

# 3000 Watts HPS3KW



Total Power: **3000 Watts**  
Input Voltage: **180-264 VAC**  
# of Outputs: **Single**

## Special Features - \* Module only

- Active Power Factor Correction
- EN61000-3-2 Harmonic Compliance
- Remote INHIBIT
- Single Wire Parallel
- Built-in EMI Filter
- Low Output Ripple
- +5V standby Output
- Built-in Cooling Fans
- Over Current Protection
- Over Voltage Protection
- Over Temperature Protection
- Hot Swap
- Built-in OR'ing Diodes

## Environmental - \* Module only

Operating Temperature: +5°C to 40°C

Non-Operating Temperature: -40° to +70°C

Electromagnetic Susceptibility: Designed to meet EN61000-4-2, -4-3, 4-4, -4-5 Level 3

Humidity: 5 to 95% RH, non-condensing

Operating: Sinusoidal Vibration - 0.25G zero to peak, 10 to 500Hz, 0.25 oct/min in each three mutually perpendicular axes. Random vibration - 0.002 G<sup>2</sup>/Hz, 10 to 500Hz, nominal 1G rms.

Non-operating: Sinusoidal Vibration - 0.75G zero to peak, 10 to 500Hz, 0.50 oct/min in each three mutually perpendicular axes. Random vibration - 0.008 G<sup>2</sup>/Hz, 10 to 500Hz, nominal 2G rms.

MTBF (demonstrated): >500Khrs at full load, 40°C

## Electrical Specs - \* Module only

### Input

|                 |                          |
|-----------------|--------------------------|
| Input Range     | 180-264VAC               |
| Frequency       | 47 - 63 Hz               |
| Inrush Current  | 100A (peak)              |
| Efficiency      | 85% typical at full load |
| EMI Filter      | CISPR22 Class A          |
| Power Factor    | 0.98 typical             |
| Leakage Current | 1.16 mA @ 240 VAC        |

### Output

|                    |                    |
|--------------------|--------------------|
| DC Voltage         | 51.4V @ 57A*       |
|                    | 5Vsb @ 5A          |
| Adjustment Range   | ± 5%               |
| Supervisory Output | 5V @ 5A            |
| Hold Up Time       | 20ms               |
| Over Current       | 51.4V: 110% - 150% |
|                    | 5Vsb: 101% - 125%  |
| Over Voltage       | 60V Max            |

### Logic Control

|            |  |
|------------|--|
| ENABLE     | Requires contact closure from "PSON" to 5Vsb return.   |
| AC OK      | TTL signal LOW   |
| POWER FAIL | TTL signal LOW; goes HIGH in the event of failure  |
| POWER GOOD | TTL logic signal goes high 100-1000 msec after 48VDC output. It goes LOW at least 1ms before loss of regulation. |

\*10% Minimum load required.

## Safety - \* Module only

UL 60950 (UL Recognized)  
NEMKO EN60950  
TUV EN60950  
CE Mark

# HPS3KW Module

## AMERICAS

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

## EUROPE

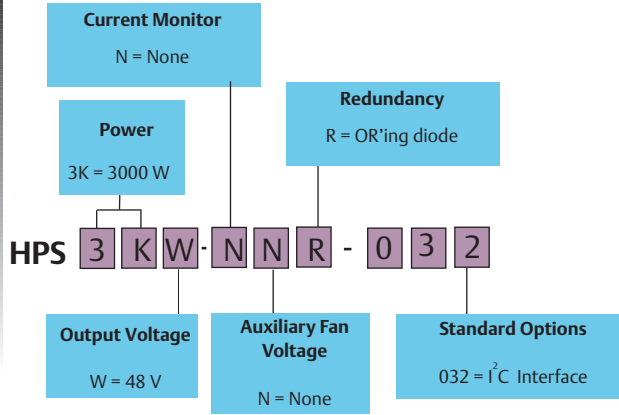
Astec House, Waterfront Business Park  
 Merry Hill, Dudley  
 West Midlands, DY5 1LX, UK  
 Telephone: 44 (1384) 842-211  
 Facsimile: 44 (1384) 843-355

## ASIA

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



## Ordering Information



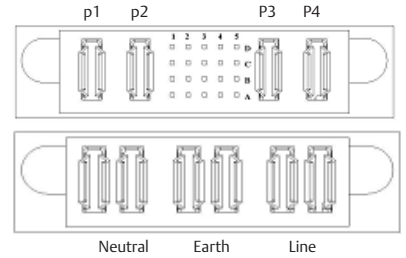
## DC Output Connector Pinout Assignment

|   | Signal Pins |          |         |             |          |
|---|-------------|----------|---------|-------------|----------|
|   | 1           | 2        | 3       | 4           | 5        |
| D | 5Vsb        | 5Vsb rtn | PSON    | SCL         | A0       |
| C | 5Vsb        | 5Vsb rtn | PRESENT | SCL/SDA RTN | A1       |
| B | 5Vsb        | 5Vsb rtn | PSKI LL | SDA         | A2       |
| A | 48LS        | AC OK    | PWOK    | FAIL        | Reserved |

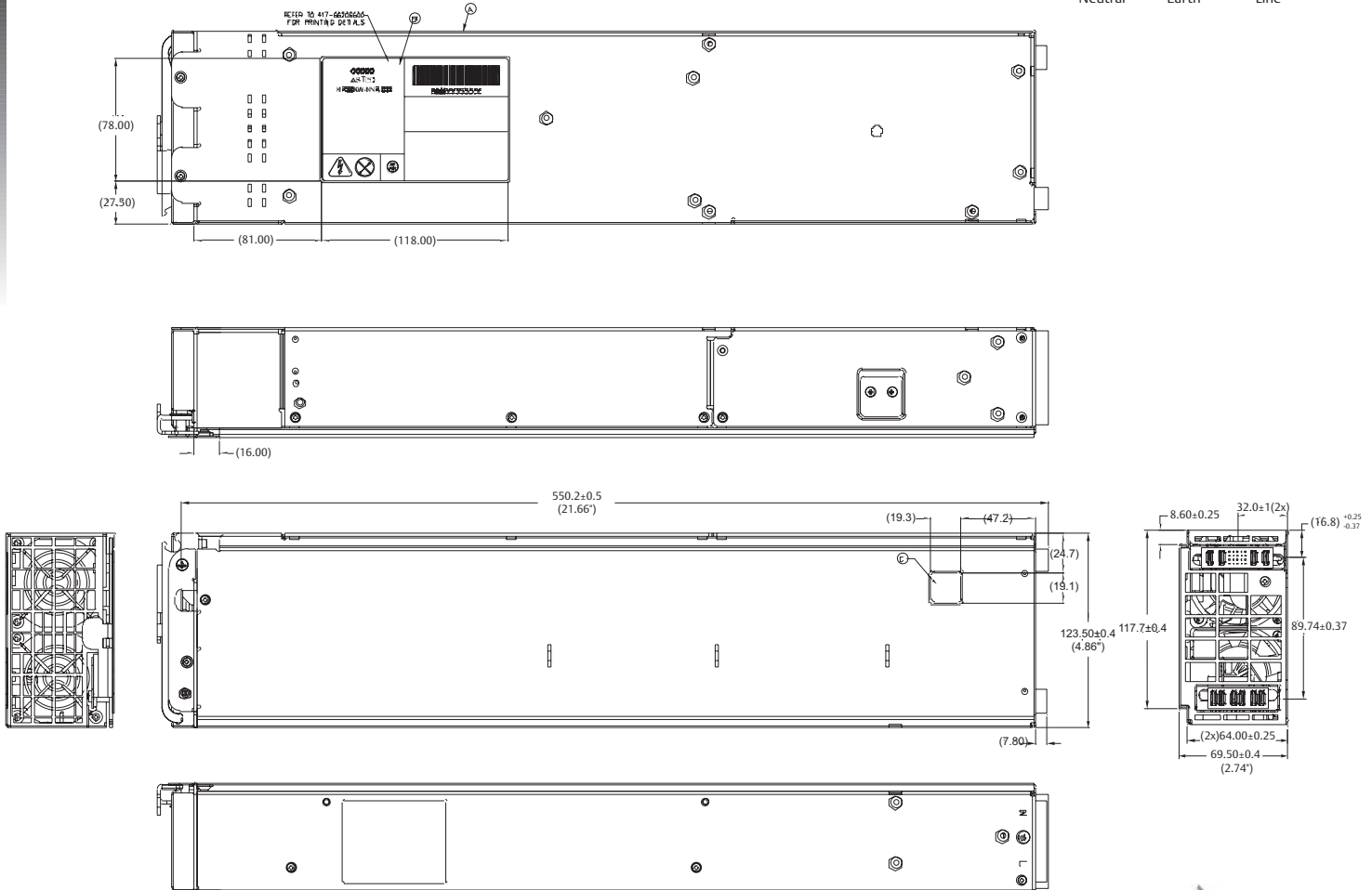
  

| Power Blades |        |
|--------------|--------|
| P1, P2       | P3, P4 |
| 48VDC RETURN | 48VDC  |

DC OUTPUT CONNECTOR: FCI 51874-001  
 DC OUTPUT MATING CONNECTOR: FCI 51875-001



## Mechanical Drawings



# HPS3KW Rack

## Ordering Information

- Hot Swap
- Can accommodate up to 18KW of bulk power
- Easy AC input connect
- Easy DC output connect

