

# INSTALLATION INSTRUCTIONS RPC SERIES

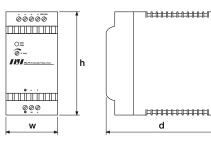
COMPACT INDUSTRIAL POWER SUPPLY

The RPC series is a family of compact industrial DIN-rail power Supplies. They feature a universal input of 85-264VAC or 90-375VDC, and are designed for class I operation in industrial and residential environments. They consume very little standby power, and operate with high efficiency to comply with the requirements of the European Eco-design directive.

When used in combination with the optional battery charge controllers and battery packs, RPC power supplies make a compact and reliable UPS system.

#### **Dimensions**

Refer to the drawing and chart below for the different measurements and weight for each model.



Model	Width (w)	Height (h)	Depth (d)	Weight
30 Watt	1.04" (26.5)	3.54" (90)	3.8" (96.5)	160g
55 Watt	1.77" (45.0)	3.54" (90)	3.8" (96.5)	260g
80 Watt	2.48" (63.0)	3.54" (90)	3.8" (96.5)	360g
120 Watt	2.83" (72.0)	3.54" (90)	4.33" (110.0)	440g

## Table of Models and Rated Values

Rated Output Power Max.	Part Number	Rated Output	*Output Voltage Adjustment Range	Recommended Circuit Breaker (Characteristic C)	Rated AC-Input Voltage Range	Operational Input Voltage Range
20 Watt	RPC-030-05	5.0VDC / 4.0A	5 - 6VDC			
26.4 Watt	RPC-030-12	12VDC / 2.2A	12 - 15VDC	-		
30 Watt	RPC-030-24	24VDC / 1.25A	24 - 28.8VDC	_	50 – 60Hz 47 –	85 – 264VAC
30 Wali	RPC-030-48	48VDC / 0.6A	48 - 56VDC	_		
42 Watt	RPC-055-12	12VDC / 3.5A	12 - 15VDC	-		
55 Watt	RPC-055-24	24VDC / 2.3A	24 - 28.8VDC	-		47 – 63Hz
55 Wall	RPC-055-48	48VDC / 1.15A	48 - 56VDC	6A		
72 Watt	RPC-080-12	12VDC / 6.0A	12 - 15VDC	-		
80 Watt	RPC-080-24	24VDC / 3.3A	24 - 28.8VDC	-		90 - 375VDC
ou wall	RPC-080-48	48VDC / 1.7A	48 - 56VDC	_		
96 Watt	RPC-120-12	12VDC / 8.0A	12 - 15VDC	_		
120 Watt -	RPC-120-24	24VDC / 5.0A	24 - 28.8VDC	-		
120 Wall	RPC-120-48	48VDC / 2.5A	48 - 56VDC	_		

<sup>\*</sup> Adjustable by potentiometer with insulated screwdriver.

# **Connection and Ambient Conditions**

Surrounding Air Temperature: Natural Air Convection Cooling	-25°C - +70°C max, above +50°C see derating below -13°F - +158°F max at nominal load, above +122°F see derating below		
Output Power Derating	above +50°C → 2.5%/°C up to +70°C above 122°F → 1.4%/°F up to +158°F		
	<100Vac input voltage output power has to be derated by 2.5%/V for continuous operation <130Vdc input voltage output power has to be derated by 1%/V for continuous operation		
Storage Temperature Range	-25°C – +85°C max		
	-13°F – +185°F max		
Wire Recommendation	Input	0.5 – 2.5mm2	AWG: 20 – 14
	Output	0.5 – 2.5mm2	AWG: 20 – 14
Connections	Screw type terminals. Recommended tightening torque 4.4lb.in.		



### **General Safety Instructions**

Before installation read these instructions carefully and completely.

These installation instructions do not account for every possible condition of installation, operation, or maintenance. Additional information may be found on our website, **www.fiberopticlink.com.** 

#### **CAUTION - Severe Shock Hazard**

- Before any installation, maintenance, or modification work ensure that the mains switch is switched off and prevented from being switched on again.
- Non-observance, touching of any live components, or improper handling of this power supply can result in death, severe personal injury, or substantial property damage.
   Proper and safe operation is dependent on proper storage, handling, installation, and operation.
- The mains supply voltage connection, must be in accordance to IEC 62103, EN50178 and IEC 60364, VDE100.
- Compliance with the relevant national regulations (in the USA, Europe and other countries) must be ensured. Before operation is started the following conditions must be met:
  - Connection to mains supply in compliance with national regulations (VDE100 and EN50178).
  - When using stranded wires, all strands must be fastened in the terminal blocks. to reduce the potential danger of contact with the case.
  - ▶ ALL output power terminals must be used.
  - Power supply and mains cables must be sufficiently fused.
  - ▶ Degree of protection 1 to IEC536. Protection Class 1
  - All output wires must be rated for the power supply output current and must be connected with the correct polarity.
  - Sufficient cooling must be ensured.
- Never work on the power supply if power is supplied!
   Risk of electric arcs and electrical shock, which can cause
   death, severe personal injury, or substantial property
   damage.
- CAUTION: "FOR USE IN A CONTROLLED ENVIRONMENT"
- Warning: Hazardous voltages and components storing a
  very substantial amount of energy are present in this power
  supply during normal operating conditions. Improper
  handling may result in an electric shock or injury. Do not
  open the power supply, there are no user serviceable
  parts inside.
  - ▶ Do not introduce any objects into the power supply.
  - Adjust the output voltage potentiometer using an insulated screwdriver only.
  - ▶ Keep away from fire and water.

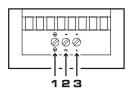
#### Installation Instructions

- This power supply is designed for professional indoor systems. Mount the unit in an enclosure so that the power supply is not accessible during operation.
- This unit must be installed and put into service by qualified personnel only.
- The correct mounting must be observed. Do not cover any ventilation holes. Leave a minimum free space of 50mm (2in.) above and below the power supply. If possible, both sides should be clear to permit airflow.
- Observe power derating.
- The internal fuse is not accessible, and is not user replaceable. If the internal fuse has blown, the power supply must be returned to the distributor for repair or replacement with the same type and rating of fuse for continued protection against risk of injury or fire.
- RECYCLING: The unit contains elements that need special disposal. You are responsible for ensuring that the power supply is properly recycled at the end of its service life.

## **AC/DC Input Terminals**

The AC/DC input terminals are located at the bottom of the power supply. View the chart below for the correct wiring.

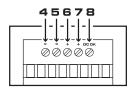
No.	Description		
	AC	DC	
1	FG 🖶	FG 🖶	
2	Ν	V-	
3	L	V+	



# **DC Output Terminals**

The DC output terminals are located at the top of the power supply. View the chart below for the correct wiring.

No.	Description	
4,5	,5 DC Output V-	
6,7	DC Output V+	
8	DC OK Signal	



\* 30 Watt models have one (1) of each, V+ and V-.

## **Customer Support**

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