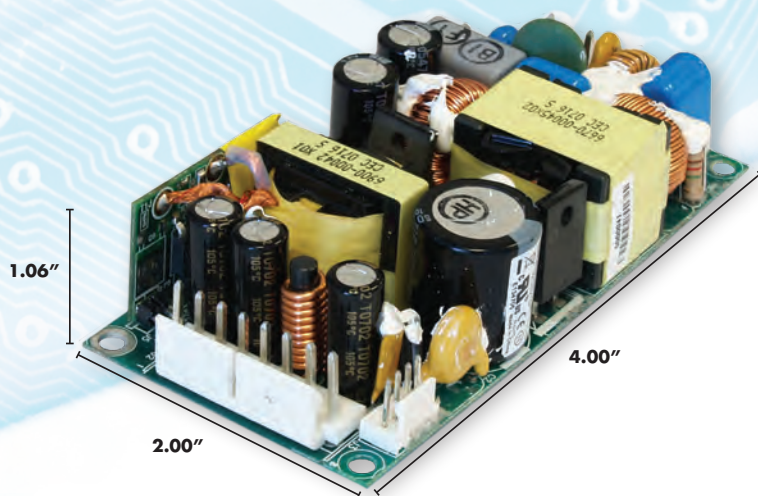


## HD160 Series

## 160 Watt High Density AC/DC Power Supply



### PRODUCT DESCRIPTION

The HD160 Series of switching power supplies utilizes advanced component and circuit technologies to deliver the industry's smallest 160 Watt switcher. The series has been designed for Medical, Telecom and Industrial Applications to satisfy 1U height considerations, the package measures only 4.00 x 2.00 x 1.06". All models offer universal AC input with active power factor correction (PFC), flexible output configurations and compliance to worldwide safety and EMC standards. Features include:

- 160W compact high-density models
- The most power in the industry standard 2 x 4" Footprint
- Universal AC input with PFC
- Low Profile / 1U Package
- Convection cooled operation up to 100 Watts
- 12V / 500mA Auxillary Output to power Fan
- RoHS compliant
- High efficiency operation of 90% (Typical)

### INPUT

|                         |                                    |
|-------------------------|------------------------------------|
| AC Input Voltage        | 90-264VAC (47-63Hz) or 170-370 VDC |
| Input Current           | 2A Max Continuous                  |
| Input Reflected Ripple  | FCC 68 part 15 Class B             |
| Power Factor Correction | 0.98 at 220VAC (typical)           |
| Input Line Protection   | 3A 250VAC IEC Type                 |
| Hold-up Time            | >16msec @ Full Load                |
| Efficiency              | 90% Typical                        |
| Leakage                 | 100/200uA @ 115/230 VAC (max)      |

### ELECTROMAGNETIC COMPATIBILITY

|                         |                                                |
|-------------------------|------------------------------------------------|
| Electrostatic Discharge | EN61000-4-2, ±4KV Contact / ±8KV Air Discharge |
| Radiated Susceptibility | EN61000-4-3, 26-1000MHz, 10V/M, 80% AM         |
| EFT / Bursts            | EN61000-4-4, ±2KV                              |
| Surges                  | EN61000-4-5, ±2KV Line-Earth, ±1KV Line-Line   |
| Conducted Immunity      | EN61000-4-6, 0.15-800MHz, 10V, 80% AM          |
| Voltage Dips            | EN61000-4-11, 95% Dip & 10ms, 30% Dip & 500ms  |
| Voltage Interruptions   | EN61000-4-11, 95% Reduction, 5s                |
| Fluctuations & Flicker  | EN61000-3-3                                    |

### OUTPUT

|                          |                                     |
|--------------------------|-------------------------------------|
| Line Regulation          | ± 0.1% for Vin (min.) to Vin (max.) |
| Load Regulation          | V1 = ±1% / V2 = ±5% Max             |
| Adjustment Range         | ±5% Minimum                         |
| Min. Load Requirement    | None                                |
| Ripple                   | ± 1% (20MHz)                        |
| Transient Response       | Better than 5% For 50% Step Load    |
| Over-Voltage Protection  | 115-150% (Latched Shut-down)        |
| Turn-On Delay            | 1 Sec. Max.                         |
| Initial Setting Accuracy | ± 1%                                |
| Over-Current             | 110-130% of I-Max (Auto-Recovery)   |
| Aux Fan Output           | 12 VDC @ 500mA                      |

### ENVIRONMENTAL

|                       |                                                  |
|-----------------------|--------------------------------------------------|
| Operation Temperature | -20 ~ +50C Derate of 2.5%/C up to +70C           |
| Storage Temperature   | -20C ~ +85C                                      |
| Cooling               | Forced Air Cooling 200LFM<br>100W Max Convection |
| Humidity              | Up to 95% RH Non-condensing                      |
| Shock & Vibration     | 0.75G Peak Half Sine, 6 Axes                     |
| MTBF                  | >300,000 Hours                                   |

### SAFETY & EMISSIONS

|                  |                                                                                           |
|------------------|-------------------------------------------------------------------------------------------|
| Safety Approvals | CSA/UL 22.2 No. 60950-1-M90 & 60601-1-M90<br>NEMKO EN60950-1 / EN60601-1<br>CE Mark (LVD) |
|------------------|-------------------------------------------------------------------------------------------|



# HD 160 Series

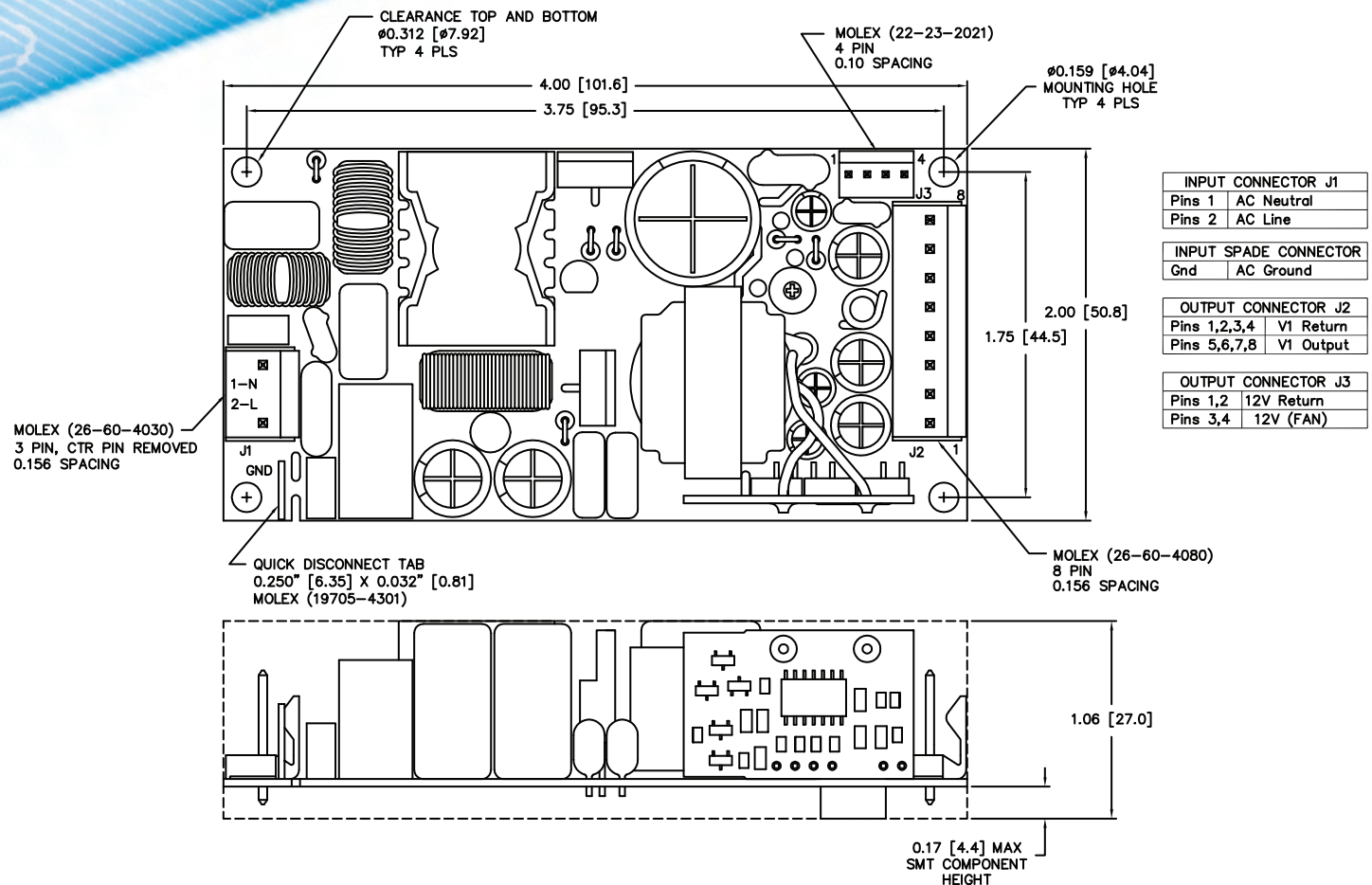
## 160 Watt High Density AC/DC Power Supply

### Model Selection Guide

200 LFM AIRFLOW RATINGS

| Model     | Output Power | Output      |
|-----------|--------------|-------------|
| HD160-105 | 100 Watts    | +5V @ 20A   |
| HD160-112 | 160 Watts    | 12V @ 13.3A |
| HD160-124 | 160 Watts    | 24V @ 6.66A |
| HD160-148 | 160 Watts    | 48V @ 3.33A |

Contact factory for other voltage configurations.



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