Ruijie RG-PA1600I-PL, PA3000I-PL Power Module Datasheet V1.0

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1. Product Overview

The RG-PA1600I-PL is an AC module (AC input and DC output) providing an output voltage of 54.5 V and anoutput power of up to 1600 W (PoE power: less than 1600 W).

The RG-PA3000I-PL is an AC module (AC input and DC output) providing an output voltage of 56 V and a PoE output power of up to 3000 W (PoE power: less than 3000 W).

2. Product Appearance



Figure 1 Appearance of the RG-PA1600I-PL



Figure 1 Appearance of the RG-PA3000I-PL

3. Product Feature

Power Supply Redundancy

The RG-PA1600I-PL and RG-PA3000I-PL support power redundancy. Dual power supply modules are connected in parallel for current sharing.

Hot Swapping

The RG-PA1600I-PL and RG-PA3000I-PL support to disconnect one redundant power supply module from the outside power supply system, plug and unplug power supply modules while the device is powered on.

Security Protection Policies

The RG-PA1600I-PL and RG-PA3000I-PL provide undervoltage protection, output overcurrent protection, output overvoltage protection and output short circuit protection.

Conformal Coating

Protects circuits against moisture, frog, mold, electrical shock and leakage, and so on.

RS485 Communication

Allows the host to communicate with the power supply module by RS485.

Power Supply Alarm

The RG-PA1600I-PL and RG-PA3000I-PL support power supply alarm. When a power fault occurs, the output status LED turns off.

4. Product Specification

Technical Specification

Power Model	RG-PA1600I-PL	RG-PA3000I-PL	
Input Specifications			
Rated input voltage	AC input: 100 V AC to 240 V AC; 50 to	AC input: 100 V AC to 240 V AC; 50 to	
	60 Hz	60 Hz	
Maximum input voltage	AC input: 90 V AC to 290 V AC; 47 to 63	AC input: 90 V AC to 290 V AC; 47 to 63	
	Hz	Hz	
Maximum input current	16 A	16 A	
Input leakage current	≤ 1.5 mA	≤ 1.5 mA	
Output Specifications			
Output voltage	54.5 V	54.5 V	
Maximum output current	90 V to 176 V AC input: 18.4 A	90 V to 176 V AC input: 22 A	
	176 V to 264 V AC input: 29.4 A	176 V to 210 V AC input: 45.9 A	
		210 V to 290 V AC input: 55 A	
Maximum output power	90 V to 176 V AC input: 1000 W	90 V to 176 V AC input: 1200 W	
	176 to 264 V AC input: 1600 W	176 V to 210 V AC input: 2500 W	
		210 V to 290 V AC input: 3000 W	
PoE output power	90 V to 176 V AC input: < 1000 W	90 V to 176 V AC input: < 1200 W	
	176 V to 264 V AC input: < 1600 W	176 V to 210 V AC input: < 2500 W	
		210 V to 290 V AC input: < 3000 W	
Dimensions and Weight			
Dimensions (W x D x H)	260 mm x 116.5 mm x 40.5 mm (10.24	260 mm x 116.5 mm x 40.5 mm (10.24	
	in. x 4.59 in. x 1.59 in.)	in. x 4.59 in. x 1.59 in.)	
Weight	Net weight: 1.60 kg (3.53 lbs.) Net weight: 1.70 kg (3.75 lbs		
Environmental Specification	ons		
Primary airflow	Rear-to-front: Air intake from the	Rear-to-front: Air intake from the	
	connecting finger and air outlet from the	connecting finger and air outlet from the	
	front panel	front panel	

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Power Model	RG-PA1600I-PL	RG-PA3000I-PL
Operating temperature	-10°C to +50°C (14°F to 122°F)	-10°C to +50°C (14°F to 122°F)
Storage temperature	-40°C to +70°C (-40°F to +158°F)	-40°C to +70°C (-40°F to +158°F)
Operating humidity	10% to 95% (non-condensing)	10% to 95% (non-condensing)
Storage humidity	5% to 95% (non-condensing)	5% to 95% (non-condensing)
Operating altitude	-500 m to +5,000 m (-1640.42 ft. to	-500 m to +5,000 m (-1640.42 ft. to
	16404.20 ft.)	16404.20 ft.)
Other Specifications		
Power cord requirement	16 A power cord	16 A power cord

LED

There are three power module LEDs on the panel of the RG-PA1600I-PL and RG-PA3000I-PL. They are used to indicate the input and output status of the power module.

LED				
Run	Alarm	Fault	Meaning	
Solid green	Off	Off	The module is operational	
Off	Off	Off	There is no power input	
Blinking green	Off	Off	The module is in standby mode	
Solid green	Solid yellow	Off	Persistent overcurrent.	
Solid green	Solid yellow	Off	Temperature alarm	
Off	Off	Solid red	Over-temperature causes power-off	
Off	Off	Solid red	AC is powered off.	
Off	Off	Solid red	Short circuit.	
Off	Off	Solid red	Output undervoltage	
Off	Off	Solid red	Output overvoltage	
Solid green	Off	Blinking red	Communication fails	

5. Ordering Information

Model	Description
RG-PA1600I-PL	1600 W AC PoE module
RG-PA3000I-PL	3000 W AC PoE module

Applicable switches for the RG-PA1600I-PL and RG-PA3000I-PL:

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Series	Model
RG-N1800 Series	RG-N18010
RG-S7800C Series	RG-S7808C

6. Warranty

For more information about warranty terms and period, contact your local sales agency:

Warranty terms: https://www.ruijienetworks.com/support/service_41
Warranty period: https://www.ruijienetworks.com/support/service_41

Note: The warranty terms are subject to the terms of different countries and distributors.

7. More Information

For more information about Ruijie Networks, visit the official Ruijie website or contact your local sales agency:

Ruijie Networks official website: https://www.ruijienetworks.com/

Online support: https://www.ruijienetworks.com/support

Hotline support: https://www.ruijienetworks.com/support/hotline

Email support: service_rj@ruijienetworks.com