

# 250-2600 Watts

## HELIOS

### Mini FLEX

2600W 48 VDC Compact Flexible Power Solution



### Special Features

- Up to 2600 W Power Output and up to 5200 W with optional double shelves
- Front access unit.
- Operable in 110VAC or 220VAC systems
- One to four 250W/500W/650W output rectifiers providing up to 1950W with N+1 redundancy
- Distribution: 8 fuse positions (0 to 10A each)
- Power factor correction
- Current sharing
- Standard Low Voltage Disconnect (LVD) with LVD bypass and LVD test.
- Hot plug-in rectifier modules
- Soft switching technology
- Brackets for 1.5 or 4.75 inch depth installation
- Full complement of LED and output alarms
- Connection for battery string
- Compact dimensions
  - Power shelf: 19"W x 4.94"H x 13.2"D
  - Battery tray: 17.3"W x 7"H x 14.46"D
- CE Marking

### Environmental

EMC/EMI: FCC Class B, CISPR Class B for digital devices, Telcordia GR-1089-CORE, Class B, EN 300 386-2

Temperature: -40° to +65°C (+50°C for high altitude)

Humidity: 0 to 95% RF (non-condensing)

Acoustic noise: < 60dB for full system

Cooling: forced air, horizontal (side to side)

Shock and vibration: meets Telcordia GR-63- CORE

Fire resistance: UL 94VO, TR-NWT-000154, Sec 7.2

Voltage surge protection: meets Telcordia GR-1089 section 4.5.9

### Electrical Specs

#### Input

|                           |                                                                                           |
|---------------------------|-------------------------------------------------------------------------------------------|
| AC input voltage range    | 110/220VAC (86-264 VAC for 250 W, 176-264 VAC for 500 W, 186-264 VAC for 650W rectifiers) |
| Frequency                 | 45 – 65 Hz                                                                                |
| Efficiency                | > 86% at full load                                                                        |
| Power factor              | 0.99 (50 – 100% output load)                                                              |
| Total harmonic distortion | < 6.5% at loads over 50% of rated current                                                 |

#### Output

|                         |                                                                        |
|-------------------------|------------------------------------------------------------------------|
| DC output voltage range | -54.5 VDC $\pm$ 0.27 VDC (Factory preset)                              |
| Output Current          | 18.35A (1000W), 36.70A (2000W), 47.71 A (2600W) @ -54.5 VDC            |
| Maximum output power    | 1120 W, 2240 W, 2730 W @ power limit. Different preset voltages avail. |
| Voltage regulation      | $\pm$ 0.5% load/line and $\pm$ 1.0% load/line°C                        |
| Dynamic response        | $\pm$ 5% for 10% to 90% or 90% to 10% load step changes                |
| Capacitor precharge     | automatic upon insertion                                               |
| Voice frequency noise   | <55dB rnc @ 10% load                                                   |
| High frequency noise    | <250 mV p-p                                                            |

#### Battery Tray - A0802970

(for 1000 W application only)

|                              |                                                               |
|------------------------------|---------------------------------------------------------------|
| Protection disconnect device | Built in 30 A circuit breaker                                 |
| Batteries                    | Designed to accommodate 30 A/h M12V30 Marathon VRLA batteries |

### Safety

|              |                                    |
|--------------|------------------------------------|
| Rectifier:   | UL1950                             |
| Power Shelf: | UL1801, CSA 22.2#950, IEC-950, VDE |

# AMERICAS

5810 Van Allen Way  
Carlsbad, CA 92008  
Telephone: 760-930-4600  
Facsimile: 760-930-0698

# EUROPE

Astec House, Waterfront Business Park  
Merry Hill, Dudley  
West Midlands, DY5 1LX, UK  
Telephone: 44 (1384) 842-211  
Facsimile: 44 (1384) 843-355

# ASIA

Units 2111-2116, Level 21  
Tower1, Metroplaza  
223, Hing Fong Road  
Fwai Fong, New Territories  
Hong Kong  
Telephone: 852-2437-9662  
Facsimile: 852-2402-4426



## Ordering Information

| HMFLEX- <span style="border: 1px solid black; padding: 0 5px;"> </span> - <span style="border: 1px solid black; padding: 0 5px;"> </span> |   | Multiplier |       |       |       |
|-------------------------------------------------------------------------------------------------------------------------------------------|---|------------|-------|-------|-------|
|                                                                                                                                           |   | 1          | 2     | 3     | 4     |
| Rectifier Base                                                                                                                            | 1 | 250W       | 500W  | 750W  | 1000W |
|                                                                                                                                           | 2 | 500W       | 1000W | 1500W | 2000W |
|                                                                                                                                           | 3 | 650W       | 1300W | 1950W | 2600W |

**EXAMPLE: HMFLEX- 1 - 3**

750 W total power  
with three 250 W rectifiers

Helios MiniFLEX includes Power Shelf, LVD, and distribution; eight 10A GMT fuses

### Options:

- P0917017 Helios MiniFlex 23" adapter bracket kit
- A080297 Battery Shelf and battery tray cable assembly to accommodate 30 A hr battery string for HMFLEX-1-   system (battery not included)
- P0917018 Battery shelf 23" adapter bracket kit
- P0944645 60" power cord for up to 220 VAC with Hubbel #2321AC plug
- P0944646 120" power cord for up to 220 VAC with Hubbel #2321AC plug
- P0944647 180" power cord for up to 220 VAC with Hubbel #2321AC plug
- P0944716 60" power cord for up to 220VAC without AC plug
- P0944718 120" power cord for up to 220VAC without AC plug
- P0944719 180" power cord for up to 220VAC without AC plug

