



CRPS Redundant Power Supply

1U CRPS Redundant Module / 2U 1+1 CRPS series with high power density design, output power from 550W to 850W all adopt the same mechanism design. It provides system design flexibility and complies with Intel CRPS specification

Features

- PMBus™ Communication
- Active Power Factor $PF \geq 0.95$
- 0~50°C Working Temperature
- Over Voltage Protection
- Over Current Protection
- Short Circuit Protection
- Under Voltage Protection
- Over Temperature Protection
- MTBF > 250,000 hours at 25°C typical load
- Surge: 2KV(L/N-PE) & 1KV(L-N)



Technical Specifications

Output

	ERA55-CPA-BF		ERA55-CPA2V-BF				ERA85-CPA2V-BF			
DC Voltage	+12V	+12VSB	+5V	+3.3V	-12V	+5VSB	+5V	+3.3V	-12V	+5VSB
Maximum Load	46A	3A	20A	20A	0.5A	3A	20A	20A	0.5A	3A
Minimum Load	1A	0A	0A	0A	0A	0A	0A	0A	0A	0A
Power Output	550W		550W				850W			
Ripple & Noise	120mV	120mV	50mV	50mV	120mV	50mV	50mV	50mV	120mV	50mV
Output Voltage Tolerance	±5%	±5%	±5%	±5%	±5%	±5%	±5%	±5%	±5%	±5%
Line Regulation	±1%		±1%				±1%			
Load Regulation	±5%		±5%				±5%			
Turn On Time And Rise Time	<3s, 20ms@115Vac/230Vac at full load		<3s, 20ms@115Vac/230Vac at full load				<3s, 20ms@115Vac/230Vac at full load			
Hold Up Time	≥12ms@115Vac at 70% load		≥12ms@115Vac at 70% load				≥12ms@115Vac at 70% load			

Technical Specifications

Input

	ERA55-CPA-BF	ERA55-CPA2V-BF	ERA85-CPA2V-BF
Voltage Range	90~264Vac	90~264Vac	90~264Vac
Operation Voltage	100~240Vac	100~240Vac	100~240Vac
Frequency Range	47~63Hz	47~63Hz	47~63Hz
AC Current (Full Load)	≤6A/115Vac, ≤3/230Vac at full load	6A/115Vac, 3A/230Vac at full load	9A/115Vac, 4.5A/230Vac at full load
Inrush Current	30A peak @115Vac, 50A peak @230Vac	30A peak @115Vac, 50A peak @230Vac	30A peak @115Vac 50A peak @230Vac
	Cold start at full load	Cold start at full load	Cold start at full load
Power Factor (Typ.)	≥0.98/115Vac, ≥0.95/230Vac at full load	≥0.95/115Vac, ≥0.95/230Vac at full load	≥0.95/115Vac, ≥0.95/230Vac at full load
Leakage Current	<3.5mA/240Vac	<3.5mA/240Vac	<3.5mA/240Vac

Specifications

AC Input Current and Inrush Current

Parameter	Min. Input	Input Voltage	Max. Input	Brown In	Brown Out
115Vac	90Vac	100~120Vac	132Vac	85Vac± 5Vac	80Vac± 5Vac
230Vac	180Vac	200~240Vac	264Vac	-	-
Frequency	47Hz	50/60Hz	63Hz	-	-

Maximum Input Current

	ERA55-CPA-BF / ERA55-CPA2V-BF		ERA85-CPA2V-BF	
Input Voltage	90~132Vac	180~264Vac	90~132Vac	180~264Vac
Input Current	6A@115Vac	3A@230Vac	9A@115Vac	4.5A@230Vac
Maximum Inrush Current	30A*peak@115Vac	50A*peak @230Vac	30A*peak@115Vac	50A*peak @230Vac
Max Power	550W	550W	850W	850W
Peak Power	660W, ≤12ms	660W, ≤12ms	935W, ≤12ms	935W, ≤12ms

Protection Circuits

Over Current Protection (OCP)

	ERA55-CPA-BF		ERA55-CPA2V-BF/ ERA85-CPA2V-BF	
Voltage	+12V	12VSB	+12V, +5V, +3.3V	5VSB
Minimum	110%	3.3A	110%	3.6A
Maximum	130%	5A	130%	5A
Shutdown Mode	Latch Off	Auto-recovery	Latch Off	Auto-recovery

Over Voltage Protection (OVP)

	ERA55-CPA-BF	ERA55-CPA2V-BF/ ERA85-CPA2V-BF		
Voltage	+12V	+12V	+5V	+3.3V
Minimum	+13.3V	+13.3V	+5.5V	+3.9V
Maximum	+14.5V	+14.5V	+6V	+4.5V
Shutdown Mode	Latch Off	Latch Off	Latch Off	Latch Off

Specifications

LED Indicators

Power Supply Condition	LED State
Normal work	Green
NO Input power to all power supplies	OFF
Input present / Only 5VSB on (PS off) or PS in CR state	Blink Green
Power cord unplugged; with a second power supply in parallel still with AC or DC input power.	Flash Blink Green
Power supply warning events where the power supply continues to operate; high temp, high power, high current, slow fan.	Blink Red
Power supply critical event causing a shutdown; failure, OCP, OVP, Fan Fail	Red
AC/DC Backup Mode	Flash Blink Red

Buzzer Indicators

Only for ERA55-CPA2V-BF/ ERA85-CPA2V-BF

Power System Condition	Backplane Buzzer Status
No AC input power to one power module only after PS ON	Buzzing
One power module not inserted or pulled out	Buzzing
AC Input present/only standby mode	OFF
Power module PS ON and output normal	OFF
Any power module failure after PS ON	Buzzing

AIRFLOW

ERA55-CPA-BF/ERA55-CPA2V-BF/ERA85-CPA2V-BF

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PROTECTION

Short Circuit Protection

ERA55-CPA-BF/ERA55-CPA2V-BF/ERA85-CPA2V-BF

Latch Off

Over Current Protection

ERA55-CPA-BF/ERA55-CPA2V-BF/ERA85-CPA2V-BF

Latch Off

Over Voltage Protection

ERA55-CPA-BF/ERA55-CPA2V-BF/ERA85-CPA2V-BF

Latch Off

ENVIRONMENT

Operation Temperature

ERA55-CPA-BF/ERA55-CPA2V-BF/ERA85-CPA2V-BF

0~ 50°C

Storage Temperature

ERA55-CPA-BF/ERA55-CPA2V-BF/ERA85-CPA2V-BF

-40~ 80°C

Operating Humidity

ERA55-CPA-BF/ERA55-CPA2V-BF/ERA85-CPA2V-BF

20%~ 90% RH non-condensing

Non-Operating Humidity

ERA55-CPA-BF/ERA55-CPA2V-BF/ERA85-CPA2V-BF

5%~ 95% RH non-condensing

Temp. Coefficient

ERA55-CPA-BF/ERA55-CPA2V-BF/ERA85-CPA2V-BF

±0.03%/°C (0~ 50°C)

Operating Altitude

ERA55-CPA-BF/ERA55-CPA2V-BF/ERA85-CPA2V-BF

16,404 ft (5000M)

Hi-Pot

Dielectric Withstand Voltage

ERA55-CPA-BF/ERA55-CPA2V-BF/ERA85-CPA2V-BF

3sec/ 1.5KVAC or 2545VDC with a trigger limit of 10mA

Surge Voltage

ERA55-CPA-BF/ERA55-CPA2V-BF/ERA85-CPA2V-BF

Line to Line : 1KV

Line-to-Ground: 2KV

Others

MTBF

ERA55-CPA-BF/ERA55-CPA2V-BF/ERA85-CPA2V-BF

250Khrs min SR332 (25°C)

Dimensions

ERA55-CPA-BF

185mm x 73.5mm x 39mm (Lx Wx H)

ERA55-CPA2V-BF/ERA85-CPA2V-BF

230mm x 76mm x 84mm (Lx Wx H)

Weight

ERA55-CPA-BF

795g

ERA55-CPA2V-BF/ERA85-CPA2V-BF

1800g

AC Connector

ERA55-CPA-BF/ERA55-CPA2V-BF/ERA85-CPA2V-BF

IEC320 C14 type 3pin connector

Rated for operation at 10A/250Vac

DC Output Connector

ERA55-CPA-BF/ERA85-CPA2V-BF

Oupiin 9393-F4P50N11ACB30DA

ERA55-CPA2V-BF

ATX

Safety

ERA55-CPA-BF

UL,CB, FCC,CE, CCC

ERA55-CPA2V-BF/ERA85-CPA2V-BF

UL,CB, FCC,CE