

# 500-750 Watts HELIOS™

## Mini 500

500W 48VDC Compact Power Solution



## Special Features

- System includes rectifiers, temperature compensation, charge control, low voltage disconnect, and distribution fuse module in a standard, compact package
- Up to three, 250 W Output Rectifiers, providing 250 W, 500 W or 500 W with N+1 Redundancy and 750 W Charging Power
- Adjustable DC Output Voltage: (-48 to -55.5V)
- Adjustable Temperature Compensation slope
- Adjustable Low Voltage Disconnect threshold
- Adjustable Battery Charge Control (2 - 20 A)
- Distribution: 10 Fuse Positions (0 to 10 A each)
- Convection Cooled
- Power Factor Correction
- Current Sharing
- Soft Switching Technology
- Full Output Power at Full Temperature Range
- Full Complement of LED and Output Alarms Available
- Connections for up to Two Battery Strings
- EMI Filter Included
- Full front access unit available

## Electrical Specs

### Input

AC Input Range	Input Voltage 110 Vrms (86-132)
Input Current	typical 5.5 A @ 120 Vrms, Max 11.5 A
Frequency	50-60 Hz (45-65 Hz)
Efficiency	>86%
Power Factor	0.99 for >50% rated output current
Total Harmonic Distortion	<5% for >50% rated output current

### Output

DC Output Voltage	-54.5 VDC $\pm$ 0.5%
DC Output Current	6 A per rectifier @ current limit
Maximum Output Power	102.5% $\pm$ 2.5% rated output power for Vout > 42 V
Voltage Regulation	0.5% load/line $\pm$ 1.0% load/line temp.
Dynamic Response	$\pm$ 5% for 10% to 90% or 90% to 10% step launch
Protection and/or Disconnect	Internal DC fuse
Parallel Operation	$\pm$ 10% of rated current between rectifiers
Capacitor Precharge	automatic upon insertion of rectifiers
Hold-up Time	Vout remains > 42 V for 30 msec
Voice Frequency Noise	<55 dB rnC
High Frequency Noise (wideband)	<100 mVrms

## Environmental & Safety

EMC/EMI: FCC Class B, part 15 sub part B, and Bellcore 1089  
 ESD: TR-NWT-001089, 15 kV no damage,  
 2 kV no disturbance  
 Temperature and Humidity: -40°C to +50°C (up to +65°C with  
 sufficient airflow)  
 Acoustic Noise: <55 dB with 'A' weighting  
 Cooling: Natural Convection  
 Shock and Vibration: TR-NWT-000063  
 Fire Resistance: All material UL 94-VO

### Safety:

UL 1950  
 IEC 950  
 CSA 22.2 # 950

**AMERICAS**

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**ASIA**

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**Ordering Information**

**System:**

- 1 = System Shelf
- 4 = System Shelf with 23" brackets for front access
- 5 = System Shelf with 19" and 23" brackets

**Output Power:**

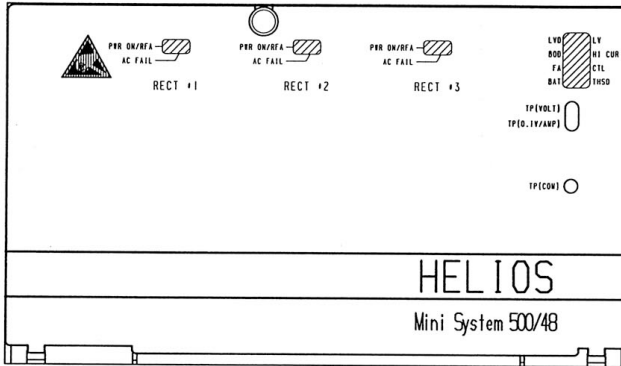
- 2 = 500 W.
- 3 = 500 W, (N+1) or 750 W

**Note:**

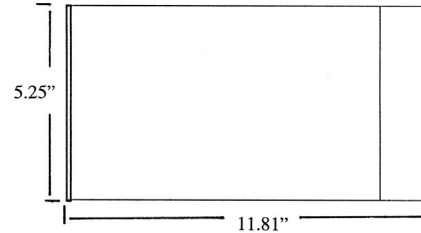
All systems include Standard Shelf, Controller, Low Voltage Disconnect, one Fuse Pack, 10 ft alarm cable, and 10 ft temperature probe

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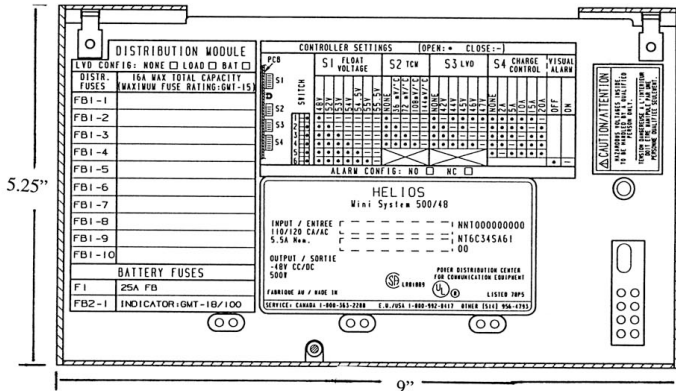
Front



Side



Back



All dimensions are in inches. Do not scale drawing