

## DESCRIPTION

**auro-he** is UNIPOWER's new generation high efficiency hot-swappable, modular Front-Ends and Rectifiers producing up to 1500 watts output power. There are 3 standard models at 48VDC and 54.4VDC output. The modules are ultra-compact with power density up to 18.75 watts per cubic inch. The modules have automatic load sharing and active output ORing circuit so they can be hot-swapped while the system is operating. An I<sup>2</sup>C Serial bus common with other UNIPOWER products is included as standard.

Front panel mounted LEDs indicate AC input and DC output status and a +5V @ 1A standby output is also included. Operating temperature range is -20°C to +70°C, but units will start-up at as low as -40°C with reduced performance.

## FEATURES

- ◆ 92% Efficiency
- ◆ 1U High: 1.6"
- ◆ -40°C to +70°C Operation
- ◆ Wide Range AC Input
- ◆ Up to 1500W Output
- ◆ >0.98 Power Factor
- ◆ Output Voltages: 48VDC and 54.4VDC
- ◆ Power Density to 18.75W/Cu. Inch
- ◆ Hot Swappable
- ◆ Integral Active Output ORing Circuit
- ◆ Class B EMI Filter
- ◆ LED Indicators
- ◆ I<sup>2</sup>C Serial Bus
- ◆ Dual Speed Cooling Fans

## TWO-YEAR WARRANTY

## SAFETY STANDARDS

UL60950-1  
 CSA22.2, No. 60950-1  
 EN60950-1



## FRONT-END / RECTIFIER MODULES

MAX. POWER	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT RANGE	INPUT CURRENT <sup>1</sup>	MODEL NUMBER <sup>2,3</sup>
1523W	54.4VDC	28.0A	180-264VAC	7.4A	RAUQ48/28-Z
1197W	54.4VDC	22.0A	85-264VAC	11.0A/5.8A	RAUP48/22-Z
1500W 1200W	48.0VDC	31.25A 25.00A	180-264VAC 85-132VAC	7.4A 11.0A	TAUQ7000-Z

### Notes

1. Input currents are at 120VAC and 240VAC respectively.
2. TAUQ7000-Z senses input supply voltage and automatically adjusts output current limit as required.
3. For special requirements I2C interface can be removed (delete -Z from model number). Consult sales.

## MODULE ACCESSORIES

DESCRIPTION	PART NUMBER		
	UNIPOWER	TYCO	FCI
Mating Connector	355-3368-0000	6450372-1	51816-025
Evaluation Board	009-4045-0000		

## 4-BAY 19" SHELF SYSTEM ORDERING GUIDE

MAX. POWER	DESCRIPTION	MAX. CURRENT	MODEL NO.
6000W	Single Output Bus IEC60320-C13 AC Input	125A	TAUQR1U4A
6000W	Single Output Bus Terminal Block AC Input	125A	TAUQR1U4B
6000W	Dual Output Bus IEC60320-C13 AC Input	62.5A/62.5A	TAUQR1U4C
6000W	Dual Output Bus Terminal Block AC Input	62.5A/62.5A	TAUQR1U4D

Note: For detailed specifications of the 19" shelf system see separate datasheet.

# SPECIFICATIONS

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

## INPUT

Voltage Range ..... See Model Table  
 Power Factor ..... >0.98  
 Total Harmonic Distortion, Max. .... 5%  
 Frequency ..... 47-63Hz  
 Inrush Current Limiting, Max. .... 50A Peak  
 EMI Filter, Conducted ..... FCC20780 pt. 15J Curve B  
 ..... EN55022 Curve B  
 Fast Transients ..... EN61000-4-4  
 Surges ..... EN61000-4-5  
 Remote Adjust ..... 0 to +5V  
 Input Protection ..... Internal Fuse, 20A

## OUTPUT

Current & Voltage ..... See Table  
 Output Power ..... 1000-1500W  
 Voltage Adjustment Range ..... ±5%  
 Standby Output ..... +5V@1A  
 Line & Load Regulation, Max. .... 2%  
 Holdup Time ..... 10msec.  
 Overvoltage Protection ..... Latch Off  
 Filtering: Wideband Noise, 20MHz BW ..... 1%  
 Current Limit ..... 105-115% Rated Current  
 Efficiency @ 48VDC  
 100% Load ..... >91.0%  
 40%-80% Load ..... >92.0%

**SAFETY STANDARDS** ..... UL60950-1, CSA22.2 No. 60950-1, EN60950-1

## STATUS INDICATORS

AC GOOD ..... Green LED  
 DC GOOD ..... Green LED

## ALARM SIGNALS (open drain, TTL compatible)

ACOK ..... AC present, 5V standby operating  
 DCOK ..... DC output within -10% of nominal @ 48V  
 TEMPOK ..... Internal temperature within limits

## SERIAL COMMUNICATIONS

I<sup>2</sup>C ..... Fitted as standard

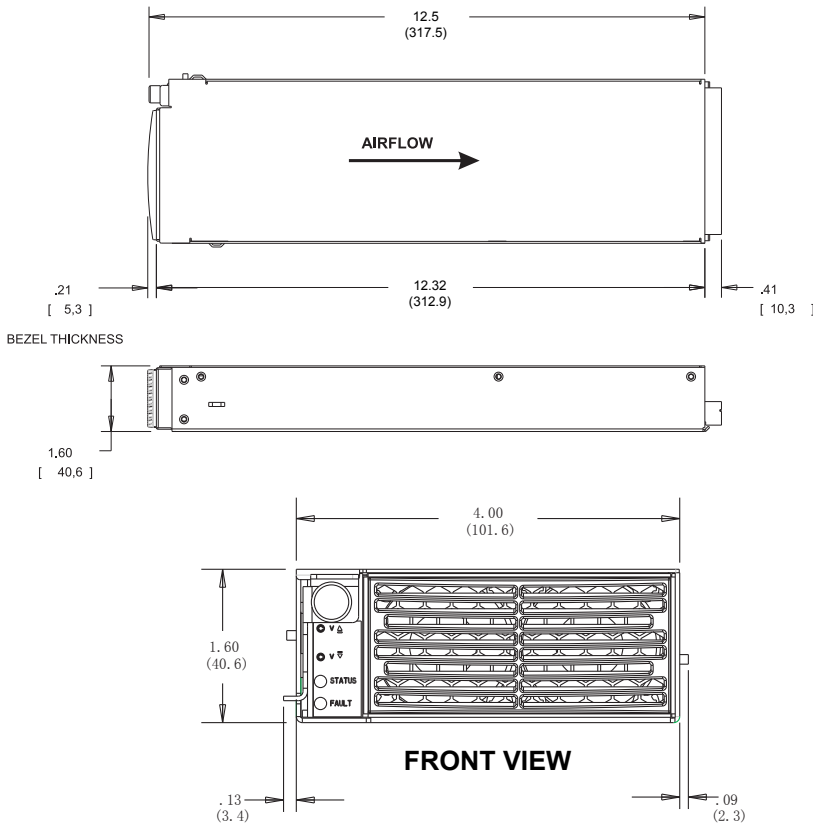
## ENVIRONMENTAL

Operating Temp. Range ..... -20°C to +70°C  
 ..... -40°C start-up, reduced performance  
 Output Current Derating ..... 2.5%/°C, 50°C to 70°C  
 Storage Temp. Range ..... -40°C to + 85°C  
 Humidity ..... 0% to 95%, Non-Condensing  
 ESD ..... Bellcore GR-1089-Core and EN61000-4-2  
 MTBF, 35°C (Bellcore) ..... 200,000 Hours  
 Cooling ..... Integral Ball Bearing Fans

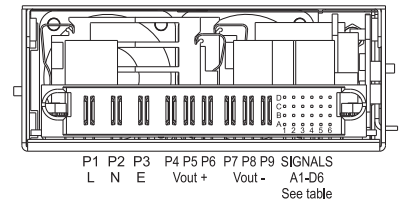
## PHYSICAL SPECIFICATIONS

Case Material ..... Steel  
 Dimensions, Inches (mm) ..... 1.60 H x 4.00 W x 12.50 D  
 (40.6 x 102 x 317.5)  
 Weight ..... 4.2 lbs. (1.9 kg.)

## OUTLINE DRAWING



## REAR VIEW (with connection details)



SIGNAL PIN CONNECTIONS			
PIN	FUNCTION	PIN	FUNCTION
A1	MODULE PRESENT	C1	Sense +Ve <sup>1</sup>
A2	Not Used	C2	Current Monitor <sup>1</sup>
A3	Not Used	C3	GA1
A4	Standby Return <sup>1</sup>	C4	5V Standby <sup>1</sup>
A5	Not Used	C5	DCOK
A6	Not Used	C6	SCL
B1	Sense -Ve	D1	Remote Adjust <sup>1</sup>
B2	Inhibit	D2	Current Share <sup>1</sup>
B3	GA2	D3	GA0
B4	Standby Return <sup>1</sup>	D4	Not Used
B5	TEMPOK	D5	ACOK
B6	SDA	D6	ENABLE

**NOTES:**  
 1. Referenced to -Ve Sense.

ALL DIMENSIONS IN INCHES (mm).  
 All specifications subject to change without notice.