

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

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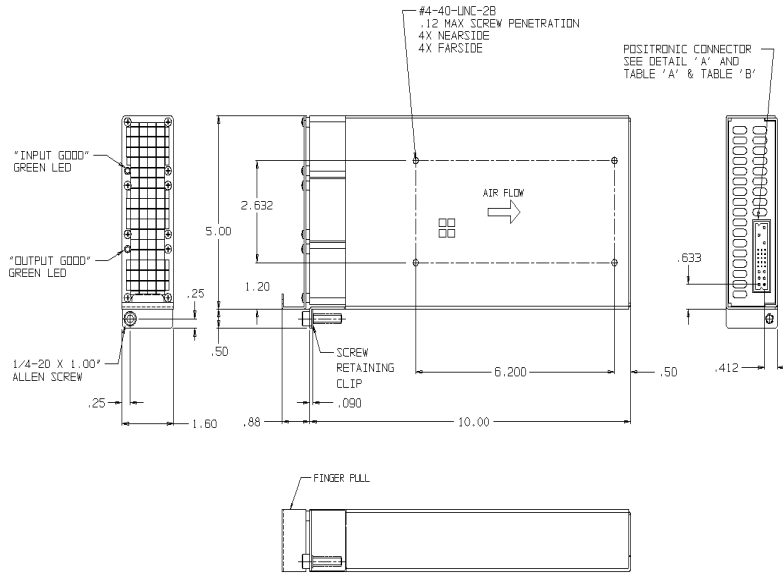
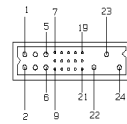


TABLE 'A' WITH I ² C OPTION POSITRONIC P/N PCB24W9M400A1 MATES WITH PCB24W9F400A1	
PIN #	DESCRIPTION
1	+VOUT
2	+VOUT
3	+VOUT
4	RTN
5	RTN
6	RTN
7	ENABLE
8	+SENSE
9	-SENSE
10	INHIBIT
11	SDA
12	SELK
13	MODULE PRESENT
14	GA1
15	INPUT POWER FAIL
16	N/C
17	GA0
18	N/C
19	GA2
20	+SV SB
21	+SV SB RTN
22	CHASSIS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



DETAIL 'A'
SCALE: 2/1
ROTATED 90° CW

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 4 msec. 30 amperes @ 115 Vac or 75 amperes @ 264 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	88-90% 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 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 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 rating factory for rating 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, in- creased energy storage & special output configurations. Consult factory.

Standby Output: +5V/1.0A, First On, Last Off. Remains ON during all fault conditions.