

HDX-1500P

HOT SWAP - 1500 Watts - 1U HIGH
Single Phase Wide Range Input (90-264Vac)
with Active Power Factor Correction



KEY FEATURES:

- 1500 Watts in a 1.60" x 5.00" x 10.00" Modular Design
- Wide Range AC Input (90-264Vac) with Active Power Factor Correction
- Hot Swap N+1 Redundant with Internal Oring FET's
- Custom Input/Output Configurations Available
- Includes Standby Output 5V/1.0A
- 18.75w/in³ Power Density
- "Zero" Wire Current Share
- Greater than 150,000 Hrs MTBF
- Integral LED Status Indicators
- No Minimum Load Required
- One Year Warranty
- Proudly Made in U.S.A.

Standard Configurations Available:

	<u>OUTPUT VOLTAGE (Vdc)</u>	<u>OUTPUT AMPERES (MAX)</u>	<u>OUTPUT POWER (WATTS)</u>
+V1	48Vdc	31.25	1500
+V1	24Vdc	50	1200
+V1	28Vdc	43	1200
+V1	12Vdc	75	900

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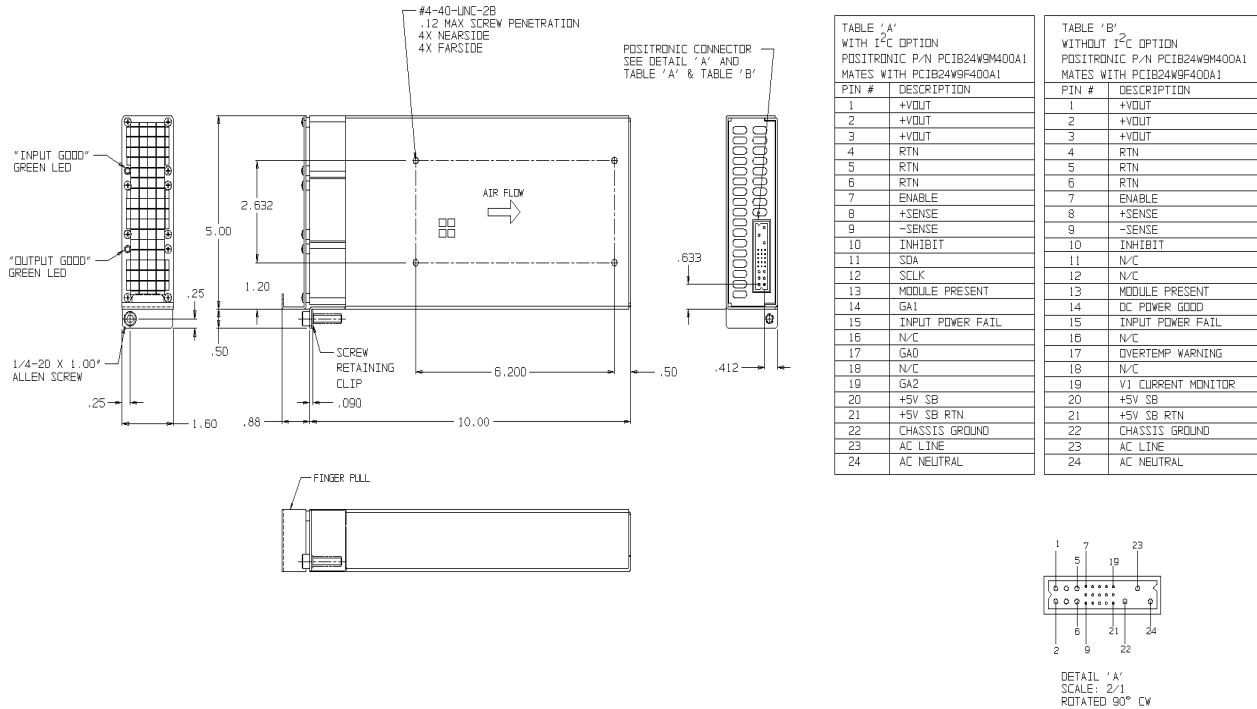
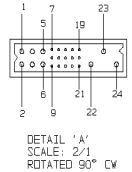


TABLE 'A' WITH I ² C OPTION POSITRONIC P/N PCB24W9M400A1 MATES WITH PCB24W9F400A1	
PIN #	DESCRIPTION
1	+VOUT
2	+VOUT
3	+VOUT
4	RTN
5	RTN
6	RTN
7	ENABLE
8	+SENSE
9	-SENSE
10	INHIBIT
11	SDA
12	SELK
13	MODULE PRESENT
14	GA1
15	INPUT POWER FAIL
16	N/C
17	GA0
18	N/C
19	GA2
20	+SV SB
21	+SV SB RTN
22	CHASSIS GROUND
23	AC LINE
24	AC NEUTRAL

TABLE 'B' WITHOUT I ² C OPTION POSITRONIC P/N PCB24W9M400A1 MATES WITH PCB24W9F400A1	
PIN #	DESCRIPTION
1	+VOUT
2	+VOUT
3	+VOUT
4	RTN
5	RTN
6	RTN
7	ENABLE
8	+SENSE
9	-SENSE
10	INHIBIT
11	N/C
12	N/C
13	MODULE PRESENT
14	DC POWER GOOD
15	INPUT POWER FAIL
16	N/C
17	OVERTEMP WARNING
18	N/C
19	V1 CURRENT MONITOR
20	+SV SB
21	+SV SB RTN
22	CHASSIS GROUND
23	AC LINE
24	AC NEUTRAL



Nominal Input Voltage Frequency 120-240 Vac, 14A max. 47-63 Hz, 400Hz. available.

Operational Input Voltage Range 90-264 Vac
Power Factor 0.99 Typical at Full Load.
Meets EN 61000-3-2.

Inrush Current Less than 10 msec. 25 amperes peak @ 120 Vac or 50 amperes peak @ 240 Vac.

Brownout Protection: Holds Regulation to 85 Vac.

Fusing 20 Ampere, 250 Vac, Internal ceramic body fuse.

Hold up time 20msec min (for output voltage greater than 87% of nominal) after loss of input at full load and any input.

Efficiency 87-90% typical.

Turn on time 1 sec max. from power up.

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

Minimum Load No minimum load required.

Ripple & Noise Through 20MHz 0.5% max. 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. Recycle input power to reset.

Overtemperature Protection Unit shuts down if overheated. Recycle input power to reset.

Leakage Current 1.0mA max at 240Vac.

Current Limiting Foldback protection, autorecovery.

Paralleling Two or more supplies can be operated in parallel and will share to within ±10% of each other.

Redundant Full power N+1 redundant with integral Oring FET's.

Remote Sense Compensates for up to 0.5V total distribution voltage drop.

INHIBIT Open to Run. Contact closure to return, turns off V1 output.

ENABLE Closed to run. Contact closure to return, turns on V1 output.

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 Low signal when V1 is within 90% of it's rating.

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. (Below 108Vac input, +48V versions power varies with temperature, consult factory for derating curves).

Stability All outputs ±0.2% for 8 hrs. after 30 minute warm-up. All outputs ±5% during 30 minute warm-up.

Humidity Up to 95% non-condensing.

Storage Temperature -40°C to 85°C.

Connector Positronic Part No. PCB24W9M400A1

Size 1.60" x 5.00" x 10.00" **Weight:** 4 lbs.

EMC External IEC inlet filter, Corcom 20EEJ1 or equivalent, required for FCC Class A and EN 55022 Level A conducted emissions.

Safety Designed to meet: IEC 60950 / CSA C22.2 No. 60950, EN60950.

Common Options Conformal coating (Acrylic or Paylene), ruggedization, increased energy storage & special output configurations. Consult factory.

Standby Output: +5V/1.0A, First On, Last Off.