

JASPER ELECTRONICS

1580 North Kellogg Drive

Anaheim, Calif. 92807

Phone: (714) 917-0749

Fax: (714) 917-0786

Email: sales@jasperelectronics.com

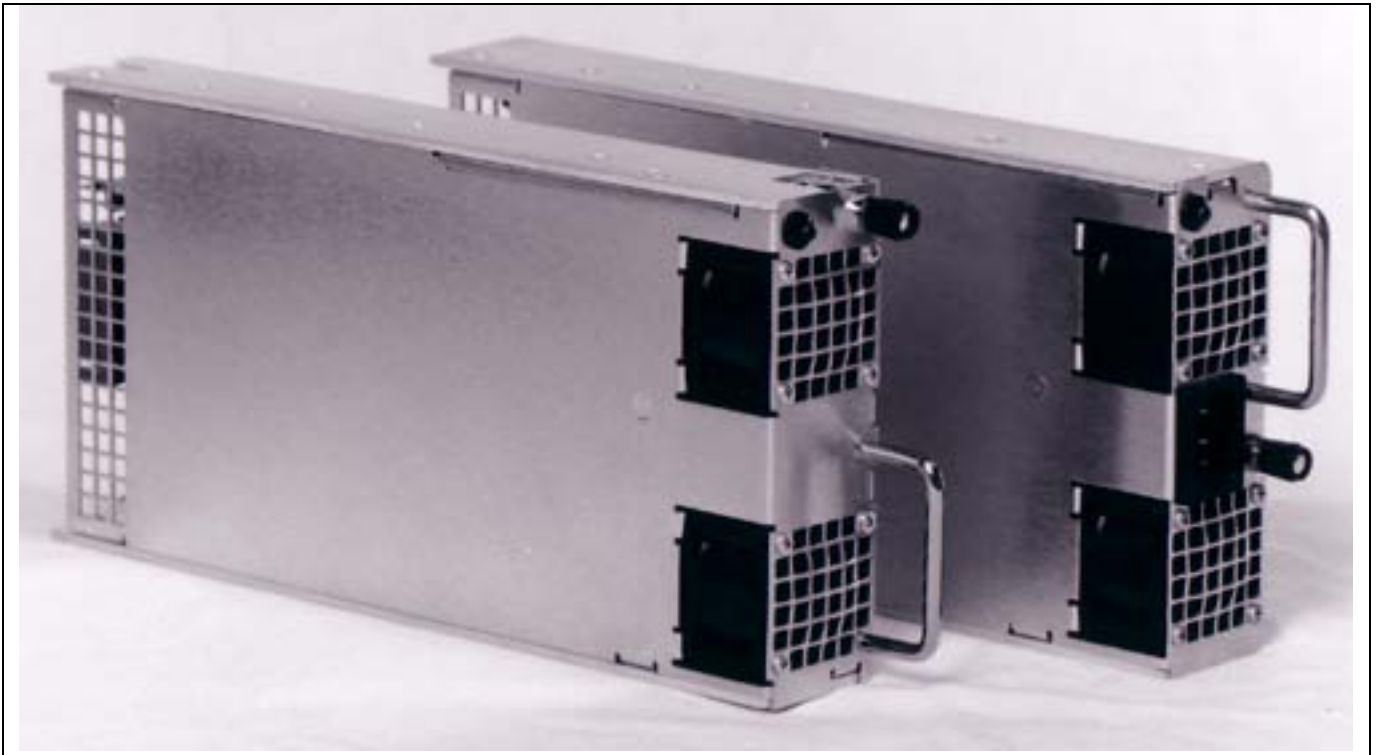
Web: www.jasperelectronics.com

HML801 MODEL SERIES

12V, 500W/650W and 24V - 54V, 800 WATT SINGLE OUTPUT

Features:

- Front End Power Supplies – 12V through 54V.
- >0.99 line Power Factor Corrected typical at AC 115V.
- High Density.
- Hot Swap-Redundancy.
- Module for 19 Inch Rack (1U High).
- Optional Extended Operating Temperature Range.
- cULus, TUV and CE Marked (800W models only).
- AC/Power Good LED Display.
- Internal Oring Diodes Provided.



General Product Specifications:

HML801 Model Series

500W, 650W and 800W Single Output

-INPUT-

Voltage/Current	AC 90-264V, 47-63Hz, 1 Phase. Max current @ 100VAC: <u>800W</u> : 11.0A; <u>650W</u> : 9.0A; 500W: 6.8A.
Fusing	AC 15.0A, 250V internal line fuse provided, non-user serviceable.
Power Factor	>0.99 line PFC typical at AC 115V, full load.
Inrush Current	Thermistor soft start (~25°C cold start). 30Apk @ AC 115V, 60Apk @ AC 230V.
Transient Protection	MOV. Withstands transients as specified by EN61000-4-5 (differential and common mode).
Under Voltage Protection	Auto DC output shutdown when AC input falls below safe operating limits (~80V AC). Automatic recovery.
EMI Filtering	Meets FCC Level A, and EN 55022 Level A.
Efficiency	75% typical at AC 115V, full load.
Redundant/Hot Swap ...	Full power N+1 redundant, hot swap capable.

-OUTPUTS-

Voltage/Current (V/A)	V1
HML501-2	12.0V, 41.7A.
HML651-2	12.0V, 54.2A.
HML801-5	24.0V, 33.3A.
HML801-6	28.0V, 28.6A.
HML801-8	48.0V, 16.7A.
HML801-9	54.0V, 14.8A.

Total loading not to exceed maximum current shown above at 50°C.
Derates linearly to 50% at 70°C. See Op. Temp. Specifications.

Output Voltage Setpoint	Factory preset within ±0.5% of nominal voltage.
Line/Load Regulation	<±1% at the sense point over full AC input range and 0 – 100% output loading, with sense leads connected.
Minimum Loading	None required.
Stability	Output drift <±0.2% after 20 minute warm-up.
Temp. Coefficient	<±0.02%/°C, 0° - 50°C, after 20 minute warm-up.
Dynamic Response	Less than 3% deviation with a 25% load change at 1A/μsec. Output recovers to within 1% in less than 300μsec.
Ripple and Noise (PARD)	<1% nominal with a 20 MHz bandwidth limit, measured with a 0.1μF ceramic capacitor in parallel with a 20μF tantalum capacitor connected between the measured output and its return at the connector.
Current Sharing/ Parallel N+1 Operation	Single wire connection for ±10% current sharing between any number of units.
Remote Sense	Output compensates for up to 0.25V total line drop in the load cables. Output is internally sensed if leads are opened.
Output Turn-on Delay	<1sec from AC turn-on. <100msec from remote enable.
Over/Under Shoot	None at turn-on or turn-off.

Hold-Up Time	Output remains in regulation >15msec minimum following loss of AC power at low line, full load.
Over Current/Short Circuit Protection	Standard hiccup (cycles on/off) current limit when output current is 105% to 120% of full load.
Over Temperature Protection	Internal temperature sensing. Causes output to shut down. Automatic recovery.
Over Voltage Protection	Non-crowbar type. V-out exceeding 25% ±10% of nominal will cause output to latch off. Remote enable or AC input recycle required to reset.

-SIGNALS, INDICATORS and CONTROLS-

Remote Enable	Enabled by closed circuit or TTL logic 0. Disabled by open circuit or TTL logic 1.
Remote Adjust	External 0-5V DC on remote adjust pin referenced to negative sense equals -5% to +5% change of nominal output voltage.
Power Good (DC-OK) Signal	High signal when V-out is above 97% of nominal voltage. Signal goes low when V-out drops below 95% of nominal.
Power Fail Warning	Loss of input AC causes a TTL compatible signal to go low >4msec prior to any output dropping out of regulation. At AC turn-on, signal stays low until output is in regulation.
Under Voltage Warning	Output dropping below 95% of nominal triggers the power fail warning signal.
LED Indicator	Front panel mounted, single-color LED. Green indicates AC power ON and output within regulation. Off indicates an input and/or output fault.
AC On/Off Switch	<u>Optional</u> . Single pole, rocker type, on the front panel. Rocker face marked "I O". See option "O" in model configuration codes below. <i>Not available in combination with optional IEC AC inlet.</i>

-OPERATING ENVIRONMENT-

Operating Temperature	Extended range: -40° – +50°C ambient at full load, with specified airflow. Full load start-up @-40°. Above 50°C, output derates linearly for all models to 50% at 70°C.
Cooling	Front panel mounted, dual DC ball bearing fans provided, rated 13 cfm minimum each. Forward airflow direction is front to rear.
Relative Humidity	Up to 90% RH, non-condensing.
Operational Vibration	0.75G peak, 5 – 500Hz along three orthogonal axis.
Storage Temperature	-40° to 85°C.
Altitude	Operating to 10,000 ft. Storage to 30,000 ft.
MTBF	Designed for 150,000 hrs at 25°C.

-SAFETY-

HML801 Models Only ... Recognized to U.S. and Canadian Bi-National Standard CSA C22.2 No. 60950 / UL 60950, Third (3rd) Edition (cULus); TUV approved to TUV EN60950/A1-A4/A11. CE marked.

-INTERCONNECT-

Input/Output Connector.....18-circuit (3X6), sequential contact, hot plug-gable type, located on the rear panel. Positronic Ind. P/N PLC18M4BN0A2-164.10. Mates with PI P/N PLC18F300A1 or equivalent.
Note: Use of the specified mating connector is required to insure proper "make/break" sequential contact sequence.

AC Inlet Connector**Optional.** Recessed 3-circuit, IEC 320/C14 type. User accessible on the front panel. See option "I" in the model configuration codes below. *Not available in combination with optional On/Off switch, or with AC input via the "hot plug".*

-MECHANICAL-

(Refer to JE Outline Configuration Dwg, P/N 02951-000.)

Weight.....1.8kg [- 4.0lb].

Retaining LatchAdjustable grip latch. User accessible on the front panel. Rotation of latch knob extends an arm down then forward into a user provided opening in the equipment to secure.

Mounting OrientationAdd "H" at end of model code to designate horizontal (5.20"w x 1.60"h) or "V" for vertical (5.20"h x 1.60"w) installation.

Input/Output and Signal Connector Type and Pin

Functions:

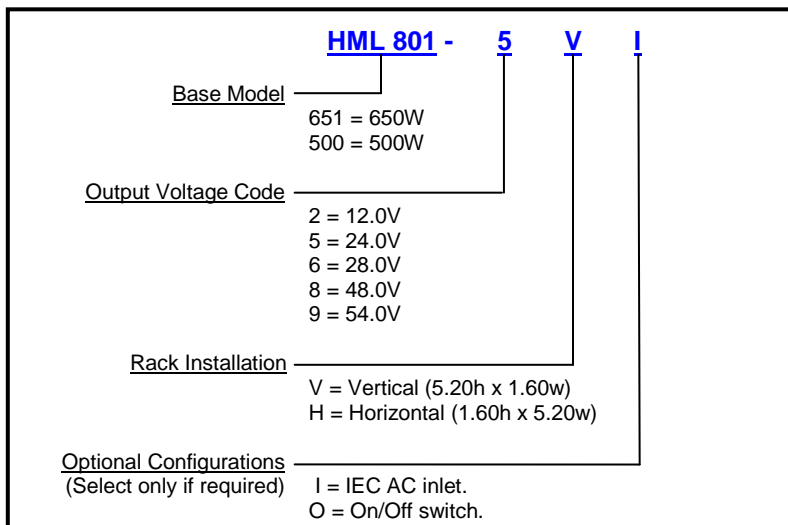
Positronics Ind. P/N PLC18M4BN0. 18 circuit (3x6) hot plug-gable type, with 16ga contact pin terminals. Glass filled polyester insulator material, rated 94V-0. Secured in the unit rear. Use of Positronic PLC18F series mating connector is required to ensure correct mating contact sequence and current capacity.

Pin#	Sequence	Function
1	(2) standard,	Remote Voltage Adjust.
2	(2) standard,	Power Fail Warning.
3	(1) postmate,	Current Share Signal.
4	(2) standard,	No Connection.
5	Blank	Not Used.
6	(2) standard,	L – Line (AC) Input. No connection on models with optional IEC AC input connector.
7	(2) standard,	+S1 (+V1) Remote Sense.
8	(2) standard,	DC-OK Signal.
9	(2) standard,	–S1 (–V1) Remote Sense.
10	(3) postmate,	Remote DC Enable. TTL Low/Closed= ON.
11	(1) premate,	Primary Earth (PE) chassis ground.
12	Blank	Not Used.
13,14	(2) standard,	+V1 (DC power output).
15	(1) premate,	–V1 (Rtn).
16	(2) standard,	–V1 (Rtn).
17	Blank	Not Used.
18	(2) standard,	N – Neutral (ACC) Input. No connection on models with optional IEC AC input connector.

CONFIGURATION OPTIONS:

HOW TO USE THE TABLE:

A two, three or four character code is required following the base model description to define the desired model configuration. The codes are added in this sequence. Please choose one from each of the categories. User selection of options I or O will incur a slight additional unit cost. Please consult the factory for additional information.



HML801 MECHANICAL SPECIFICATIONS:

