

# 1U Type N+1 Redundant Power Supply

## EFRP-250/300

ATX12V

- 250/300 watts Output Power**
- Power Factor Correction (PFC)**
- N+1 Redundant Configuration**
- Meet 1U Rack Mount System**



Dimensions: 83(W) x 40(H) x 250(D) mm

### Features:

- ⦿ Compact size Module Design
- ⦿ Universal Power Input
- ⦿ Over Power Protection
- ⦿ Over Voltage Protection
- ⦿ Over Current Protection
- ⦿ Short Circuit Protection
- ⦿ Power Fault Alarm Signals
- ⦿ Quick Removable Application
- ⦿ Active Power Factor Correction
- ⦿ Remote DC Sense on +5V and +3.3V
- ⦿ Current Sharing on +5V, +3.3V & +12V
- ⦿ Front panel LED to Indicate Power Status
- ⦿ MTBF >100,000 Hours

### General Specifications:

- ⦿ Input Range: 100 to 240 VAC, +/-10%
- ⦿ Power Factor: 0.95 minimum
- ⦿ Efficiency: 65% minimum, at full load
- ⦿ Hold up Time: 20mS minimum, at full load
- ⦿ PSON (Remote ON/OFF): TTL compatible signal
- ⦿ Power Good: 100 to 500 ms, TTL compatible signal
- ⦿ Cooling Fan: 40x40x28 mm (SANYO)
- ⦿ Operating Temperature: 0 to 50 °C (For EFRP-2250)  
0 to 40 °C (For EFRP-2300)
- ⦿ Operating Humidity: 20 to 90 %

### Agency Requirements:

- ⦿ Harmonic: Meet EN61000-3-2 standards
- ⦿ EMI/RFI: CE, FCC class B and CISPR class B
- ⦿ Safety: UL, cUL, CB, TUV, CCC

### Electrical Specifications:

#### Regulation, Ripple & Noise:

Output	+5V	+3.3V	+12V	-5V	-12V	5Vsb
Load Regulation	± 5%	± 5%	± 5%	± 5%	± 5%	± 5%
Cross Regulation	± 5%	± 5%	± 5%	± 5%	± 5%	± 5%
Line Regulation	± 1%	± 1%	± 1%	± 1%	± 1%	± 1%
Ripple & Noise	60mV	60mV	120mV	100mV	120mV	70mV

#### Input and Output Ratings:

Model No	Input			Watt	Load	Output					
	Voltage	Frequency	Current			+5V	+3.3V	+12V	-5V	-12V	5Vsb
EFRP-250	100 - 240 VAC	47-63 Hz	5-2.5A	250W	Max Load	25A	20A	16A	0.3A	0.8A	2A
					Min Load	3A	1A	1A	0A	0A	0A
EFRP-300	100 - 240 VAC	47-63 Hz	6-3A	300W	Max Load	30A	25A	18A	0.3A	0.8A	2A
					Min Load	3A	1A	1A	0A	0A	0A

Note: 1. The +5 & +3.3 Volt combine total output shall not exceed 140W for EFRP-250 and 170W for EFRP-300.

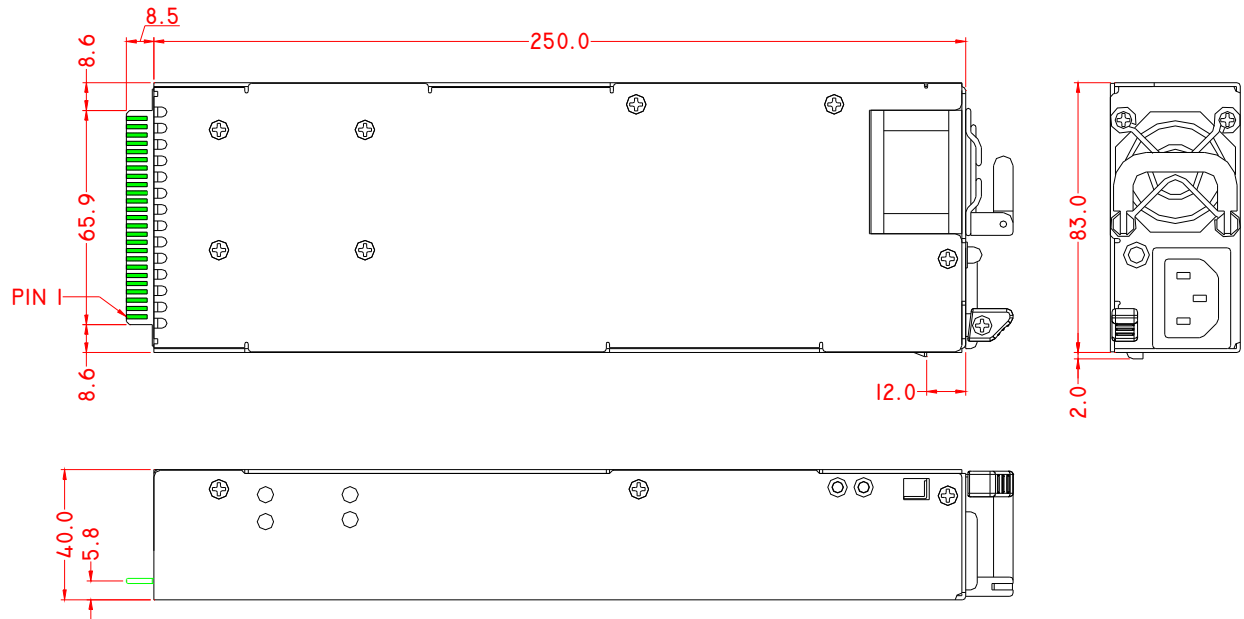
2. The +5, +3.3 and +12 Volt combine total output shall not exceed 230W for EFRP-250 and 280W for EFRP-300.

3: Noise bandwidth is from DC to 20 MHz.

# 1U Type N+1 Redundant Power Supply

## EFRP-250/300

**Dimensions (Unit: mm):**



### Output Connector:

Pin#	Top Side		Bottom Side		Pin#
	Signal	Voltage	Signal	Voltage	
1	PSON		5VSB		26
2	PF0		PG		27
3	12V <sub>S+</sub>		12V <sub>SHR</sub>		28
4	3V <sub>S+</sub>		3V <sub>SHR</sub>		29
5	+3.3V		+3.3V		30
6	+3.3V		+3.3V		31
7	+3.3V		+3.3V		32
8	+3.3V		+3.3V		33
9	+12V		+12V		34
10	+12V		+12V		35
11	+12V		+12V		36
12	GND		GND		37
13	GND		GND		38
14	GND		GND		39
15	GND		GND		40
16	GND		GND		41
17	GND		GND		42
18	GND		GND		43
19	GND		GND		44
20	+5V		+5V		45
21	+5V		+5V		46
22	+5V		+5V		47
23	+5V		+5V		48
24	-5V		-12V		49
25	5V <sub>S+</sub>		5V <sub>SHR</sub>		50