# HDX-750P

## 750 Watts (180-264Vac)

## 700 Watts (90-132Vac)

Dual High Current Outputs, Standard Models of 5Vdc/100Amps and 3.3Vdc/50Amps

I²C OPTION FOR IPMI COMPATIBILITY

## FEATURES:

**Size: 1.6" x 5" x 11" in Size**
**Low Profile - Only 1.6" high!**
**N+1 Redundant and Hot Swap**
**8.5w/in³ Power Density**
**Meets EN55022 Level A / FCC Class A**
**No Additional Cooling Required up to 50 °C**
**Power Factor Corrected Input (90-264VAC)**
**'Zero' Wire Current Share**
**Remote Sense On V1, V2, V3 Outputs**
**Integral LED Status Indicators**
**Greater than 90,000 Hrs MTBF**

| | OUTPUT **VOLTAGE** (VDC) | OUTPUT **AMPERES** (MAX) | OUTPUT **POWER** (WATTS) |
|---|---|---|---|
| +V1 | 2 to 48 | 100 | 750 |
| +V2 | 1.5 to 48 | 50 | 480 |
| +V3 | 5 to 24 | 12/15pk | 240 |
| - V4 | 0.8 to 15 | 5 | 72 |
| +V5 | +5V Standby Output | 0.25A | |

***V1 & V2 Combined current must not exceed 140A.**

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Regulated D.C. Power

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# HDX-750P SERIES - 750 WATT COMPACT SIZE

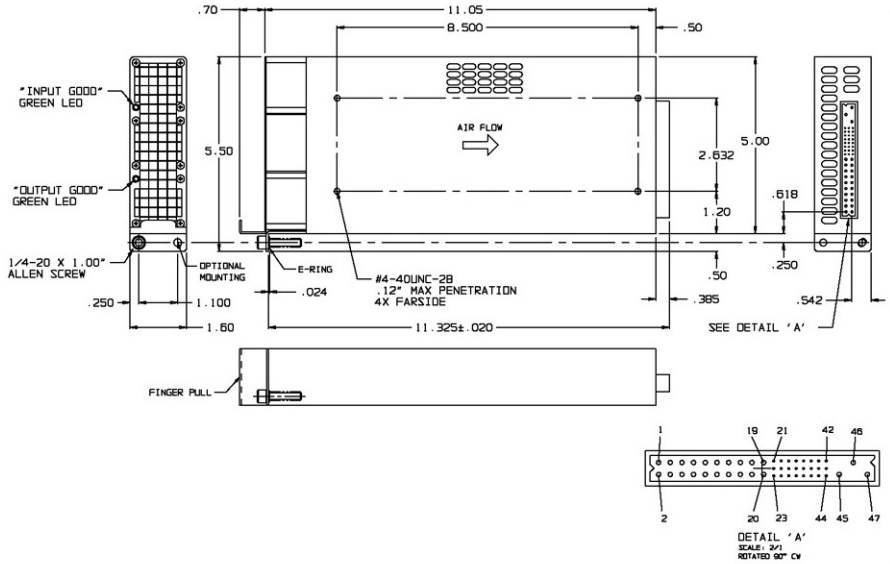


TABLE 'A'
WITH I2C OPTION
POSITRONIC P/N PCIH47M400A1

| PIN NO. | SIGNAL |
|---|---|
| 1 | +V1 OUT |
| 2 | +V1 OUT |
| 3 | +V1 OUT |
| 4 | +V1 OUT |
| 5 | +V1 OUT |
| 6 | +V1 OUT |
| 7 | V1 & V2 RTN |
| 8 | V1 & V2 RTN |
| 9 | V1 & V2 RTN |
| 10 | V1 & V2 RTN |
| 11 | V1 & V2 RTN |
| 12 | V1 & V2 RTN |
| 13 | V1 & V2 RTN |
| 14 | +V2 OUT |
| 15 | +V2 OUT |
| 16 | +V2 OUT |
| 17 | +V2 OUT |
| 18 | +V2 OUT |
| 19 | V3 RTN |
| 20 | +V3 OUT |
| 21 | V4 OUT |
| 22 | V4 RTN |
| 23 | V4 OUT |
| 24 | V4 RTN |
| 25 | GA0 |
| 26 | +5VSB RTN |
| 27 | ENABLE |
| 28 | GA1 |
| 29 | +5VSB |
| 30 | +V1 SENSE |
| 31 | -V1 SENSE |
| 32 | V4 RTN |
| 33 | +V2 SENSE |
| 34 | -V2 SENSE |
| 35 | V4 OUT |
| 36 | +V3 SENSE |
| 37 | -V3 SENSE |
| 38 | SDA |
| 39 | INHIBIT |
| 40 | SCLK |
| 41 | N/C |
| 42 | INPUT POWER FAIL |
| 43 | INTERRUPT |
| 44 | N/C |
| 45 | CHASSIS GROUND |
| 46 | AC LINE |
| 47 | AC NEUTRAL |

TABLE 'B'
WITHOUT I2C OPTION
POSITRONIC P/N PCIH47M400A1

| PIN NO. | SIGNAL |
|---|---|
| 1 | +V1 OUT |
| 2 | +V1 OUT |
| 3 | +V1 OUT |
| 4 | +V1 OUT |
| 5 | +V1 OUT |
| 6 | +V1 OUT |
| 7 | V1 & V2 RTN |
| 8 | V1 & V2 RTN |
| 9 | V1 & V2 RTN |
| 10 | V1 & V2 RTN |
| 11 | V1 & V2 RTN |
| 12 | V1 & V2 RTN |
| 13 | V1 & V2 RTN |
| 14 | +V2 OUT |
| 15 | +V2 OUT |
| 16 | +V2 OUT |
| 17 | +V2 OUT |
| 18 | +V2 OUT |
| 19 | V3 RTN |
| 20 | +V3 OUT |
| 21 | V4 OUT |
| 22 | V4 RTN |
| 23 | V4 OUT |
| 24 | V4 RTN |
| 25 | SPARE |
| 26 | +5VSB RTN |
| 27 | ENABLE |
| 28 | SPARE |
| 29 | +5VSB |
| 30 | +V1 SENSE |
| 31 | -V1 SENSE |
| 32 | V4 RTN |
| 33 | +V2 SENSE |
| 34 | -V2 SENSE |
| 35 | V4 OUT |
| 36 | +V3 SENSE |
| 37 | -V3 SENSE |
| 38 | OUTPUT POWER GOOD |
| 39 | INHIBIT |
| 40 | OVERTEMP WARNING |
| 41 | N/C |
| 42 | INPUT POWER FAIL |
| 43 | SPARE |
| 44 | N/C |
| 45 | CHASSIS GROUND |
| 46 | AC LINE |
| 47 | AC NEUTRAL |

**Nominal Input Voltage**
**Frequency**
120-240 VAC, 8A max.
47-63 Hz , 400Hz. available.

**Operational Input Voltage Range**
90-132 VAC, 700 Watts Output
132-264 VAC, 750 Watts Output
Power Factor 0.99 Typical at Full Load.
Meets EN 61000-3-2.

**Inrush Current**
Less than 4 msec. 40 amperes @ 115 VAC or 80 amperes @ 264 VAC.

**Brownout Protection:**
Holds Regulation to 85 Vac.

**Fusing**
16 Ampere, 250 VAC, Internal ceramic body fuse.

**Hold up time**
20msec minimum after loss of AC Input at full load and any input.

**Efficiency**
72 - 76% typical, line dependent.

**Turn on time**
1 sec max. from power up. All output voltages come up within 10msec of each other.

**Line and Load Regulation**
±2% over AC input range and 0 to 100% load change.

**Minimum Load**
A 2A minimum load required on V1.

**Ripple & Noise**
Through 20MHz 1% max. or 100mv whichever is greater for all outputs, peak to peak, with coaxial probe and 0.1uF/10uF capacitors at the connector.

**Transient Response**
Output maximum excursion of ± 4% for 25% load step. Recovery less than 300 µsec.

**Overshoot/Undershoot**
No turn-on or turn-off overshoot.

**Output Isolation**
Isolated from chassis ground, 50Vdc.

**Input/Output Isolation**
2200 VDC from input to both chassis/outputs. SELV construction.

**Reverse Voltage**
Protected against reverse voltage to supply current rating.

**Overvoltage Protection**
Shutdown at 130% of nominal Vout (V1,V2, V3). V4 failsafe design. Recycle input power to reset.

**Overtemperature Protection**
Unit shuts down if overheated. Recycle AC to reset.

**Leakage Current**
1.0mA max at 240Vac.

**Current Limiting**
V1,V2,V3 Shutdown overload -recycle AC to reset. V4 Foldback protected-auto recovery.

**Paralleling**
Two or more supplies can be operated in parallel and will share 5V/3.3V/12V current to within ±10% of each other.

**Redundant**
Full power N+1 redundant with integral Oring Diodes.

**Remote Sense**
Compensates for up to 0.5V total distribution voltage drop on the V1, V2 and V3 outputs.

**INHIBIT**
Open to Run, Contact closure to return , turns off all outputs.

**ENABLE**
Closed to run. Contact closure to return, turns on all outputs.

**Input POWER FAIL**
Normal logic '0' TTL signal which goes high whenever the AC line voltage ceases. Provides 4msec warning before outputs go out of regulation.

**Indicators**
Green LED indicating Input Good, Green LED indicating output Good.

**Output Power Good**
Provides logic High signal when V1, V2 are within 90% of their ratings.

**Over Temp Warning**
Provides a logic High signal at least 1 sec before supply shuts down.

**Operating Temperature**
-20°C to 50°C operating temperature. 50°C to 75°C, derate 2%/°C. (Power varies with AC input, consult factory for rating curves).

**Stability**
All outputs ±0.5% for 8 hrs. after 30 minute warm-up. All outputs ±1% during 30 minute warm-up.

**Humidity**
Up to 95% non-condensing.

**Storage Temperature**
-40°C to 85°C.

**Connector**
Positronic Part No. PCIH47M400A1

**Size**
1.6" x 5" x 11" **Weight:** 4 lbs.

**EMC**
Meets EN55022 Level A / FCC Class A conducted.

**Safety**
UL 60950 / CSA C22.2 No. 60950, EN60950.

SERIES BREAKDOWN: HDX-750X1-P

where X1= S for Single output, D for Dual output, T for Triple output or Q for Quad output

5-13-08
REV C