

TWRI SERIES: RF/WIRELESS POWER SUPPLY

Hot-Swap 2U, Up to 9,000 Watts Output Power

FEATURES



- 85% Efficiency
- Power Factor Correction to EN61000-3-2
- 10.6W/In³ Power Density
- Hot-Swap, N+1 Redundant Operation
- 2U 19-inch or 23-inch Rack Mounting
- 26.5-33.5V Output Adjustment Range
- Low Cost
- 28 to 32VDC Rated Output
- 2250W Module Output Power
- Up to 9000W Total Power, Non-Redundant
- Up to 6750W Total Power, 3+1 Redundant
- Integral Isolation Diode
- Output Current Limiting
- Inrush Current Limiting
- Remote Output Adjustment

TWO-YEAR WARRANTY

STANDARD, PRE-SET MODULES						
Max. Watts	Rated Output * Voltage /Current	Adjustment Range	Input Voltage Range	Minimum Load	Line/Load Regulation	Model Number
2250	28V@80.4A	26.5-33.5VDC	170 - 264VAC	0A	1%	TWRI6000
2250	29V@77.6A	26.5-33.5VDC	170 - 264VAC	0A	1%	TWRI6001
2250	30V@75.0A	26.5-33.5VDC	170 - 264VAC	0A	1%	TWRI6002
2250	31V@72.6A	26.5-33.5VDC	170 - 264VAC	0A	1%	TWRI6003
2250	32V@70.3A	26.5-33.5VDC	170 - 264VAC	0A	1%	TWRI6004

*These are the standard, factory-set output voltages. Other voltages can be set. Please contact factory.

ORDERING GUIDE

The hot-swap modules and the mating rack-mounts are separate items and must be ordered separately.

HOT-SWAP MODULES:

Order quantity using model number from table.

SYSTEM RACKS:

Order RRS2U-19 for 3 modules or RRS2U-23 for 4 modules.

MATING-CONNECTOR KIT
Order Kit No. 775-1441-0000

SAFETY STANDARDS

- UL1950
- CSA22.2 No.950
- IEC 60950-1

TWRI MODULE SPECIFICATIONS

Typical at Nominal 230VAC Line, Full Load and 25°C Unless Otherwise Noted.

OUTPUT SPECIFICATIONS

Total Output Power, Max. 2250 Watts
 Voltage Adjustment Range 26.5-33.5VDC
 Total Regulation¹..... 1.0%
 Ripple & Noise, PK-PK². 250mV
 Holdup Time³. 20ms
 Dynamic Response⁴ 1ms
 Temperature Coefficient 0.05%/°C
 Minimum Load 0A
 Overload Protection..... Constant Current Limiting
 Overvoltage Protection..... Latched Shutdown
 Active Current Share⁵ 10% Differential From Rated Current
 Remote Sense..... Up to 0.5V Per Wire

INPUT SPECIFICATIONS

Input Voltage Range 170-264VAC
 Power Factor 0.98
 Input Frequency 47-63Hz
 Inrush Limiting 25A Peak
 Input Current, Full Load..... 11.8A@230VAC
 Input EMI Filter, Conducted EN55022 Curve B
 FCC20780 pt. 15J Curve B
 Harmonic Distortion EN61000-3-2
 Input Immunity, Conducted
 Fast Transients, Line-Line..... ±2kV (EN61000-4-4 Level 3)
 Surges, Line-Line..... ±1kV (EN61000-4-5 Level 2)
 Surges, Line-Ground..... ±2kV (EN61000-4-5 Level 3)
 Input Protection, Internal Fuse 20A

GENERAL SPECIFICATIONS

Efficiency 85% at Full Load
 Switching Frequency 70kHz Nominal
 Overtemperature Protection Power Shutdown
 Isolation, Class I⁶, min..... 3000VAC Input - Output
 1500VAC Input - Ground
 50VDC Output - Ground
 Safety Standards..... IEC60950-1, UL1950, CSA22.2 No.950

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature..... 0°C to 70°C Ambient
 Derating..... 2.5% / °C, 50°C to 70°C
 Storage Temperature..... -40°C to +85°C
 Cooling Integral Ball Bearing Fan

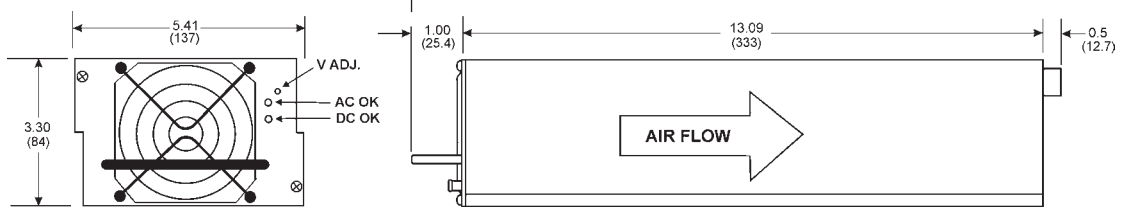
PHYSICAL SPECIFICATIONS

Case Material, Module, Aluminum
 Rack Mount..... Steel
 Finish, Rack Mount..... Powder Coat Gray
 Dimensions, Inches (mm)
 Module 3.3H x 4.9W x 13.1D
 (84 x 124 x 333)
 19" Rack..... 3.50H x 19.00W x 19.88D
 (89 x 483 x 505)
 23" Rack..... 3.50H x 23.00W x 19.88D
 (89 x 584 x 505)

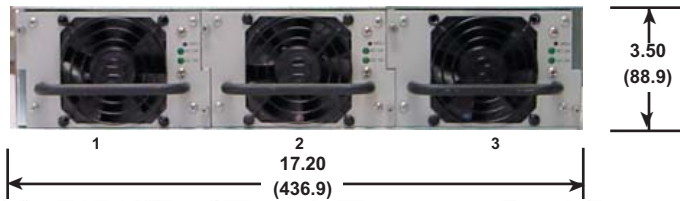
NOTES:

- At remote sense point over full line range and 0-100% load change.
- 20MHz bandwidth. Measured with 0.1µF ceramic and 10µF tantalum capacitors in parallel across the output.
- Full output power at nominal AC line.
- <5% deviation recovering to within 1% for 50% load change.
- Using single wire current share with remote sense connected.
- Input - output isolation figure is for isolation components only. 100% production Hipot tested.

HOT-SWAP MODULE



FRONT VIEW, 19" RACK



AC CONNECTION AREA J1 SIGNAL CONNECTOR + DC OUTPUT BUS BARS -

FRONT VIEW, 23" RACK

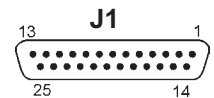


J1 SIGNAL CONNECTOR

PIN	FUNCTION	PIN	FUNCTION
1	Inhibit	14	AC Good-1
2	Thermal Alarm-1	15	DC Good-1
3	Current Monitor-1	16	AC Good-2
4	Thermal Alarm-2	17	DC Good-2
5	Current Monitor-2	18	AC Good-3
6	Thermal Alarm-3	19	DC Good-3
7	Current Monitor-3	20	AC Good-4*
8	Thermal Alarm-4*	21	DC Good-4*
9	Current Monitor-4*	22	N.C.
10	Current Share	23	-Sense
11	+ Sense	24	Remote Adjust-1
12	Remote Adjust-2	25	Remote Adjust-3
13	Remote Adjust-4*		

*These pins are N.C. on 19" rack.

NOTE: AC Connections are made to a terminal block behind the rear grille. There is a separate connection to each module.



AMP747846-4 Connector
AMP747912-2 Mate

ALL DIMENSIONS IN INCHES mm.

All specifications subject to change without notice.

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