



2500W 1U Power Supplies

Features	Benefits
• 1U High	• Utilizes less system space
• Internal ORing FETs & Current Share	• Suitable for N+1 redundancy
• High Efficiency	• Easier system cooling
• I2C, PMBus™ Communication Option	• Easier system monitoring



Specification		
Model	RFE2500	
Input Voltage Range (2)	VAC	85 - 265VAC, 47 - 63Hz. See model selector for power derating
Input Current (Max) 115/230VAC	A	15 / 12A
Inrush Current	A	<50A
Power Factor Correction	-	Meets EN61000-3-2, PF > 0.98 at full load
Temperature Coefficient	%/°C	<0.02%/°C
Overcurrent Protection	%	115VAC: >110%; 230VAC: 105 - 120%
Overvoltage Protection (1)	%	110% (Tracking). Cycle AC to reset or utilize Remote On/Off
Overtemperature Protection (1)	-	Shutdown with automatic reset. Warning signal provided
Hold up time	ms	>10ms, 100/230VAC Input, 80% loading
Leakage Current	mA	< 0.8 / 1.6mA, 115 / 230VAC, 60Hz
Remote Sense Compensation	-	12V: 0.25V/wire; 24V: 0.5V/wire; 48V: 1V/wire
Indicators	-	AC OK: Green LED, DC OK / Fail: Green / Red LED
Remote On/Off	-	Yes, inhibit & enable
Parallel Operation	-	Yes, single wire current share, 5% accuracy of max current, up to 8 units
AC Fail Signal	-	Open Collector, ON when AC is within 85 - 270VAC
DC Good Signal	-	Open Collector, ON when output is above 85 to 95% of setpoint (tracking)
Remote Adjust (1)	-	By either external 0 - 5V signal or 1k potentiometer
I²C Interface (1)	-	Isolated from output, Add suffix /S, PMBus compatible
Auxiliary Output	-	11.2 - 12.5V, 0.5A, 240mV ripple and noise
Operating Temperature	°C	-10°C to +70°C, derate 2%/°C from 50°C to 60°C, 2.5%/°C from 60°C to 70°C
Storage Temperature	°C	-30°C to +85°C
Humidity (Non condensing)	%RH	Operating: 10 - 90%RH, Storage: 10 - 95%RH
Cooling	-	Two variable speed internal fans, airflow exits across input/output connector
Withstand Voltage	-	Input to Output 3kVAC, Input to Ground 2kVAC, Output to Ground: RFE2500-12, -24V 500VAC, RFE2500-48 2250VAC
Isolation Resistance	MΩ	>100MΩ at 25°C & 70%RH, Output to Ground 500VDC
Vibration (Basic transportation)	-	IEC60068-2-64 (Basic Transportation)
Shock (Basic transportation)	-	IEC60068-2-27 (Basic Transportation 20G)
Safety Agency Certifications	-	UL60950-1, EN60950-1 (2nd Edition), CE Mark
Conducted and Radiated EMI	-	EN55022 & FCC part 15; Conducted class B, Radiated class A
Immunity	-	IEC61000-4-2 (lv 2,3), -3 (lv 2), -4 (lv2), -5 (lv3,4), -6 (lv2), -8 (lv 4), -11
Size (W x H x D) (Excluding busbars)	mm	107 x 41 x 345
Weight	g	2500
Warranty	yrs	3

Notes: (1) See installation manual for detailed specifications & test methods (2) Derate linearly 1.3%/VAC from 100VAC to 85VAC input

Model Selector

Model	Output Voltage	Adjust. Range ⁽¹⁾	Max Current (Vin>180VAC)	Max Power (Vin>180VAC)	Max Current (100<Vin<170VAC) ⁽²⁾	Max Power (100<Vin<170VAC) ⁽²⁾
RFE2500-12	12V	9.6 - 13.2V	200A	2400W	125A	1500W
RFE2500-12/S	12V	9.6 - 13.2V	200A	2400W	125A	1500W
RFE2500-24	24V	19.2 - 29V	96A	2304W	62.5A	1500W
RFE2500-24/S	24V	19.2 - 29V	96A	2304W	62.5A	1500W
RFE2500-48	48V	38.4 - 58V	52A	2496W	31.25A	1500W
RFE2500-48/S	48V	38.4 - 58V	52A	2496W	31.25A	1500W

Model	Load Reg	Line Reg	Ripple & Noise	Efficiency ⁽³⁾	I ² C
RFE2500-12	60mV	30mV	240mV	90 / 92%	-
RFE2500-12/S	60mV	30mV	240mV	90 / 92%	Yes
RFE2500-24	120mV	60mV	240mV	90 / 92%	-
RFE2500-24/S	120mV	60mV	240mV	90 / 92%	Yes
RFE2500-48	240mV	120mV	480mV	91 / 93%	-
RFE2500-48/S	240mV	120mV	480mV	91 / 93%	Yes

Notes: (1) See installation manual for detailed specifications & test methods (2) Derate linearly 1.3%/VAC from 100VAC to 85VAC input
(3) At 75% load, 115/230VAC input

Outline Drawing RFE2500 Series

