KW (5+1 unit)
- -30°C~+70°C wide operating temperature
- Protections :
  - DC Input: Reverse Polarity / DC Low Alarm / DC Low Shutdown / Over Voltage
  - AC Output: Short Circuit / Overload / Over Temp./ AC Circuit Breaker
- Support MODBUS-RTU(RS-485) communication
- 3 years warranty

## Models

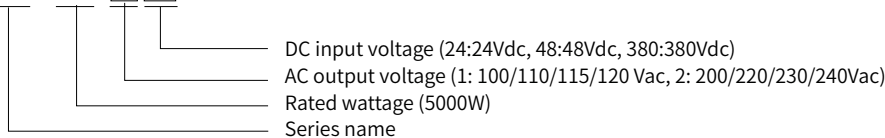


Installation	Model No.	Continue power	Input(Vdc)	Output(Vac/Hz)	Charger		AC Bypass Function	AC Output Parallel
					AC	MPPT		
Built-in	NTN-5K-xyy	5000W	20~33Vdc 40~66Vdc 280~430Vdc	124, 148 : 110Vac/60HZ 224, 248, 2380 : 230Vac/50HZ 100/110/115/120Vac 200/220/230/240Vac <i>(4-stage output voltage can be adjusted through DIP S.W)</i>	✓	External	✓ (<10ms)	✓ (5+1 unit)

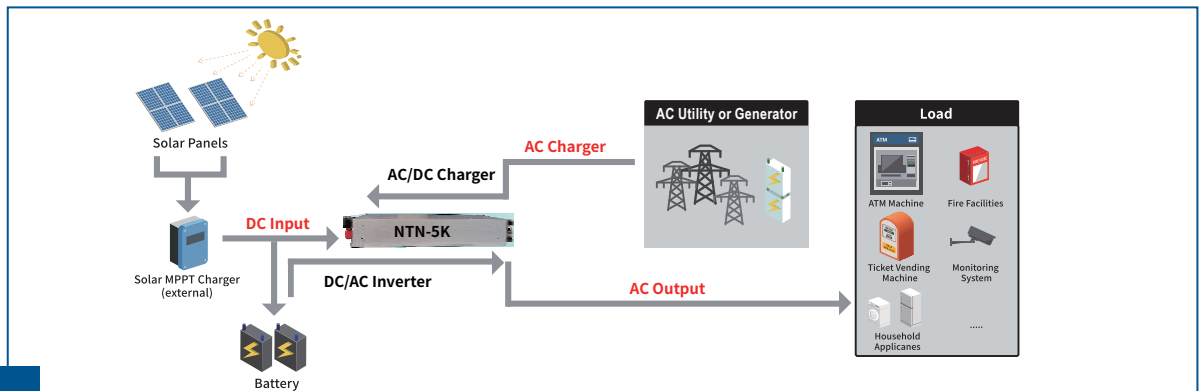
## Model Encoding

Model x= 1, 2 ; yy= 24, 48, 380

NTN - 5K - 2 24



## System Configuration



※ The NTN-5K Series is under development, expected to be launched in Q1 of 2024



Spec

## Features

- High frequency & portable design
- With power ON/OFF switch and LED indicator
- Remote ON/OFF controller sold separately(1000~2500W)
- Built-in USB 5VDC/0.5A, fanless (100W)
- Input and output are fully isolated
- Protections:
  - DC Input: Reverse Polarity/Over Voltage/ Low Voltage Shutdown
  - AC Output: Short Circuit/Overload/Over Temp.
- **Low cost**
- 1 year warranty

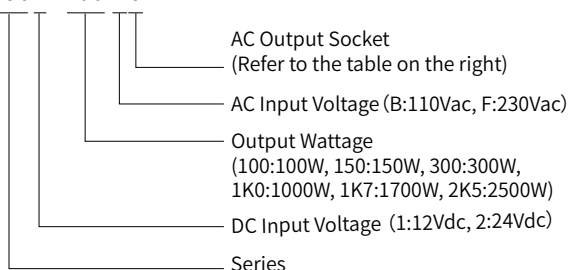


## Models

Installation	Model No.	Continue power	Input(Vdc)	Output(Vac/Hz)	Built-in Fan
External (Portable)	A301-100F3 A302-100F3	100W	A301:10~15Vdc A302:21~30Vdc	B2:110Vac/60Hz F3:230Vac/50Hz	X
	A301-150-B2 A301-150-F3 A302-150-B2 A302-150-F3	150W			
	A301-300-B2 A301-300-F3 A302-300-B2 A302-300-F3	300W			√
	A301-600-B2 A301-600-F3 A302-600-B2 A302-600-F3	600W			
	A301-1K0-B2 A301-1K0-F3 A302-1K0-B2 A302-1K0-F3	1000W			
	A301-1K7-B2 A301-1K7-F3 A302-1K7-B2 A302-1K7-F3	1700W			
	A301-2K5-B4 A301-2K5-F3 A302-2K5-B4 A302-2K5-F3	2500W			

## Model Encoding

**A301- 100 F3**



TYPE-1	TYPE-2	TYPE-3	TYPE-4	TYPE-5
JAPAN	USA	EUROPE	UNIVERSAL	AUSTRALIA U.K.
▶ Please consult MEAN WELL for other kinds of optional socket. TYPE-2,3 (standard model) ; TYPE-1,4,5 (optional model)				

# ERS/ERG Series

4 CH 1400W Energy Recycling DC Power Supply  
4 CH 5000W Energy Recycling Grid Type Power Inverter



## ERS Features

- AC/DC Energy Recovery System Power Supply
- Wide input voltage range:  
10~60VDC/60~380VDC by models
- Modular design, flexible configuration of aging tests in groups or partitions
- Flexible CC/CV/CP operation modes
- Built-in CANBus communication interface, and can be used with CMU2A for remote monitoring, setting, data analysis and management
- Max. of 64 units ERS-1400 can be connected
- Protections: Over Voltage/Undervoltage/Over Temp./Communication Error
- Aging test system, energy saving & carbon reduction
- 5 years warranty

## ERG Features

- DC/AC Grid-connected Energy Recovery Inverter
- Wide input voltage range:  
10~60VDC/60~420VDC by models
- Modular design, flexible configuration of aging tests in groups or partitions
- Flexible CC/CV operation modes
- Built-in CANBus communication interface, and can be used with CMU2A for remote monitoring, setting, data analysis and management
- Max. of 64 units ERG-5000 can be connected
- Protections: Over & Undervoltage/Over Temp./Over Power/Grid Fault/Communication Error
- Aging test system, energy saving & carbon reduction
- 5 years warranty

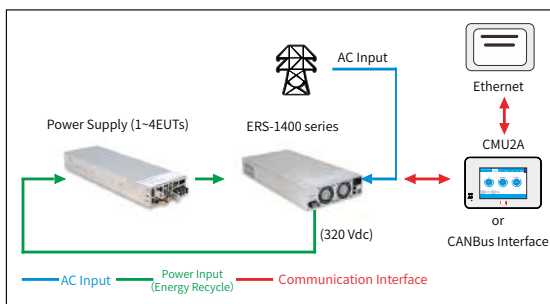
## Models



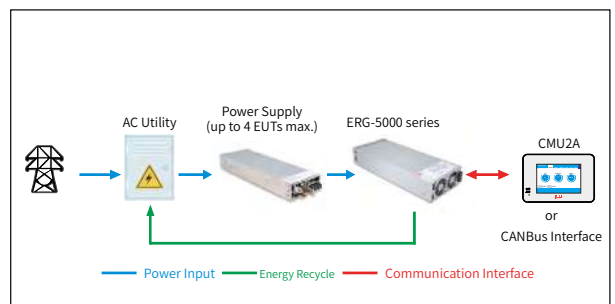
Model No.	ERS-1400	ERS-1400H	ERG-5000	ERG-5000H
DC Input Voltage	10~60VDC	60~380VDC	10~60VDC	60~420VDC
AC Input Voltage	180~264VAC		N.A	
Vout / Iout	320VDC, 0~6.3A	320VDC, 0~6.3A	180~264VAC, Single Phase ,24A	

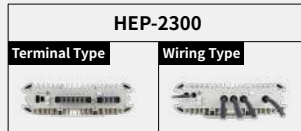
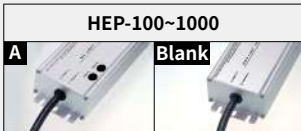
## Application Diagram:

### ERS-1400(H)



### ERG-5000(H)





## HEP-100~600 Features

- Universal AC input/Full range: 85~264VAC
- Active PFC, high efficiency up to 96%
- No load power consumption<0.5W at remote OFF (HEP-600)
- Aluminum case and filling with heat-conducted glue, fanless design
- -55~+70°C wide operating temperature(HEP-600: -40~+70°C)
- Meet 6KV surge immunity level
- Withstand 10G vibration test
- Operating altitude up 5000 meters
- Protections: Short Circuit/Overload/Over Voltage/Over Temp.
- Various functions for selection:  
A-Type (Standard): IP65, Vo and Io can be adjusted through internal potentiometer  
Blank-Type (Optional): IP68, Vo and Io cannot be adjusted (Except for HEP-600)
- Suitable for industrial applications in high/low temperature, high humidity, high vibration or outdoor
- 6 years warranty

## HEP-1000~2300 Features

- Universal AC input/Full range: 90~305VAC
- Active PFC, high efficiency up to 96%
- Aluminum case fanless design, filling with head-conducted glue
- Withstand 10G vibration test
- -40~+70°C wide operating temperature
- Charger for lead-acid batteries and Li-ion batteries
- Built-in default 2/3 stage charging curves and programmable curve
- Built-in CANBus; PMBus/Modbus selectable (Only HEP-2300)
- Output voltage and constant current level programmable
- Remote ON/OFF control (Except for HEP-1000 Terminal Type)
- DC OK active signal and auxiliary power available
- HEP-2300 harness connector type with AC fail and T-Alarm signal
- Protections: Short Circuit/Overload/Over Voltage/Over Temp.
- IP67 design for indoor or outdoor installation (Wiring Type)
- LED indicator for power on (Except for HEP-1000 as Terminal Type)
- 6 years warranty

## Models

IP65 IP67 PMBus IFC CB A cULus ENEC CE UK CA

Model No.	HEP-100-□	HEP-150-□	HEP-185-□	HEP-240-□
Vout / Iout	12V, 0~8.34A	12V, 0~12.5A	12V, 0~13A	12V, 0~16A
	15V, 0~6.67A	15V, 0~10A	15V, 0~11.5A	15V, 0~15A
	24V, 0~4A	24V, 0~6.3A	24V, 0~7.8A	24V, 0~10A
	36V, 0~2.65A	36V, 0~4.2A	36V, 0~5.2A	36V, 0~6.7A
	48V, 0~2A	48V, 0~3.2A	48V, 0~3.9A	48V, 0~5A
	54V, 0~1.77A	54V, 0~2.8A	54V, 0~3.45A	54V, 0~4.45A

Model No.	HEP-320-□	HEP-480-□	HEP-600	HEP-1000-○	HEP-2300-○		
Vout / Iout	12V, 0~22.0A	24V, 0~20A	12V, 0~40A	Power	24V, 0~42A	Power	55V, 0~48A
	15V, 0~19.0A	36V, 0~13.3A	15V, 0~36A		48V, 0~21A	charger	57.6V, 0~48A
	24V, 0~13.34A	48V, 0~10A	20V, 0~28A		100V, 0~10A		
	36V, 0~8.90A	54V, 0~8.9A	24V, 0~25A	charger	28.8V, 0~35A		115V, 0~20A
	48V, 0~6.70A		30V, 0~20A		57.6V, 0~17.5A	charger	230V, 0~10.6A
	54V, 0~5.95A		36V, 0~16.7A		115.2V, 0~8.7A		380V, 0~6.9A
			42V, 0~14.3A				
			48V, 0~12.5A				
		54V, 0~11.2A					

□=A or Blank A: Standard model(IP65) Blank: Optional model(IP68)  
 ○=Blank, W, H(2300W only) Blank: Terminal type W: Wiring type with IP67 H: Harness connector type

# PSC/ADS/AD/ADD Series

35~160W PCB/Enclosed Type (With UPS)  
Single/Dual Output Security Power



PSC-35  
(3.3"x 2")



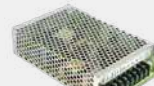
PSC-60  
(4"x 2")



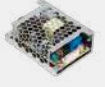
PSC-100  
(5"x 3")



PSC-160  
(6"x 3")



ADS-55  
AD-55  
ADD-55  
159x97x38 mm



PSC-35x-C



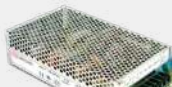
PSC-60x-C



PSC-100x-C



PSC-160x-C



ADS-155  
AD-155  
ADD-155  
199x110x50 mm



Spec

## PSC Features

- Universal AC input/Full range: 90~264VAC
- Single output with built-in battery charger circuit (UPS function)
- PCB (PSC) & Enclosed (PSC-C) Type multiple option
- Compact size
- Protections: Short Circuit/Overload/Over voltage/Battery low/Battery Reverse Polarity(fuse)
- Alarm signal for AC OK and battery reverse low
- Fanless design, free air convection
- -30~+70°C wide operating temperature
- 2 years warranty

## ADS/AD/ADD Features

- Universal AC input/Full range: 88~264VAC
- Fanless design
- ADS: Single output, additional 5V with no external battery
- AD: Built-in battery charging control for single output, and external battery can be used to form UPS
- ADD: Dual output with built-in battery charging control, and external batteries can be connected to form UPS
- Protections: Short Circuit/Overload/Over Voltage/Battery Low Voltage (except ADS series)/Battery Polarity (AD/ADD-155)
- -10~+60°C working temperature
- Support 12V/24V/48V system
- 2 years warranty

## Models



Model No.	Output Number	PSC-35A□	PSC-35B□	PSC-60A□	PSC-60B□
Vout / Iout	CH1 (Main Power)	13.8V, 0~2.6A	27.6V, 0~1.3A	13.8V, 0~4.3A	27.6V, 0~2.15A
	CH2 (Charging)	13.8V, 0~0.9A	27.6V, 0~0.45A	13.8V, 0~1.5A	27.6V, 0~0.75A
Dimension (mm)		PCB: 84.6x50.8x24 Enclosed: 86.4x59.6x30		PCB: 101.6x50.8x29 Enclosed: 103.4x62x37	

Model No.	Output Number	PSC-100A□	PSC-100B□	PSC-160A□	PSC-160B□
Vout / Iout	CH1 (Main Power)	13.8V, 0~7A	27.6V, 0~3.5A	13.8V, 0~11.6A	27.6V, 0~5.8A
	CH2 (Charging)	13.8V, 0~2.5A	27.6V, 0~1.25A	13.8V, 0~4A	27.6V, 0~2A
Dimension (mm)		PCB : 127x76.2x31 Enclosed: 130x85x37		PCB : 152.4x76.2x32 Enclosed: 155.4x85x37	

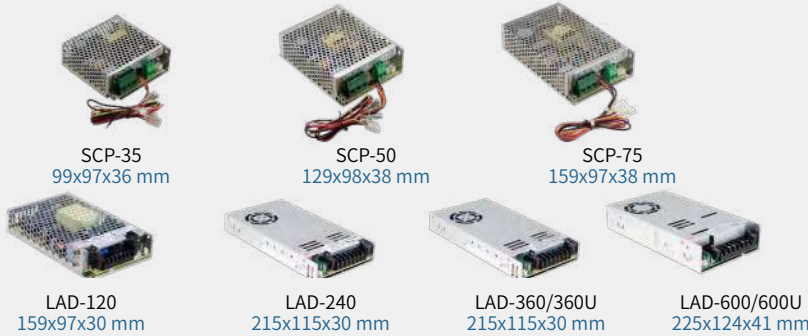
□=Blank, -C Blank:PCB Type -C: Enclosed Type

Model No.	Output Number	ADS-5512	ADS-5524	ADS-15512	ADS-15524	ADS-15548
Vout / Iout	CH1 (Main Power)	12V, 0~4A	24V, 0~2.5A	12V, 0~12.5A	24V, 0~6.5A	48V, 0~3.2A
	CH2 (Auxiliary Power)	5V, 0~4A	5V, 0~4A	5V, 0~3A	5V, 0~3A	5V, 0~3A

Model No.	Output Number	AD-55A	AD-55B	AD-155A	AD-155B	AD-155C
Vout / Iout	CH1 (Main Power)	13.8V, 0~4A	27.6V, 0~2A	13.8V, 0~11.5A	27.6V, 0~5.5A	54V, 0~2.7A
	CH2 (Charging)	13.4V, 0~0.23A	26.5V, 0~0.16A	13.3V, 0~0.5A	27.1V, 0~0.5A	53.5V, 0~0.5A

Model No.	Output Number	ADD-55A	ADD-55B	ADD-155A	ADD-155B	ADD-155C
Vout / Iout	CH1 (Main Power)	13.8V, 0~3.5A	27.6V, 0~2A	13.8V, 0~10.5A	27.6V, 0~5A	54V, 0~2.5A
	CH2 (Auxiliary Power)	5V, 0~4A	5V, 0~4A	5V, 0~3A	5V, 0~3A	5V, 0~3A
	CH3 (Charging)	13.4V, 0~0.23A	26.5V, 0~0.16A	13.3V, 0~0.5A	27.1V, 0~0.5A	53.5V, 0~0.2A





## SCP Features

- Universal AC input/Full range: 85~264VAC
- **Basic model, can be plugged in with an external battery, does not have battery charging control**
- Fanless design, free air convection
- Output voltage detection signal
- **Temperature compensation function**
- No load power consumption <0.75W
- Protections: Short Circuit/Overload/Over Voltage/ Battery Reverse Polarity Protection by Fuse
- -20~+60°C operating temperature
- LED indicator for power on
- 2 years warranty

## LAD Features

- Universal AC input / Full range (120W: 90~264VAC, 240~600W: 115/230VAC by S.W)
- **Single output with battery charging control, external battery can be connected to constitute UPS function**
- Built-in TTL signals for status detection: AC OK, Battery Disconnect, Battery Reverse Polarity, Battery Undervoltage, Fully Charged and Backedup
- **UART Communication** (LAD-360/600 U Type Only)
- Built-in main and backup circuit enhance maintenance safety
- CH1 output voltage adjustable (-20 +5%) by VR
- Built-in **buzzer alarm** (LAD-360/600 U Type Only)
- Forced UPS activation for battery maintenance
- Protections: Short Circuit/Overload/Over Voltage/Over Temp./ Battery Under voltage/**Battery Reverse Polarity (No damage)**
- -20~+60°C operating temperature
- Comply with fire regulation **GB17945**
- **1U low profile (30mm)**
- 3 years warranty

## Models



Model No.	SCP-35	SCP-50	SCP-75
Vout / Iout	13.8V, 0~2.6A	13.8V, 0~3.6A	13.8V, 0~5.4A
	27.6V, 0~1.4A	27.6V, 0~1.8A	27.6V, 0~2.7A
Dimension (mm)	99x97x36	129x98x38	159x97x38

Model No.	Output Number	LAD-120A	LAD-120B	LAD-120C	LAD-120D
Vout / Iout	CH1	13.8V, 0~8.7A	27.6V, 0~4.4A	41.5V, 0~2.9A	55.2V, 0~2.21A
	CH2 (Charging)	13.8V, 0~1A	27.6V, 0~1A	41.5V, 0~1A	55.2V, 0~1A

Model No.	Output Number	LAD-240A	LAD-240B	LAD-240C	LAD-240D
Vout / Iout	CH1	13.8V, 0~17.4A	27.6V, 0~8.7A	41.5V, 0~5.78A	55.2V, 0~4.4A
	CH2 (Charging)	13.8V, 0~1A	27.6V, 0~1A	41.5V, 0~1A	55.2V, 0~1A

Model No.	Output Number	LAD-360B <sup>U</sup>	LAD-360C <sup>U</sup>	LAD-360D <sup>U</sup>
Vout / Iout	CH1	27.6V, 0~13A	41.5V, 0~8.64A	55.2V, 0~6.53A
	CH2 (Charging)	27.6V, 0~1.5A	41.5V, 0~1.5A	55.2V, 0~1.5A

Model No.	Output Number	LAD-600B <sup>U</sup>	LAD-600C <sup>U</sup>	LAD-600D <sup>U</sup>
Vout / Iout	CH1	27.6V, 0~21.74A	41.5V, 0~14.45A	55.2V, 0~10.87A
	CH2 (Charging)	27.6V, 0~3A	41.5V, 0~3A	55.2V, 0~3A

U: Built-in UART Communication

# DRC/DRS Series

40~480W Security/Fire Alarm DIN Rail



DRC-40 40x90x100 mm    DRC-60 40x90x100 mm    DRC-100 55x90x100 mm    DRC-180 63x125.2x113.5 mm    DRS-240 85.5x125.2x129.2 mm    DRS-480 110x125.2x150.7 mm



## DRC Features

- Universal AC input/Full range: 90~264VAC
- Single output with battery charging control, external battery can be connected to constitute UPS function
- Pass LPS (DRC-40/60)
- Fanless design, free air convection
- Alarm signal for AC OK and battery low via relay contact
- Protections: Short Circuit/Overload/Over Voltage/ Battery Low /Battery Reverse Polarity(fuse)
- -30~+70°C wide operating temperature
- LED indicator for power on
- 3 years warranty

## DRS Features

- Universal AC input/Full range: 90~305 VAC
- Integrated multifunctional intelligent power supply for Security/Fire Alarm (Power Supply, DC-UPS, Battery Charging, and Status Monitoring)
- Signal and alarms design meet UL2524/EN54-4/GB17945 requirement
- Load power prioritized when the AC power grid is abnormal
- Form-C relay, detects AC fail, DC OK, low battery voltage, abnormal detection of charging circuit
- Built-in MODBus protocol (CANBus optional)
- Protections: Short Circuit/Overload/Over Voltage/Over Temp. (auto derating)/Battery Discharged/Battery Undervoltage/ Battery Reverse Polarity (No damage)
- 20~100% charging current adjustable by VR
- 2 or 3 charging curves, adjustable by DIP S.W
- -30~+70°C wide operating temperature
- Suitable for lead acid and lithium-ion batteries
- 3 years warranty

## Models



Model No.	Output Number	DRC-40A	DRC-40B	DRC-60A	DRC-60B
Vout / Iout	CH1 (Main Power)	13.8V, 0~2.9A	27.6V, 0~1.45A	13.8V, 0~4.3A	27.6V, 0~2.15A
	CH2 (Charging)	13.8V, 0~1A	27.6V, 0~0.5A	13.8V, 0~1.5A	27.6V, 0~0.75A

Model No.	Output Number	DRC-100A	DRC-100B	DRC-180A	DRC-180B
Vout / Iout	CH1 (Main Power)	13.8V, 0~7A	27.6V, 0~3.5A	13.8V, 0~9A	27.6V, 0~4.5A
	CH2 (Charging)	13.8V, 0~2.5A	27.6V, 0~1.25A	13.8V, 0~4A	27.6V, 0~2A

Model No.	DRS-240	DRS-480
Vout / Iout	12V, 0~20A	24V, 0~20A
	24V, 0~10A	36V, 0~13.3A
	36V, 0~6.6A	48V, 0~10A
	48V, 0~5A	

**Note:**  
 DRS series built-in high current charging function  
 Total Output Wattage =  
 Charging Wattage + Load Wattage

Product Profile	Type	Series Name	Watt.	Function								Design ref. Safety	
				Charger	Charging Adj.	UPS	AC OK	DC OK	BAT. Low	No BAT.	Alarm		Com
Basic		SCP	35W 50W 75W										
		AD	55W 155W	✓									
Advance	Enclosed	LAD	120W 240W 360W 600W	✓		✓	✓ (TTL)	✓ (TTL)		✓ (buzzer optional)	360/600w UART optional	GB17945	
		PSC	35W 60W 100W 160W	✓		✓	✓ (RELAY)	✓ (TTL)					
Premium	Open-Frame	DRC	40W 60W 100W 180W	✓		✓	✓ (RELAY)	✓ (TTL)					
		DRS	240W 480W	✓	✓ (20-100%)	✓	✓ (RELAY)	✓ (RELAY)	✓ (RELAY)	✓ (RELAY)	✓ (MODBus)	✓ (MODBus)	UL2524 EN54-4 GB17945





KNX-20E-640

W52.5x H90x D54.5mm



KNX-40E-1280 D

W72x H90x D57mm



KAA-8R-16S

KAA-8R-10S

W70x H90x D57mm



KAA-4R4V-10S

W70x H90x D57mm



Spec

## KNX Features

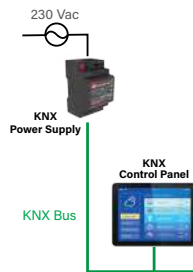
- EIB / KNX power supply with Integrated choke
- 180~264VAC Input
- No load power consumption < 0.5W
- Safety Extra Low Voltage (SELV)
- Isolation class I
- Over voltage category III
- LED indicator for normal operation, bus reset and bus overload
- Compact size
- Protections: Short Circuit/Overload/Over Voltage
- 3 years warranty

## KAA Features

- KNX LED switching driver/dimmer
- Dimming and lighting control of LED driver & electrical ballast (KAA-4R4V)
- Linear or logarithmic dimming curve programmable via ETS software (KAA-4R4V)
- 8 channel actuator in a compact size (KAA-8R)
- For AX, C-load, capacitive & inductive of loads (KAA-8R)
- Manual control via Push button on panel
- Programmable various time and scene function
- 3 years warranty

MEAN WELL also provide KNX lighting control solution, please check our standard LED driver catalog or visit our website

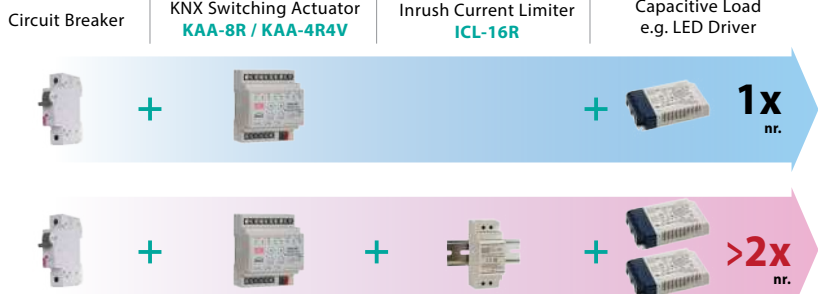
<https://www.meanwell.com>



LED Lamp LED Driver	Dimmable LED Lamp LED Driver	DALI LED Lamp LED Driver	KNX LED Driver	KNX LED Driver
KNX Actuator	KNX Dimming Actuator	KNX/DALI Gateway	KNX LED Driver	KNX LED Driver

### Durability of KNX Actuator

All MEAN WELL KNX actuator has been tested more than standard to 220µF to ensure long term operation in the system. In case even higher demand is required, the inrush current limiter can be placed between KNX actuator and the loads to further increase the capacitive load to 2500µF.



NOTE: The max. number connected load is no more limited by its inrush current.

# LSP/UHP/ERP Series

LED Display and Outdoor Lighting Power Supply



LSP-160  
194x55x20

UHP-200A  
167x55x26

ERP-200  
200x120x40

ERP-350  
220.4x130x48

ERPF-400  
220.4x130x48



Spec

## LSP/UHP Features

- Universal AC input / Full range
- Withstand 300VAC surge input for 5 secs.
- Slim width and low profile
- Built-in active PFC function
- Built-in current sharing  
(LSP-160 series output below 5V)
- Fanless design, free air convection
- DC OK active signal function
- Protections: Short Circuit/Overload/  
Over Voltage/Over Temp.
- LED indicator for power on
- 3 years warranty

## ERP Features

- Constant voltage output
- Withstand 300VAC surge input for 5 secs.
- Metal case with semi-potted design, against rain splash
- Built-in active PFC function (ERPF Series)
- No-load/standby power consumption <0.5W
- Protections: Short Circuit/Overload/  
Over Voltage/Over Temp.
- 3 years warranty

## Models

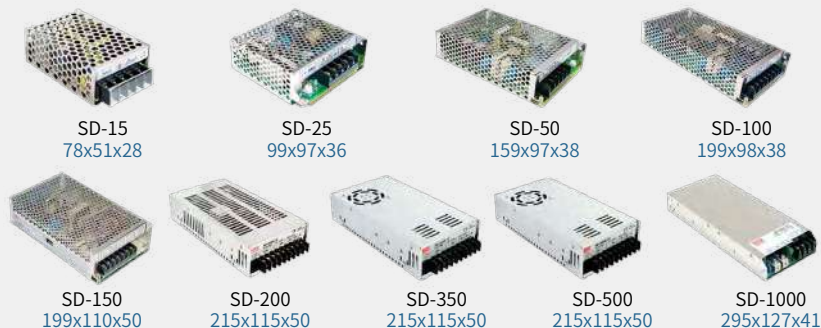


Model No.	LSP-160□-xx○	UHP-200A	ERP-200	ERP-350	ERPF-400
Vin	100~264VAC	90~264VAC	180~264VAC	180~264VAC	90~264VAC
Vout / Iout	3.3V, 0~32A	4.2V, 0~40A	12V, 0~16.8A	12V, 0~26.7A	12V, 0~30A
	4.2V, 0~32A	4.5V, 0~40A	24V, 0~8.33A	24V, 0~14.6A	24V, 0~16.7A
	5V, 0~32A	5V, 0~40A		36V, 0~9.7A	48V, 0~8.3A
	12V, 0~13.5A			48V, 0~7.3A	
	24V, 0~6.75A				
	36V, 0~4.5A				
	48V, 0~3.4A				

□ = Blank or R  
○ = T or W

Blank: Enclosed  
T: For terminal block;

R: Current sharing function (3.3/4.2/5V)  
W: For wafer connector (By Request)



SD Spec

## Features

- 2:1 wide input range (SD-15~350)
- 4:1 wide input range (SD-500/1000)
- I/O isolation: 1.5KVAC (SD-15~350)  
2KVAC (SD-500/1000)
- Protections: Short Circuit/Overload/Over Voltage;  
Over Temp. (200~1000W) /Input Polarity (500W only)
- Fanless design, cooling by free air convection (SD-15~200)
- Forced air cooling by built-in DC fan (SD-350~1000)
- DC input active surge current limiting (SD-500 only)
- Output OK signal (SD-500/1000)
- 12 Vaux / 0.25A output (SD-500/1000)
- Built-in remote ON/OFF control and remote sense (SD-500/1000)
- 2 years warranty (SD-15~350)
- 3 years warranty (SD-500/1000)

## Models



Model No.	SD-15A	SD-15B	SD-15C	SD-25A	SD-25B	SD-25C
Vin	9.2~18VDC	18~36VDC	36~72VDC	9.2~18VDC	19~36VDC	36~72VDC
Vout / Iout	5V, 0~3A	5V, 0~3A	5V, 0~3A	5V, 0~5A	5V, 0~5A	5V, 0~5A
	12V, 0~1.25A	12V, 0~1.25A	12V, 0~1.25A	12V, 0~2.1A	12V, 0~2.1A	12V, 0~2.1A
	24V, 0~0.625A	24V, 0~0.625A	24V, 0~0.625A	24V, 0~1.1A	24V, 0~1.1A	24V, 0~1.1A

Model No.	SD-50A	SD-50B	SD-50C	SD-100A	SD-100B	SD-100C	SD-100D
Vin	9.2~18VDC	19~36VDC	36~72VDC	9.5~18VDC	19~36VDC	36~72VDC	72~144VDC
Vout / Iout	5V, 0~10A	5V, 0~10A	5V, 0~10A	5V, 0~18A	5V, 0~20A	5V, 0~20A	5V, 0~20A
	12V, 0~4.2A	12V, 0~4.2A	12V, 0~4.2A	12V, 0~8.5A	12V, 0~8.5A	12V, 0~8.5A	12V, 0~8.5A
	24V, 0~2.1A	24V, 0~2.1A	24V, 0~2.1A	24V, 0~4.2A	24V, 0~4.2A	24V, 0~4.2A	24V, 0~4.2A

Model No.	SD-150B	SD-150C	SD-150D	SD-200B	SD-200C	SD-200D
Vin	19~36VDC	36~72VDC	72~144VDC	19~36VDC	36~72VDC	72~144VDC
Vout / Iout	12V, 0~12.5A	12V, 0~12.5A	12V, 0~12.5A	5V, 0~34A	5V, 0~40A	5V, 0~40A
	24V, 0~6.3A	24V, 0~6.3A	24V, 0~6.3A	12V, 0~16.7A	12V, 0~16.7A	12V, 0~16.7A
				24V, 0~8.4A	24V, 0~8.4A	24V, 0~8.4A
				48V, 0~4.2A	48V, 0~4.2A	48V, 0~4.2A

Model No.	SD-350B	SD-350C	SD-350D	SD-500L	SD-500H	SD-1000L	SD-1000H
Vin	19~36VDC	36~72VDC	72~144VDC	19~72VDC	72~144VDC	19~72VDC	72~144VDC
Vout / Iout	5V, 0~57A	5V, 0~60A	5V, 0~60A	12V, 0~40A	12V, 0~40A	12V, 0~60A	12V, 0~60A
	12V, 0~27.5A	12V, 0~27.5A	12V, 0~29.2A	24V, 0~21A	24V, 0~21A	24V, 0~40A	24V, 0~40A
	24V, 0~14.6A	24V, 0~14.6A	24V, 0~14.6A	48V, 0~10.5A	48V, 0~10.5A	48V, 0~21A	48V, 0~21A
	48V, 0~7.3A	48V, 0~7.3A	48V, 0~7.3A				

# RSD Series

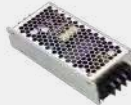
## 30~500W Railway & ITE DC-DC Converter (Enclosed Type)



RSD-30  
113x60x25



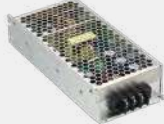
RSD-60  
128x60x25



RSD-100  
161x68x36



RSD-150  
189x77x36



RSD-200  
191x86x40



RSD-300  
216x96.5x40



RSD-500  
237x100x41



RSD Spec

## Features

- **Railway & ITE dual certification**
- 2:1 wide input range (RSD-100~500)
- 4:1 wide input range (RSD-30/60)
- **4KVDC I/O reinforced isolation**
- Protections: Short Circuit/Overload/Over Voltage/Over Temp./DC Input Reverse Polarity
- **Fanless design**, cooling by free air convection
- **-40~+70°C** wide operating temperature (RSD-500: -40~+80°C)
- Built-in constant current limiting circuit
- Ultra compact and 1U low profile (25~41 mm)
- **Half encapsulated, moistureproof, dustproof and 5G vibration resistance**
- All using 105°C long life electrolytic capacitors
- LED indicator for power on
- 3 years warranty

## Models



Model No.	RSD-30G	RSD-30L	RSD-30H	RSD-60G	RSD-60L	RSD-60H
Vin	9~36VDC	18~72VDC	40~160VDC	9~36VDC	18~72VDC	40~160VDC
Vout / Iout	3.3V, 0~6A	3.3V, 0~6A	3.3V, 0~6A	3.3V, 0~12A	3.3V, 0~12A	3.3V, 0~12A
	5V, 0~6A	5V, 0~6A	5V, 0~6A	5V, 0~12A	5V, 0~12A	5V, 0~12A
	12V, 0~2.5A	12V, 0~2.5A	12V, 0~2.5A	12V, 0~5A	12V, 0~5A	12V, 0~5A
	24V, 0~1.25A	24V, 0~1.25A	24V, 0~1.25A	24V, 0~2.5A	24V, 0~2.5A	24V, 0~2.5A

Model No.	RSD-100B	RSD-100C	RSD-100D	RSD-150B	RSD-150C	RSD-150D
Vin	16.8~31.2VDC	33.6~62.4VDC	67.2~143VDC	16.8~31.2VDC	33.6~62.4VDC	67.2~143VDC
Vout / Iout	5V, 0~20A	5V, 0~20A	5V, 0~20A	5V, 0~30A	5V, 0~30A	5V, 0~30A
	12V, 0~8.4A	12V, 0~8.4A	12V, 0~8.4A	12V, 0~12.5A	12V, 0~12.5A	12V, 0~12.5A
	24V, 0~4.2A	24V, 0~4.2A	24V, 0~4.2A	24V, 0~6.3A	24V, 0~6.3A	24V, 0~6.3A

Model No.	RSD-200B	RSD-200C	RSD-200D	RSD-500B	RSD-500C	RSD-500D
Vin	16.8~31.2VDC	33.6~62.4VDC	67.2~143VDC	16.8~33.6VDC	33.6~67.2VDC	67.2~154VDC
Vout / Iout	12V, 0~16.7A	12V, 0~16.7A	12V, 0~16.7A	12V, 0~35A	12V, 0~35A	12V, 0~35A
	24V, 0~8.4A	24V, 0~8.4A	24V, 0~8.4A	24V, 0~17.5A	24V, 0~19.2A	24V, 0~20.8A
	48V, 0~4.2A	48V, 0~4.2A	48V, 0~4.2A	48V, 0~8.8A	48V, 0~9.6A	48V, 0~10.4A

Model No.	RSD-300B	RSD-300C	RSD-300D	RSD-300E	RSD-300F
Vin	16.8~31.2VDC	33.6~62.4VDC	67.2~143VDC	25.2~46.8VDC	50.4~93.6VDC
Vout / Iout	5V, 0~42A	5V, 0~42A	5V, 0~42A	5V, 0~42A	5V, 0~42A
	12V, 0~22.5A	12V, 0~25A	12V, 0~25A	12V, 0~25A	12V, 0~25A
	24V, 0~11.3A	24V, 0~12.5A	24V, 0~12.5A	24V, 0~12.5A	24V, 0~12.5A
	48V, 0~5.7A	48V, 0~6.3A	48V, 0~6.3A	48V, 0~6.3A	48V, 0~6.3A

# 15~480W Railway & ITE DC-DC Converter (DIN Rail Type)

# DDR Series



DDR-15 17.5x90x54.5  
DDR-30 35x90x54.5  
DDR-60 52.5x90x54.5

DDR-120 32x125.2x102  
DDR-240 40x125.2x113.5  
DDR-480 85.5x125.2x128.5



DDR Spec

## DDR-15~60 Features

- Plastic case
- **4:1** ultra-wide input range
- Compact size with 1SU~3SU width
- **Fanless design**, cooling by free air convection
- DIN Rail: TS-35/7.5 or TS-35/15
- **4KVDC** I/O Reinforced isolation
- **-40~+85°C** wide operating temperature
- DC output adjustable (+/-10%)
- Protections: Short Circuit/Overload/  
Over Voltage/Input Reverse Polarity/  
Input Under Voltage
- 3 years warranty

## DDR-120~480 Features

- Metal case
- **2:1** wide input range
- **Railway & ITE dual certification**
- **150%** peak load capability
- **-40~+70°C** wide operating temperature
- **Fanless design**, cooling by free air convection
- DIN Rail: TS-35/7.5 or TS-35/15
- **4KVDC** I/O Reinforced isolation
- DC output adjustable ( $\pm 15\%$ )
- DC OK relay contact and Remote ON/OFF(DDR-240/480 only)
- **Current sharing function** with 3+1  
(DDR-240/480 only; Max. 960W/1920W)
- Protections: Short Circuit/Overload/Over Voltage/  
Input Reverse Polarity/Input Under Voltage
- 3 years warranty

## Models



Model No.	DDR-15G	DDR-15L	DDR-30G	DDR-30L	DDR-60G	DDR-60L
Vin	9~36VDC	18~75VDC	9~36VDC	18~75VDC	9~36VDC	18~75VDC
Vout / Iout	3.3V, 0~3.5A	3.3V, 0~4.5A	5V, 0~6A	5V, 0~6A	5V, 0~10.8A	5V, 0~12A
	5V, 0~3A	5V, 0~3A	12V, 0~2.5A	12V, 0~2.5A	12V, 0~5A	12V, 0~5A
	12V, 0~1.25A	12V, 0~1.25A	15V, 0~2A	15V, 0~2A	15V, 0~4A	15V, 0~4A
	15V, 0~1A	15V, 0~1A	24V, 0~1.25A	24V, 0~1.25A	24V, 0~2.5A	24V, 0~2.5A
	24V, 0~0.63A	24V, 0~0.63A				

Model No.	DDR-120A	DDR-120B	DDR-120C	DDR-120D	DDR-240B	DDR-240C	DDR-240D
Vin	9~18VDC	16.8~33.6VDC	33.6~67.2VDC	67.2~154VDC	16.8~33.6VDC	33.6~67.2VDC	67.2~154VDC
Vout / Iout	12V, 0~8.3A	12V, 0~10A	12V, 0~10A	12V, 0~10A	24V, 0~10A	24V, 0~10A	24V, 0~10A
	24V, 0~4.2A	24V, 0~5A	24V, 0~5A	24V, 0~5A	48V, 0~5A	48V, 0~5A	48V, 0~5A
	48V, 0~2.1A	48V, 0~2.5A	48V, 0~2.5A	48V, 0~2.5A			

Model No.	DDR-480B	DDR-480C	DDR-480D
Vin	16.8~33.6VDC	33.6~67.2VDC	67.2~154VDC
Vout / Iout	12V, 0~33.4A	12V, 0~33.4A	12V, 0~33.4A
	24V, 0~20A	24V, 0~20A	24V, 0~20A
	48V, 0~10A	48V, 0~10A	48V, 0~10A

# DDRH/RSDH Series

15~300W PV/Energy Storage  
DC-DC Converter



DDRH-15  
DDRH-30  
DDRH-45

DDRH-15-ST  
DDRH-30-ST  
DDRH-45-ST

DDRH-15-DR  
DDRH-30-DR  
DDRH-45-DR

DDRH-60

DDRH-120

DDRH-240

RSDH-150

RSDH-300



## ■ DDRH Features

- 150~1500VDC 10:1 ultra-wide input range (DDRH-15~60)  
250~1500VDC 6:1 ultra-wide input range(DDRH-120/240)
- 4KVDC I/O reinforced isolation
- **Fanless design**, cooling by free air convection
- **Potted with silicone, dust and moisture proof**(DDRH-15~60)
- DIN Rail: TS-35/7.5 or TS-35/15
- Protections: Short Circuit/Overload/Over Voltage/Over Temp./DC Input Under Voltage/DC Input Reverse Polarity
- **-40~+80°C** wide operating temperature (>+50°C derating based on models)
- **Current sharing function** with 3+1 (Only DDRH-240, **Max. 960W**)
- Operating altitude up to 5000 meters
- OVC II
- DC OK relay contact
- DC output adjustable (+20%, only DDRH-60~240)
- 3 years warranty

## ■ RSDH Features

- 250~1500VDC 6:1 ultra-wide input range
- 4KVAC I/O reinforced isolation
- Protections: Short Circuit/Overload/Over Voltage/Over Temp./DC Input Under Voltage/DC Input Reverse Polarity
- **Fanless design**, cooling by free air convection
- **Half encapsulated, dustproof, moistureproof, 3G vibration resistance**
- **-40~+80°C** wide operating temperature (>+55 °C derating)
- OVC II
- Operating altitude up to **5000** meters
- DC output adjustable (+20%)
- 1U low profile (41mm)
- 3 years warranty

## ■ Models

CB DEKRA EAC CE UK CA

Model No.	DDRH-15-xx□	DDRH-30-xx□	DDRH-45-xx□	DDRH-60	DDRH-120	DDRH-240
Vout / Iout	5V, 0~2A	12V, 0~2.5A	12V, 0~3.75A	5V, 0~10A	12V, 0~8.4A	12V, 0~16.7A
	12V, 0~1.25A	15V, 0~2A	15V, 0~3A	12V, 0~5A	24V, 0~5A	24V, 0~10A
	15V, 0~1A	24V, 0~1.25A	24V, 0~1.87A	24V, 0~2.5A	32V, 0~3.75A	32V, 0~7.5A
	24V, 0~0.625A	48V, 0~0.625A	48V, 0~0.93A	48V, 0~1.25A	48V, 0~2.5A	48V, 0~5A
Dimension (mm)	P : 76.2x50.8x25 ST : 122.3x57.3x32 DR : 122.3x57.3x43.5	P : 89x63.5x25 ST : 135x70x32 DR : 135x70x43.5		57x93.5x105	63x125.2x115	85.5x125.2x129.2






















□=P (PCB mounting); ST (Screw Terminal); DR (DIN Rail Type)

Model No.	RSDH-150	RSDH-300
Vout / Iout	12V, 0~10A	12V, 0~20A
	24V, 0~6.2A	24V, 0~12.5A
	32V, 0~4.68A	32V, 0~9.37A
	48V, 0~3.12A	48V, 0~6.25A
Dimension (mm)	191x86x41	237x100x41

# Selection Table of DC-DC Module Type



Selection Table  
of DC-DC Module

Type	Package	Series		Watt	Vin	Vout	Output Regulation	Isolation voltage	Operating temperature	Dimension (LxWxH)	Certificated	
		Picture	Model									
Medical	SIP		MDS01	1W	5V(4.5~5.5V) 12V(10.8~13.2V) 24V(21.6~26.4V)	3.3V 5V 12V 15V	Unregulated	6KVDC	-40~+85°C	0.77"x0.39"x0.49"	UL/EAC/ CE/UKCA 	
			MDD01	1W	5V(4.5~5.5V) 12V(10.8~13.2V) 24V(21.6~26.4V)	±5V ±9V ±12V ±15V						
			MDS02	2W	5V(4.5~5.5V) 12V(10.8~13.2V) 24V(21.6~26.4V)	5V 12V 15V						
			MDD02	2W	5V(4.5~5.5V) 12V(10.8~13.2V) 24V(21.6~26.4V)	±5V ±9V ±12V ±15V						
	DIP24		MDS03	3W	12V, 48V(9~36V) 24V, 48V(18~75V)	5V 12V 15V	Regulated	6KVDC	-40~+90°C	1.25"x0.8"x0.48"	EAC/CE/ UKCA 	
			MDD03	3W	12V, 24V(9~36V) 24V, 48V(18~75V)	±5V ±12V ±15V						
			MDS06	6W	12V, 24V(9~36V) 24V, 28V(18~75V)	5V 12V 15V						
			MDD06	6W	12V, 24V(9~36V) 24V, 48V(18~75V)	±5V ±12V ±15V						
	2"x1"		MDS15	15W	12V(9~18V) 24V(18~36V) 48V(36~75V)	5V 12V 15V 24V	Regulated	4KVAC	-40~+90°C	2"x1"x0.47"	EAC/CE/ UKCA 	
			MDS20	20W	12V(9~18V) 24V(18~36V) 48V(36~75V)	5V 12V 15V 24V						
	Photovoltaic/Energy Storage	DIP		DDRH-15-P	15W	150~1500V	5V 12V 15V 24V	Regulated	4KVAC	-40~+80°C	3"x2"x1"	EAC/CE/ UKCA  
				DDRH-30-P	30W	150~1500V	12V 15V 24V 48V					
			DDRH-45-P	45W	150~1500V	12V 15V 24V						
			DDRH-15-TB	15W	150~1500V	5V 12V 15V 24V						
			DDRH-30-TB	30W	150~1500V	12V 15V 24V 48V						
			DDRH-45-TB	45W	150~1500V	12V 15V 24V 48V						



# Selection Table of DC-DC Module Type



Type	Package	Series		Watt	Vin	Vout	Output Regulation	Isolation voltage	Operating temperature	Dimension (LxWxH)	Certificated	
		Picture	Model									
Railway	DIP24		RSDW08	8W	12V, 24V (9~36V) 24V, 48V (18~75V)	3.3V 5V 12V 15V	Regulated	1.5KVDC	-40~+85°C	1.25"x 0.8"x 0.4"	EAC/CE/ UKCA 	
			RDDW08	8W	12V, 24V(9~36V) 24V, 48V (18~75V)	±5V ±12V ±15V		1.5KVDC	-40~+85°C	1.25"x 0.8"x 0.4"		
			RSDW10	10W	72V, 96V, 110V (43~160V)	3.3V 5V 12V 15V		3KVDC	-40~+85°C	1.25"x 0.8"x 0.5"		
			RDDW10	10W	72V, 96V, 110V (43~160V)	±5V ±12V ±15V		3KVDC	-40~+85°C	1.25"x 0.8"x 0.5"		
	2"x1"		RSDW20	20W	12V, 24V (9~36V) 24V, 48V (18~75V) 72V, 96V, 110V (43~160V)	3.3V 5V 12V 15V		1.5/3KVDC (By type)	-40~+85°C	2"x 1"x 0.4"	EAC/CE/ UKCA 	
			RDDW20	20W	12V, 24V (9~36V) 24V, 48V (18~75V) 72V, 96V, 110V (43~160V)	±5V ±12V ±15V		1.5/3KVDC (By type)	-40~+85°C	2"x 1"x 0.4"		
			RSDW20UW	20W	12V, 24V, 48V 72V, 96V, 110V <b>(8.5~160V)</b>	5V 12V 15V		3KVAC	-40~+90°C	2"x 1"x 0.4"	UL/EAC/ CE/UKCA 	
			RDDW20UW	20W	12V, 24V, 48V 72V, 96V, 110V <b>(8.5~160V)</b>	±12V ±15V ±24V		3KVAC	-40~+90°C	2"x 1"x 0.4"		
			RSDW40	40W	12V, 24V(9~36V) 24V, 48V(18~75V) 72V, 96V,110V (40~160V)	3.3V 5V 12V 15V 24V 48V		1.6/3KVDC (By type)	-40~+90°C	2"x 1"x 0.41"	EAC/CE/ UKCA 	
			RDDW40	40W	12V, 24V(9~36V) 24V, 48V(18~75V)	±12V ±15V		1.6KVDC	-40~+90°C	2"x 1"x 0.41"		
			RSDW60	60W	12V, 24V(9~36V) 24V, 48V(18~75V) 72V, 96V,110V (40~160V)	3.3V 5V 12V 15V 24V 48V		1.6/3KVDC (By type)	-40~+85°C	2"x 1"x 0.41"		
			RDDW60	60W	12V, 24V(9~36V) 24V, 48V(18~75V)	±12V ±15V		1.6KVDC	-40~+85°C	2"x 1"x 0.41"		
	1/4 Brick		RQB40W12	40W	24V, 36V, 48V, 72V, 96V, 110V <b>(14~160V)</b>	5V 12V 24V 48V 54V		3KVDC	-40~+90°C	2.28"x 1.45"x 0.5"		EAC/CE/ UKCA 
			RQB60W12	60W	24V, 36V, 48V, 72V, 96V, 110V <b>(14~160V)</b>	5V 12V 24V 48V 54V		3KVDC	-40~+90°C	2.28"x 1.45"x 0.5"		
			RQB150W12	150W	24V, 36V, 48V, 72V, 96V, 110V <b>(14~160V)</b>	12V 24V 48V 54V		3KVDC	-40~+90°C	2.28"x 1.45"x 0.5"		
			RQB150W3	150W	72V, 96V,110V (60~160V)	12V 24V 48V 54V		3KVDC	-40~+90°C	2.28"x 1.45"x 0.5"		



# Selection Table of DC-DC Module Type





















Type	Package	Series		Watt	Vin	Vout	Output Regulation	Isolation voltage	Operating temperature	Dimension (LxWxH)	Certificated			
		Picture	Model											
Telecom / Datacom / Industrial	SIP		N78-PV/PH	3.3~15W	12V(6~36V)	3.3V	Regulated	NA (non-isolated)	-40~+85°C	16x10.5x7.5mm	EAC/CE/UKCA			
					12V(8~36V) 12V(8~27V)	5V -5V								
					24V(13~36V)	9V								
			N78-C/CW	3.3~15W	24V(16~36V) 12V(8~20V)	12V -12V								
	24V(20~36V) 12V(8~18V)				15V -15V									
	SMD		SPOL-01	5.5W	Nom. 12V (3~14V)	Nom.5V (0.9~5.5V programmable)	Regulated	NA (non-isolated)	-40~+82°C	12.4x12.4x4mm	EAC/CE/UKCA			
						SPOL-12						66W	Nom. 12V (3~14V)	Nom.5V (0.6~5.5V programmable)
														SMT01
			SBTN01	1W	5V(4.5~5.5V) 12V(10.8~13.2V) 24V(21.6~26.4V)	5V 9V 12V 15V	1.5KVDC	-40~+90°C (-40~+105°C optional)	0.5"x 0.43"x 0.28"	CB/UL/EAC/CE/UKCA				
						SBTN01-N					1W	5V(4.5~5.5V) 12V(10.8~13.2V) 24V(21.6~26.4V)	5V 12V 15V	
			SFTN01	1W			5V(4.5~5.5V) 12V(10.8~13.2V) 24V(21.6~26.4V)	5V 9V 12V 15V	3KVDC	-40~+90°C (-40~+105°C optional)		0.6"x 0.42"x 0.28"	EAC/CE/UKCA	
						SFTN01-N	1W	5V(4.5~5.5V) 12V(10.8~13.2V) 24V(21.6~26.4V)			5V 9V 12V 15V			3KVDC
			DETN01	1W				5V(4.5~5.5V) 12V(10.8~13.2V) 24V(21.6~26.4V)	±5V ±12V ±15V	3KVDC	-40~+90°C (-40~+105°C optional)	0.6"x 0.43"x 0.28"	EAC/CE/UKCA	
						DETN01-N	1W	5V(4.5~5.5V) 12V(10.8~13.2V) 24V(21.6~26.4V)	±5V ±12V ±15V					3KVDC
			SFTN02	2W				5V(4.5~5.5V) 12V(10.8~13.2V) 24V(21.6~26.4V)	5V 12V 15V	3KVDC	-40~+100°C	0.6"x 0.43"x 0.28"	EAC/CE/UKCA	
						SFTN02-N	2W	5V(4.5~5.5V) 12V(10.8~13.2V) 24V(21.6~26.4V)	5V 12V 15V					3KVDC
			DETN02	2W				5V(4.5~5.5V) 12V(10.8~13.2V) 24V(21.6~26.4V)	±5V ±12V ±15V	3KVDC	-40~+100°C (-40~+105°C optional)	0.6"x 0.43"x 0.28"	EAC/CE/UKCA	
						DETN02-N	2W	5V(4.5~5.5V) 12V(10.8~13.2V) 24V(21.6~26.4V)	±5V ±12V ±15V					3KVDC

# Selection Table of DC-DC Module Type





















Selection Table  
of DC-DC Module

Type	Package	Series		Watt	Vin	Vout	Output Regulation	Isolation voltage	Operating temperature	Dimension (LxWxH)	Certified					
		Picture	Model													
Telecom / Datacom / Industrial	SIP		SMU01	1W	5V(4.5~5.5V) 12V(10.8~13.2V) 24V(21.6~26.4V)	5V 9V 12V 15V	Unregulated	1.5KVDC	-40~+90°C	0.46"x 0.24"x 0.4"	FCC/EAC/ CE/UKCA					
			SMU02	2W	5V(4.5~5.5V) 12V(10.8~13.2V) 24V(21.6~26.4V)	5V 12V 15V				0.46"x 0.3"x 0.4"						
			SPU01	1W	5V(4.5~5.5V) 12V(10.8~13.2V) 24V(21.6~26.4V)	5V 12V 15V				1.5KVDC	-40~+90°C	5/12Vin: 0.77"x 0.24"x 0.4" 24Vin: 0.77"x 0.28"x 0.4"	EAC/CE/ UKCA			
			DPU01	1W	5V(4.5~5.5V) 12V(10.8~13.2V) 24V(21.6~26.4V)	± 5V ± 12V ± 15V				1.5KVDC	-40~+90°C	5/12Vin: 0.77"x 0.24"x 0.4" 24Vin: 0.77"x 0.28"x 0.4"				
			SPUN02	2W	5V(4.5~5.5V) 12V(10.8~13.2V) 24V(21.6~26.4V)	5V 12V 15V				3KVDC	-40~+105°C	0.77"x 0.28"x 0.4"				
			DPUN02	2W	5V(4.5~5.5V) 12V(10.8~13.2V) 24V(21.6~26.4V)	± 5V ± 12V ± 15V				3KVDC	-40~+105°C	0.77"x 0.28"x 0.4"				
			SPU03	3W	5V(4.5~5.5V) 12V(10.8~13.2V) 24V(21.6~26.4V)	5V 12V 15V				3KVDC	-40~+90°C	0.77"x 0.3"x 0.4"	FCC/EAC/ CE/UKCA			
			SPRN01	1W	5V(4.75~5.5V) 12V(11.4~13.2V) 24V(22.8~26.4V) 48V(45.6~52.8V)	5V 12V 15V				Regulated	1.5KVDC	-40~+90°C	0.77"x 0.28"x 0.4"	EAC/CE/ UKCA		
			DPRN01	1W	5V(4.75~5.5V) 12V(11.4~13.2V) 24V(22.8~26.4V) 48V(45.6~52.8V)	± 12V ± 15V							1.5KVDC		-40~+90°C	0.77"x 0.28"x 0.4"
			SPA01	1W	12V(9~18V) 24V(18~36V) 48V(36~72V)	5V 12V 15V							1.5KVDC		-40~+90°C	0.69"x 0.3"x 0.44"
			SPAN02	2W	5V(4.5~9V) 12V(9~18V) 24V(18~36V) 48V(36~75V)	3.3V 5V 12V 15V	1.5KVDC	-40~+90°C	0.86"x 0.36"x 0.44"							
			DPAN02	2W	5V(4.5~9V) 12V(9~18V) 24V(18~36V) 48V(36~75V)	± 5V ± 12V ± 15V	1.5KVDC	-40~+90°C	0.86"x 0.36"x 0.44"							
			SPBW03	3W	12V, 24V(9~36V) 24V, 48V(18~75V)	3.3V 5V 12V 15V	1.5KVDC	-40~+85°C	0.86"x 0.36"x 0.44"							
			DPBW03	3W	12V, 24V(9~36V) 24V, 48V(18~75V)	± 5V ± 12V ± 15V	1.5KVDC	-40~+85°C	0.86"x 0.36"x 0.44"							
			SPBW06	6W	12V, 24V(9~36V) 24V, 48V(18~75V)	3.3V 5V 12V 15V	1.5KVDC	-40~+85°C	0.86"x 0.36"x 0.44"							
			DPBW06	6W	12V, 24V(9~36V) 24V, 48V(18~75V)	± 5V ± 12V ± 15V	1.5KVDC	-40~+85°C	0.86"x 0.36"x 0.44"							
			SPB09	9W	12V(9~18V) 24V(18~36V) 48V(36~75V)	3.3V 5V 12V 15V 24V	1.5KVDC	-40~+90°C	0.94"x 0.38"x 0.44"							
			DPB09	9W	12V(9~18V) 24V(18~36V) 48V(36~75V)	± 5V ± 12V ± 15V	1.5KVDC	-40~+90°C	0.94"x 0.38"x 0.44"							



Selection Table of DC-DC Module





















# Selection Table of DC-DC Module Type

Type	Package	Series		Watt	Vin	Vout	Output Regulation	Isolation voltage	Operating temperature	Dimension (LxWxH)	Certificated
		Picture	Model								
Telecom / Datacom / Industrial	DIP16		SRS	0.5W	5V(4.5~5.5V) 12V(10.8~13.2V) 24V(21.6~26.4V) 48V(43.2~52.8V)	5V 9V 12V 15V	Unregulated	1KVDC	-25~+71°C	0.89"x0.39"x0.33"	FCC/EAC/ CE/UKCA
	DIP16		SUS01	1W	5V(4.5~5.5V) 12V(10.8~13.2V) 24V(21.6~26.4V) 48V(43.2~52.8V)	5V 9V 12V 15V		1KVDC	-25~+71°C	0.89"x0.39"x0.33"	
	DIP7		SMA01	1W	5V(4.5~5.5V) 12V(10.8~13.2V) 24V(21.6~26.4V)	5V 9V 12V 15V		1KVDC	-40~+90°C	0.5"x0.4"x0.28"	
	DIP16		SLC03	3W	12V (9~18V) 24V (18~36V) 48V (36~75V)	5V 12V 15V	Regulated	1.5KVDC	-40~+85°C	0.87"x0.54"x0.34"	EAC/CE/ UKCA
	DIP16		DLC03	3W	12V (9~18V) 24V (18~36V) 48V (36~75V)	±5V ±12V ±15V		1.5KVDC	-40~+85°C	0.87"x0.54"x0.34"	
	DIP24		SCWN03	3W	5V (4.5~9V) 12V (9~18V) 24V (18~36V) 48V (36~72V)	3.3V 5V 12V 15V	Regulated	3KVDC	-40~+90°C	1.25"x0.8"x0.4"	EAC/CE/ UKCA
			DCWN03	3W	5V (4.5~9V) 12V (9~18V) 24V (18~36V) 48V (36~72V)	±5V ±12V ±15V		3KVDC	-40~+90°C	1.25"x0.8"x0.4"	
			SCWN06	6W	12V,(9~18V) 24V,(18~36V) 48V,(36~72V)	3.3V 5V 12V 15V		3KVDC	-40~+90°C	1.25"x0.8"x0.4"	
			DCWN06	6W	12V,(9~18V) 24V,(18~36V) 48V,(36~72V)	±5V ±12V ±15V		3KVDC	-40~+90°C	1.25"x0.8"x0.4"	
			SCW08	8W	12V (9~18V) 24V (18~36V) 48V (36~72V)	5V 12V 15V		1KVDC	-40~+71°C	1.25"x0.8"x0.48"	FCC/EAC/ CE/UKCA
			DCW08	8W	12V (9~18V) 24V (18~36V) 48V (36~72V)	±5V ±12V ±15V		1KVDC	-40~+71°C	1.25"x0.8"x0.48"	
			SCW12	12W	12V (9~18V) 24V (18~36V) 48V (36~72V)	5V 12V 15V		1.5KVDC	-40~+71°C	1.25"x0.8"x0.48"	
			DCW12	12W	12V (9~18V) 24V (18~36V) 48V (36~72V)	±5V ±12V ±15V		1.5KVDC	-40~+71°C	1.25"x0.8"x0.48"	
			SCW20	20W	12V (9~18V) 24V (18~36V) 48V (36~75V)	5V 12V 15V		1.5KVDC	-40~+80°C	1.25"x0.8"x0.48"	EAC/CE/ UKCA
	1"x1"		SKMW06	6W	12V, 24V,(9~36V) 24V, 48V,(18~75V)	3.3V 5V 9V 12V 15V 24V	Regulated	1.5KVDC	-40~+85°C	1"x1"x0.46"	FCC/EAC/ CE/UKCA
			DKMW06	6W	12V, 24V,(9~36V) 24V, 48V,(18~75V)	±5V ±12V ±15V ±24V		1.5KVDC	-40~+85°C	1"x1"x0.46"	
		SKM10	10W	5V (4.7~9V) 12V (9~18V) 24V (18~36V) 48V (36~75V)	3.3V 5V 12V 15V	1.5KVDC		-40~+85°C	1"x1"x0.4"	EAC/CE/ UKCA	
		DKM10	10W	5V (4.7~9V) 12V (9~18V) 24V (18~36V) 48V (36~75V)	±5V ±12V ±15V	1.5KVDC		-40~+85°C	1"x1"x0.4"		



Selection Table of DC-DC Module

























# Selection Table of DC-DC Module Type

Type	Package	Series		Watt	Vin	Vout	Output Regulation	Isolation voltage	Operating temperature	Dimension (LxWxH)	Certified
		Picture	Model								
Telecom / Datacom / Industrial	1"x 1"		SKMW15	15W	12V, 24V,(9~36V) 24V, 48V,(18~75V)	3.3V 5V 12V 15V	Regulated	3KVDC	-40~+85°C	1"x1"x0.4"	EAC/CE/ UKCA
			DKMW15	15W	12V, 24V,(9~36V) 24V, 48V,(18~75V)	±5V ±12V ±15V		3KVDC	-40~+85°C	1"x1"x0.4"	
			SKMW20	20W	12V,24V (9~36V) 24V,48V (18~75V)	3.3V 5V 12V 15V		1.5KVDC	-40~+85°C	1"x1"x0.4"	
			DKMW20	20W	12V, 24V (9~36V) 24V, 48V (18~75V)	±12V ±15V		1.5KVDC	-40~+85°C	1"x1"x0.4"	
			SKMW30	30W	12V, 24V (9~36V) 24V, 48V (18~75V)	3.3V 5V 12V 15V		1.5KVDC	-40~+85°C	1"x1"x0.4"	
			DKMW30	30W	12V, 24V (9~36V) 24V, 48V (18~75V)	±12V ±15V		1.5KVDC	-40~+85°C	1"x1"x0.4"	
	2"x1"		SLW05	5W	12V(9~18V) 24V(18~36V) 48V(36~72V)	5V 9V 12V 15V		1KVDC	-25~+71°C	2"x 1"x0.44"	FCC/EAC/ CE/UKCA
			DLW05	5W	12V(9~18V) 24V(18~36V) 48V(36~72V)	±5V ±12V ±15V		1KVDC	-25~+71°C	2"x 1"x0.44"	
			SKE10	10W	12V(9~18V) 24V(18~36V) 48V(36~72V)	5V 12V 15V 24V		1KVDC	-25~+71°C	2"x 1"x0.44"	
			DKE10	10W	12V(9~18V) 24V(18~36V) 48V(36~72V)	±5V ±12V ±15V ±24V		1KVDC	-25~+71°C	2"x 1"x0.44"	
			SKA15	15W	12V(9~18V) 24V(18~36V) 48V(36~72V)	3.3V 5V 12V 15V		1KVDC	-40~+71°C	2"x 1"x0.44"	
			DKA15	15W	12V(9~18V) 24V(18~36V) 48V(36~72V)	±5V ±12V ±5V		1KVDC	-40~+71°C	2"x 1"x0.44"	
			SKA20	20W	12V(9~18V) 24V(18~36V) 48V(36~75V)	5V 12V 15V		1.5KVDC	-40~+85°C	2"x 1"x0.44"	
			SKM30	30W	12V(9~18V) 24V(18~36V) 48V(36~75V)	5V 12V 15V		1.5KVDC	-40~+75°C	2"x 1"x0.44"	
			SKM30-N	30W	12V,24V(9~36V) 24V,48V(18~75V)	5V 12V 15V		3KVDC	-40~+90°C	2"x 1"x0.44"	
			SKM50	50W	24V(18~36V) 48V(36~75V)	5V 12V 15V		1.5KVDC	-40~+75°C	2"x 1"x0.54"	
	2"x2"		SKE15	15W	12V(9~18V) 24V(18~36V) 48V(36~72V)	5V 12V 15V 24V		1KVDC	-25~+71°C	2"x 2"x0.43"	FCC/EAC/ CE/UKCA
			DKE15	15W	12V(9~18V) 24V(18~36V) 48V(36~72V)	±5V ±12V ±15V ±24V		1KVDC	-25~+71°C	2"x 2"x0.43"	
			DKA30	30W	12V(9~18V) 24V(18~36V) 48V(36~72V)	±5V ±12V ±15V		1KVDC	-40~+85°C	2"x 2"x0.82"	
			TKA30	30W	12V(9~18V) 24V(18~36V) 48V(36~72V)	5V/±12V 5V/±15V		1KVDC	-40~+85°C	2"x 2"x0.82"	



Selection Table of DC-DC Module

# Selection Table of DC-DC Module Type

Type	Package	Series		Watt	Vin	Vout	Output Regulation	Isolation voltage	Operating temperature	Dimension (LxWxH)	Certified
		Picture	Model								
Telecom / Datacom / Industrial	2"x2"		SKA40	40W	12V(9~18V) 24V(18~36V) 48V(36~75V)	5V 12V 15V	Regulated	1.5KVDC	-40~+80°C	2"x2"x0.43"	FCC/EAC/ CE/UKCA
			SKA60	60W	12V(9~18V) 24V(18~36V) 48V(36~75V)	5V 12V 15V		1.5KVDC	-40~+70°C	2"x2"x0.43"	
	1/2 Brick		MHB75	75W	12V(9~18V) 24V(18~36V) 48V(36~75V)	5V 12V 24V		1.5KVDC	-40~+100°C	2.28"x2.4"x0.5"	UL/EAC/ CE/UKCA
			MHB100	100W	24V(18~36V) 48V(36~75V)	5V 12V 24V		1.5KVDC	-40~+100°C	2.28"x2.4"x0.5"	
			MHB150	150W	48V(36~75V)	5V 12V 24V		1.5KVDC	-40~+100°C	2.28"x2.4"x0.5"	
	LED	NA		LDD-300~700L	NA	9~36V		2~32V	NA	NA (non-isolated)	-40~+85°C
			LDD-300~700LW	9~36V		2~32V	-40~+85°C	0.89"x0.39"x0.35"			
			LDD-300~700LS	9~32V		2~28V	-40~+85°C	1"x0.4135"x0.366"			
			LDB-300~350L	9~36V		2~40V	-40~+70°C	1.25"x0.8"x0.48"			
			LDB-500L	9~36V		2~32V	-40~+70°C	1.25"x0.8"x0.48"			
			LDB-600L	9~36V		2~30V	-40~+70°C	1.25"x0.8"x0.48"			
			LDB-300~350LW	9~36V		2~40V	-40~+70°C	1.25"x0.8"x0.48"			
			LDB-500LW	9~36V		2~32V	-40~+70°C	1.25"x0.8"x0.48"			
			LDB-600LW	9~36V		2~30V	-40~+70°C	1.25"x0.8"x0.48"			
			LDDS-HW/HWB	12~56V		2~45V	-40~+55°C	1.85"x0.47"x0.28"			
			LDD-350~1050H-DA	6~50V		3~45V	-40~+85°C	1.6"x0.93"x0.4"			
			LDD-1400H-DA	6~40V		3~36V	-40~+85°C	1.6"x0.93"x0.4"			
			LDD-350~1050H-WDA	6~50V		3~45V	-40~+85°C	1.6"x0.93"x0.4"			
			LDD-1400H-WDA	6~40V		3~36V	-40~+85°C	1.6"x0.93"x0.4"			
			NLDD-350~1050H	10~56V		6~52V	-40~+50°C	1.26"x0.8"x0.49"			
			NLDD-1200~1400H	10~56V		6~46V	-40~+50°C	1.26"x0.8"x0.49"			
			NLDD-350~1050HW	10~56V		6~52V	-40~+50°C	1.26"x0.8"x0.49"			
			NLDD-1200~1400HW	10~56V		6~46V	-40~+50°C	1.26"x0.8"x0.49"			
			NHDD-40H/HW	360~420V		350V	-30~+40°C	1.26"x0.8"x0.49"			

# VFD (Variable Frequency Drive) 150~750W



VFD-200C-230  
VFD-350C-230  
VFD-750C-230



VFD-250P-230  
VFD-350P-230  
(5"x3")



VFD-150P-48  
VFD-250P-48  
VFD-350P-48  
(4"x2")



Spec

## Features

- 90~264 VAC input, **built-in PFC function** (VFD-200C/350C/750C/250P/350P-230)
- 20~55 VDC input (VFD-150P/250P/350P-48)
- Driver efficiency up to 93%
- **Fanless design**
- High surge current **200%** up to 5 secs.
- Multi-Sensors: Current, DC Bus Voltage, Temperature
- **Suitable for driving BLDC brushless motors**, it can be used in HVAC systems, water pumps, air conditioners, medical treatment, AVG, home appliances, etc.
- -30~+70°C wide operating temperature
- Optional control card
- EN61800-5/3 certified
- 3 years warranty

## Models

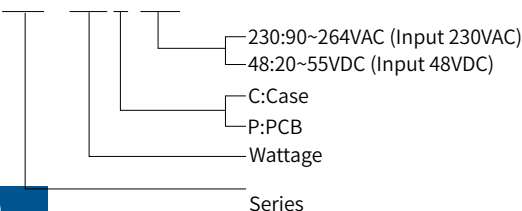


Model No.	VFD-200C-230	VFD-350C-230	VFD-750C-230
Appearance	Metal Case		
Vin	90~264VAC		
Watt	200W	300W	750W
Vout	3 Phase UVW, line to line 0~240 VAC		
Dimension (mm)	146x55x26	146x62x31	150x100x41

Model No.	VFD-250P-230	VFD-350P-230	VFD-150P-48	VFD-250P-48	VFD-350P-48
Appearance	PCB On Board Type (5"x3")		PCB On Board Type (4"x2")		
Vin	90~264VAC			20~55VDC	
Watt	250W	350W	150W	250W	350W
Vout	3 Phase UVW, line to line 0~240 VAC				
Dimension (mm)	127x76.2x35		101.6x50.8x25.6		

## Model Encoding

### VFD- 200C-230



# Sustainable Development Group



The prospect of Sustainable Development Group (SDG) was initiated by Jerry Lin, MEAN WELL's founder. He selected nine goals from United Nations Sustainable Development Goals (SDGs) and integrated the SDG spirits into the corporate sustainable development.

Sustainable Development Group is composed of four parts:

**MEAN WELL Group**, the solid foundation with 4 decades of history;

**PowerNex**, the equity investment company based in Taiwan;

**Share Well**, the group creates synergies through cooperation with power-related industries in China

**MEAN WELL Foundation**, the non-profit organization conserves the core value of "good intentions"

SDG Group aims to build industry alliances with global partners, and exerts the power of stability in the power supply industry, to make a better environment for the next generation



**SUSTAINABLE DEVELOPMENT GROUP**

Reliable Partners · Sustainable Development





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