

## **Din Rail Power Supply**



POWERLD's DIN Rail Power Supply adopts compact structure, and its unique innovative technology provides the highest guarantee for the reliability of the system.

1.Leading High Power Density
30% smaller size than any other brand in the market

#### 2. High Efficiency 94% efficiency, high conversion rate, low power consumption

#### 3.Powerful

The output power is increased to 110% when the output voltage of PSU is higher by 10%.

150% of the current can be withstood within 3 seconds.

# Over 27 years' experience, dedicated in switching power supply





## **DIN Rail Series**



#### **FEATURES**

#### Leading High Power Density

■ 30% smaller size than any other brand in the market

#### High Efficiency

■ 94.5% efficiency, high conversion rate, low power consumption.

#### Powerful

- The output power is increased to 110% when the output voltage of PSU is increased by 10%.
- 150% of the current can be withstood within 3 seconds.



DG-75 Series DG-120 Series DG-240 Series DG-360 Series DG-480 Series

DG-960 Series







#### **FEATURES**

POWERLD DIN RAIL Power Supply adopts compact structure, and its unique innovative technology provides the highest guarantee for reliability of the system.

#### Universal

Wide input voltage range.

#### High Reliability

MTBF > 300,000 hours (For details please refer the related models)

With perfect protections of output short circuit/over load/over voltage/over temperature.

Current sharing supports parallel applications.

#### Parallel Outputs Allowed

To increase the output power or redundancy electricity

#### Reliable Operations at harsh environment.

Wide operation temperature range.

#### Convenient operation

Mounting rail TS-35/7.5 or TS-35/15.

#### Remote monitoring

Red/green light is for the site diagnosis for failures. Users can also remotely monitor the PSU through the dry contact of DC-OK.



#### Save space

Compact structure design.

CE Parallel (P)

Dimension (L\*W\*H)



#### 75W Single Output



#### ▶ Features:

- Universal AC input range(85~264Vac)
   Support 1+1 or N+1 redundant system
- Built-in active PFC,PF>0.95
   High efficiency up to 91%

- Built-in current sharing function
   Built-in current limiting circuit
   Output protections: OVP/OLP/SCP/OTP
- Wide operating ambient temp (-25℃~70℃)
- 150% peak load capacity
- Easy Fuse Tripping due to High Overload Current · Excellent Partial Load Efficiency
- Built-in DC OK relay contact
   Can be installed on TS-35/7.5 or TS-35/15
- 100% full load burn-in test • Ultra-slim,32mm width

Input voltage	85Vac~264Vac, 127Vdc-360Vdc
Frequency	47Hz~63Hz
Operating amb. temp	-25°C~70°C (refer to derating curve)
Over load protection	110%~150% of rated current
Over voltage protection	120%~150% of rated output voltage
Start up/Hold up time	Ton<250mS Td≥20mS@230Vac
Withstand Voltage	IP-OP 3KVac, IP-FG 1.5KVac, OP-FG 0.5 KVdc, 1min
Safety standards	UL508, UL60950, EN60950
ЕМС	EN61000-4-2,3,4,5,6,8,11; EN55022, EN55024, FCC PART 15 Class B
Dimension (I *W*H)	12/1*110*32mm

Model No.	Output Volta	age/Current	Accuracy	Ripple and Noise	Efficiency
DG-75-12	12V	6.3A	$\pm1.0\%$	≤100mV	88%
DG-75-24	24V	3.2A	$\pm 1.0\%$	≤120mV	91%
DG-75-48	48V	1.6A	$\pm 1.0\%$	≤120mV	91%

## 120W Single Output



#### ▶ Features:

- Universal AC input range(85~264Vac)
   Support 1+1 or N+1 redundant system
- Built-in active PFC,PF>0.95
   High efficiency up to 92%
- Built-in current sharing function
  Built-in current limiting circuit
  Output protections: OVP/OLP/SCP/OTP
  Wide operating ambient temp (-25°C-70°C)
- 150% peak load capacity
   Easy Fuse Tripping due to High Overload Current
- Excellent Partial Load Efficiency
- Built-in DC OK relay contact
   Can be installed on TS-35/7.5 or TS-35/15
- 100% full load burn-in test
   Ultra-slim,32mm width

Input voltage	85Vac~264Vac, 127Vdc-360Vdc
Frequency	47Hz~63Hz
Operating amb. temp	-25°C~70°C (refer to derating curve)
Over load protection	110%~150% of rated current
Over voltage protection	120%~150% of rated output voltage
Start up/Hold up time	Ton<250mS Td≥20mS@230Vac
Withstand Voltage	IP-OP 3KVac, IP-FG 1.5KVac, OP-FG 0.5 KVdc, 1min
Safety standards	UL508, UL60950, EN60950
ЕМС	EN61000-4-2,3,4,5,6,8,11; EN55022, EN55024, FCC PART 15 Class B
Dimension (L*W*H)	124*119*32mm

Model No.	Output Volt	age/Current	Accuracy	Ripple and Noise	Efficiency
DG-120-12	12V	10.0A	$\pm 1.0\%$	≤100mV	89.5%
DG-120-24	24V	5.0A	$\pm 1.0\%$	≤120mV	91%
DG-120-48	48V	2.5A	$\pm 1.0\%$	≤240mV	92%

#### 480W Single Output



Input voltage

DG-480-48



#### Features:

- Universal AC input range(85~264Vac)
   Support 1+1 or N+1 redundant system
- Built-in active PFC,PF>0.95
   High efficiency up to 94%
- Built-in current sharing function
   Built-in current limiting circuit
   Output protections: OVP/OLP/SCP/OTP
- Wide operating ambient temp (-25℃~70℃)
- 150% peak load capacity
   Easy Fuse Tripping due to High Overload Current
- · Excellent Partial Load Efficiency
- Built-in DC OK relay contact
   Can be installed on TS-35/7.5 or TS-35/15

- 100% full load burn-in test

Ultra-slim, /0mm width
85Vac~264Vac, 127Vdc-360Vdc

Frequency	47Hz~63Hz
Operating amb. temp	-25°C~70°C (refer to derating curve)
Over load protection	110%~150% of rated current
Over voltage protection	120%~150% of rated output voltage
Start un/Hold un time	Ton<3S Td>20mS@230Vac

Over voltage protection	120%~150% of rated output voltage
Start up/Hold up time	Ton<3S Td≥20mS@230Vac
Withstand Voltage	IP-OP 3KVac, IP-FG 1.5KVac, OP-FG 0.5 KVdc, 1min
Safety standards	UL508 UL60950 EN60950

EMC	EN61000-4-2,3,4,5,6,8,11; EN55022, EN55024, FCC PART 15 Class B
Dimension (L*W*H)	124*127*70mm

Model No.	Output Volt	age/Current	Accuracy	Ripple and Noise	Efficiency
DG 480 24	2437	20.04	+ 2 0.04	< 240mV	03 89/

48V 10.0A ±3.0% ≤480mV 93.8%

#### 960W Single Output



#### Features:

- Universal AC input range(85~264Vac)
   Support 1+1 or N+1 redundant system
- Built-in active PFC,PF>0.98
- High efficiency up to 94.4%
- Built-in current sharing function
   Built-in current limiting circuit
- Output protections: OVP/OLP/SCP/OTP
- Wide operating ambient temp (-25°C~70°C)
- 150% peak load capacity
   Easy Fuse Tripping due to High Overload Current
- · Excellent Partial Load Efficiency
- Built-in DC OK relay contact
   Can be installed on TS-35/7.5 or TS-35/15
- 100% full load burn-in test
   Ultra-slim,140mm width

	- Olda Shingi Walai
nput voltage	85Vac~264Vac, 127Vdc-360Vdc
requency	47Hz~63Hz
Operating amb. temp	-25°C~70°C (refer to derating curve)
Over load protection	110%~150% of rated current
Over voltage protection	120%~150% of rated output voltage
start up/Hold up time	Ton<1S Td≥20mS@230Vac
Withstand Voltage	IP-OP 3KVac, IP-FG 1.5KVac, OP-FG 0.5 KVdc,1min
Safety standards	UL508, UL60950, EN60950
EMC	EN61000-4-2,3,4,5,6,8,11; EN55022, EN55024, FCC PART 15 Class B

Model No.	Output Volt	age/Current	Accuracy	Ripple and Noise	Efficiency
DG-960-24	24V	40.0A	$\pm3.0\%$	≤240mV	94.4%
DG-960-48	48V	20.0A	$\pm 3.0\%$	≤480mV	94.0%

124.6\*138.2\*140mm

#### 240W Single Output



Dimension (L\*W\*H)

#### Features:

- Universal AC input range(85~264Vac) Support 1+1 or N+1 redundant system.
- Built-in active PFC,PF>0.95
   High efficiency up to 94%
- Built-in current sharing function
   Built-in current limiting circuit
- Output protections: OVP/OLP/SCP/OTP
   Wide operating ambient temp (-25°C~70°C)
- 150% peak load capacity
   Easy Fuse Tripping due to High Overload Current
- · Excellent Partial Load Efficiency
- Built-in DC OK relay contact
   Can be installed on TS-35/7.5 or TS-35/15
- 100% full load burn-in test

	Uttra-stim,45mm width
Input voltage	85Vac~264Vac, 127Vdc-360Vdc
Frequency	47Hz~63Hz
Operating amb. temp	-25°C~70°C (refer to derating curve)
Over load protection	110%~150% of rated current
Over voltage protection	120%~150% of rated output voltage
Start up/Hold up time	Ton<3S Td≥20mS@230Vac
Withstand Voltage	IP-OP 3KVac, IP-FG 1.5KVac, OP-FG 0.5 KVdc ,1min
Safety standards	UL508, UL60950, EN60950
ЕМС	EN61000-4-2,3,4,5,6,8,11; EN55022, EN55024, FCC PART 15 Class B

Dimension (L*W*H)	12	124*119*45mm				
Model No.	Output Volt	age/Current	Accuracy	Ripple and Noise	Efficiency	
DG-240-24	24V	10.0A	± 3.0%	≤240mV	94%	
DG-240-48	48V	5.0A	± 3.0%	≤480mV	93%	

#### 360W Single Output



Dimension (L\*W\*H)



- Universal AC input range(85~264Vac)
   Support 1+1 or N+1 redundant system
- Built-in active PFC,PF>0.95
   High efficiency up to 93%
- Built-in current sharing function
   Built-in current limiting circuit
- Output protections: OVP/OLP/SCP/OTP
   Wide operating ambient temp (-25°C~70°C)
- 150% peak load capacity
   Easy Fuse Tripping due to High Overload Current
- · Excellent Partial Load Efficiency
- Built-in DC OK relay contact
   Can be installed on TS-35/7.5 or TS-35/15
- 100% full load burn-in test
- . Ultra-slim.50mm width

iput voltage	85Vac~264Vac, 127Vdc-360Vdc
requency	47Hz~63Hz
perating amb. temp	-25°C~70°C (refer to derating curve)
ver load protection	110%~150% of rated current
ver voltage protection	120%~150% of rated output voltage
tart up/Hold up time	Ton<3S Td≥20mS@230Vac
ithstand Voltage	IP-OP 3KVac, IP-FG 1.5KVac, OP-FG 0.5 KVdc ,1min
afety standards	UL508, UL60950, EN60950
MC	EN61000-4-2,3,4,5,6,8,11; EN55022 EN55024 FCC PART 15 Class R

Model No.	Output Volta	age/Current	Accuracy	Ripple and Noise	Efficiency
DG-360-24	24V	15.0A	$\pm$ 3.0%	≤240mV	93%
DG-360-36	36V	10.0A	$\pm3.0\%$	≤240mV	92.5%
DG-360-48	48V	7.5A	$\pm 3.0\%$	≤480mV	92.5%

124\*127\*50mm



## Economical Series 120W-240W Single Output



#### 15W Single Output



Input voltage

Operating amb. temp

Over load protection

Withstand Voltage

Dimension (L\*W\*H)

DG-15-S12

DG-15-S24

Safety standards

Over voltage protection Start up/Hold up time

Frequency

#### ▶ Features:

- . Universal AC input range(90-264Vac)
- High efficiency, long life and high reliability
   Output protections: OVP/OLP/SCP
- Wide operating ambient temp (-25°C~70°C)
- Can be installed on TS-35/7.5 or 35/15
- 100% full load burn-in test

90Vac~264Vac, 127VDC-370VDC

-25°C~70°C (refer to derating curve) 120%~160% of rated current

120%~140% of rated output voltage

EN55022, EN55024, FCC PART 15 Class B

1.25A ±1.0% ≤120mV 83.0%

Output Voltage/Current Accuracy Ripple and Noise Efficiency

24V 0.65A ±1.0% ≤120mV 84.5%

Ton<1.5S Td≥20mS@230Vac IP-OP 3KVac, IP-FG 1.5KVac, OP-FG 0.5

UL508, UL60950, EN60950

EN61000-4-2,3,4,5,6,8,11;

103.7\*97.5\*32mm

47Hz~63Hz

KVdc,1min

12V

- · PCB with conformal coating
- Suitable for critical applications · Cooling by free air convection

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Safety standards

## 30W Single Output



#### Features: Universal AC input range(90~264Vac)

- High efficiency, long life and high reliability
   Output protections: OVP/OLP/SCP
- Wide operating ambient temp (-25°C~70°C) Can be installed on TS-35/7.5 or 35/15
- 100% full load burn-in test
- PCB with conformal coating
- Suitable for critical applications
- · Cooling by free air convection

Input voltage	90Vac~264Vac, 127VDC-370VDC			
Frequency	47Hz~63Hz			
Operating amb. temp	-25°C~70°C (refer to derating curve)			
Over load protection	120%~160% of rated current			
Over voltage protection	120%~140% of rated output voltage			
Start up/Hold up time	Ton<1.5S Td≥20mS@230Vac			
Withstand Voltage	IP-OP 3KVac, IP-FG 1.5KVac, OP-FG 0.5 KVdc 1min			

Dimension (L*W*H)		) 10	103.7*97.5*32mm				
	Model No.	Output Volt	age/Current	Accuracy	Ripple and Noise	Efficiency	
	DG-30-S12	12V	2.5A	±1.0%	≤50mV	82.0%	
	DG-30-S24	24V	1.25A	$\pm 1.0\%$	≤70mV	85.0%	

UL508, UL60950, EN60950

EN61000-4-2,3,4,5,6,8,11;

#### 120W Single Output



#### ▶ Features:

- Universal AC input range(90–264Vac)
   High efficiency up to 89%
- Built-in current limiting circuit
   Output protections: OVP/OLP/SCP/OTP
- Wide operating ambient temp (-20°C~70°C)
- Built-in DC OK function
- Can be installed on TS-35/7.5 or TS-35/15
- . 100% full load burn-in test
- Suitable for critical applications
   Ultra-slim,45mm width

Input voltage	90Vac~264Vac, 127VDC-370VDC
Frequency	47Hz~63Hz
Operating amb. temp	-25°C~70°C (refer to derating curve)
Over load protection	110%~150% of rated current
Over voltage protection	110%~150% of rated output voltage
Start up/Hold up time	Ton<1.5S Td≥20mS@230Vac
Withstand Voltage	IP-OP 3KVac, IP-FG 1.5KVac, OP-FG 0.5 KVdc, 1min
Safety standards	UL508, UL60950, EN60950
EMC	EN61000-4-2,3,4,5,6,8,11; EN55022, EN55024, FCC PART 15 Class B
Dimension (L*W*H)	103.7*97.5*32mm

Dimen	1011 (L 11 11)	10.	3.1 91.3 3	2111111		
N	Iodel No.	Output Volta	age/Current	Accuracy	Ripple and Noise	Efficienc
DO	G-U120S12	12V	10.0A	±1.0%	≤50mV	85.0%
DO	G-U120S24	24V	5.0A	$\pm 1.0\%$	≤70mV	88.0%
DO	G-U120S48	48V	2.5A	$\pm1.0\%$	≤70mV	89.0%

#### 240W Single Output With Active PFC



#### Features:

- Universal AC input range(90~264Vac)
   Built-in active PFC,PF>0.94
- High efficiency up to 87%
   Built-in current limiting circuit
- Output protections: OVP/OLP/SCP/OTP
   Wide operating ambient temp (-20°C~70°C)
- Can be installed on TS-35/7.5 or TS-35/15
   100% full load burn-in test
- Suitable for critical applications
   Altitude up to 6000m
- Ultra-slim,70mm width
   Cooling by free air convection

Input voltage	90Vac~264Vac, 127VDC-370VDC
Frequency	47Hz~63Hz
Operating amb. temp	-20°C~70°C (refer to derating curve)
Over load protection	110%~150% of rated current
Over voltage protection	110%~150% of rated output voltage
Start up/Hold up time	Ton<1.5S Td≥20mS@230Vac
Withstand Voltage	IP-OP 3KVac, IP-FG 1.5KVac, OP-FG 0.5 KVdc ,1min
Safety standards	UL508, UL60950, EN60950
ЕМС	EN61000-4-2,3,4,5,6,8,11; EN55022 EN55024 ECC PART 15 Class R

Dimension (L*W*H)	124*127*70mm

Model No.	Output Volt	age/Current	Accuracy	Ripple and Noise	Efficiency
DG-U240S24	24V	10.0A	$\pm 1.0\%$	≤120mV	87.0%

### **60W Single Output**



## Features:

- Universal AC input range(90~264Vac)
- 300Vac surge for 3 seconds
   High efficiency, long life and high reliability
- Output protections: OVP/OLP/SCP Wide operating ambient temp (-25°C-50°C)
   Can be installed on TS-35/7.5 or 35/15
- 100% full load burn-in test · PCB with conformal coating
- Suitable for critical applications
   Cooling by free air convection

Input voltage	90Vac~264Vac, 127VDC-370VDC				
Frequency	47Hz~63Hz				
Operating amb. temp	-25°C~50°C (refer to derating curve)				
Over load protection	120%~160% of rated current				
Over voltage protection	120%~140% of rated output voltage				
Start up/Hold up time	Ton<1.5S Td≥20mS@230Vac				
Withstand Voltage	IP-OP 3KVac, IP-FG 1.5KVac, OP-FG 0.5 KVdc, 1min				
Safety standards	UL508, UL60950, EN60950				
ЕМС	EN61000-4-2,3,4,5,6,8,11; EN55022, EN55024, FCC PART 15 Class B				
Dimension (L*W*H)	103.7*97.5*32mm				

	EN	EN55022, EN55024, FCC PART 15 Class B				
Dimension (L*W*H)	10	103.7*97.5*32mm				
Model No.	Output Volt	age/Current	Accuracy	Ripple and Noise	Efficiency	
DG-60-S12	12V	5.0A	$\pm 1.0\%$	≤60mV	86.0%	
DG-60-S24	24V	2.5A	$\pm 1.0\%$	≤50mV	88.0%	
DG-60-S48	48V	1.25A	$\pm 1.0\%$	≤120mV	89.0%	

### 75W Single Output



DG-U75S12

DG-U75S24



#### Features:

EN55022, EN55024, FCC PART 15 Class B

- Universal AC input range(90–264Vac)
   Long life, high reliability and high efficiency
- Built-in current limiting circuit
   Output protections: OVP/OLP/SCP/OTP
- Wide operating ambient temp (-20 °C-70 °C)

±1.0% ≤120mV 82.0%

3.2A ±1.0% ≤120mV 87.0%

- Can be installed on TS-35/7.5 or TS-35/15 Can be instance on 13-3...
   100% full load burn-in test
   Cuitable for critical applications

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٠	Ultra-slim,45mm width

90Vac~264Vac, 127VDC-370VDC			
47Hz~63Hz			
-20°C~70°C (refer to derating curve)			
110%~150% of rated current			
110%~150% of rated output voltage			
Ton<1.5S Td≥20mS@230Vac			
IP-OP 3KVac, IP-FG 1.5KVac, OP-FG 0.5 KVdc ,1min			
UL508, UL60950, EN60950			
EN61000-4-2,3,4,5,6,8,11; EN55022, EN55024, FCC PART 15 Class B			
124*119*45mm			

6.25A

24V