



ULTRA LEVEL TECH CO., LTD.

www.ultralevel.com.tw Tel:+886-2-29180118 Fax:+886-2-29181465

We Supply the Power Customers Need ISO9001

300W ~ 400W AC-DC ACTIVE PFC SWITCHING POWER SUPPLY PRL1201D DUAL OUTPUT SERIES



U Type (U-Chassis only):
5(W) x 8(L) x 1.6(H) inches.

FEATURES:



- ◆ 400W convection cooling with 1U height
- ◆ Design meets IEC/EN/UL60950-1 Latest Edition
- ◆ Power Factor Corrected to EN61000-3-2 class D
- ◆ High Quality & Reliable Component Usage
- ◆ 5/ 12/ 24V Dual Output Optional Combinations
- ◆ Full Range AC Input



PRODUCT SPECIFICATIONS:

Input Voltage: 90 ~ 264Vac full range, 47 ~ 63Hz.

Input Current: 6A at 90VAC full load.

Inrush Current: 70A peak maximum. (Measuring at 230VAC and full load cold start.)

Power Factor Correction: Pass EN61000-3-2 class D

Transient Response: Returns to within 1% in less than 2.5mS for a 50% load change and the peak transient does not exceed 5%.

Overshoot: Turn-on & turn-off not exceed 5% over nominal voltage.

Efficiency: 80% minimum (Measuring at 115V and full load)

Turn On Delay: 2 second maximum at 115 VAC.

Hold Up Time: 16 m sec. minimum at 115VAC and 75% of rated maximum load.

Adjustability: Output user adjustable +/-5% minimum.

Remote On-Off: Designated as **RSW** on the CN3, requires a low signal to inhibit output.

Power Supply On: When the Bi-color LED emit green light that indicates the supply is operating. When any protection is occurred or RSW is applied a low signal, the Bi-color LED will emit orange light.

Power Good: Designated as PG on CN3. This signal will go high 100-500 Msec after the output reaches the regulation limit. It goes low at least 1 Msec before loss of regulation and has ability to sink 100mA.

Input Circuit Protection (primary): One T6.3A/250V fuse inserted.

Input Voltage Protection: Power shut down under 80 +/-10Vac, and recovered over 90 Vac.

Over-Power Protection: 110~140% of the rated output current and recovers automatically.

Over-Voltage Protection: Latching down will occur when output voltage exceed 130% max., and recycle AC input to reset.

Over Temp. Protection: Protected at ambient 110 +/- 5 °C; Auto-recovery.

Short Circuit Protection: Trip without damage and auto-recovery.

Operating Temperature: 0°C to +50°C

Switching Frequency: PFC 60K Hz; PWM 27K Hz.

Storage Temperature: -20 to +85 degrees C.

Operating Humidity: 5% to 90% RH, Non-condensing.

Storage Humidity: 5% to 95% RH, Non-condensing.

Vibration: Frequency 5 to 50 Hz, acceleration +/-7.35 M/(SxS) on X,Y and Z Axis.

EMC: EN55022 class B conducted / radiated, EN61000-3-2, EN61000-3-3; EN55024 (IEC61000-4-2, IEC61000-4-3, IEC61000-4-4, IEC61000-4-5, IEC61000-4-6, IEC61000-4-11).

Safety: Approved UL60950-1, CSA C22.2 No. 950-95, EN60950 and CB certificate available

Leakage Current: < 500uA at 240Vac

HI-POT Test: 1500 VAC between input line and chassis (10mA AC cut off current); 3000VAC between primary and secondary windings; Primary to core 1500VAC. All for 3 sec.

Grounding Test: Apply 25 A from ground pin to the earthed connection point. Maximum allowable resistance is 0.1ohm.

Warranty: 2 years.

MTBF: 100000 Hrs (according to MIL-HBK-217F) at 30°C.

Burn in: 45 +/- 5 degree C for 1 hour @230Vac with full load.

Weight: 1KG



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OUTPUT VOLTAGE / CURRENT RATING CHART: Measured at output power connector.

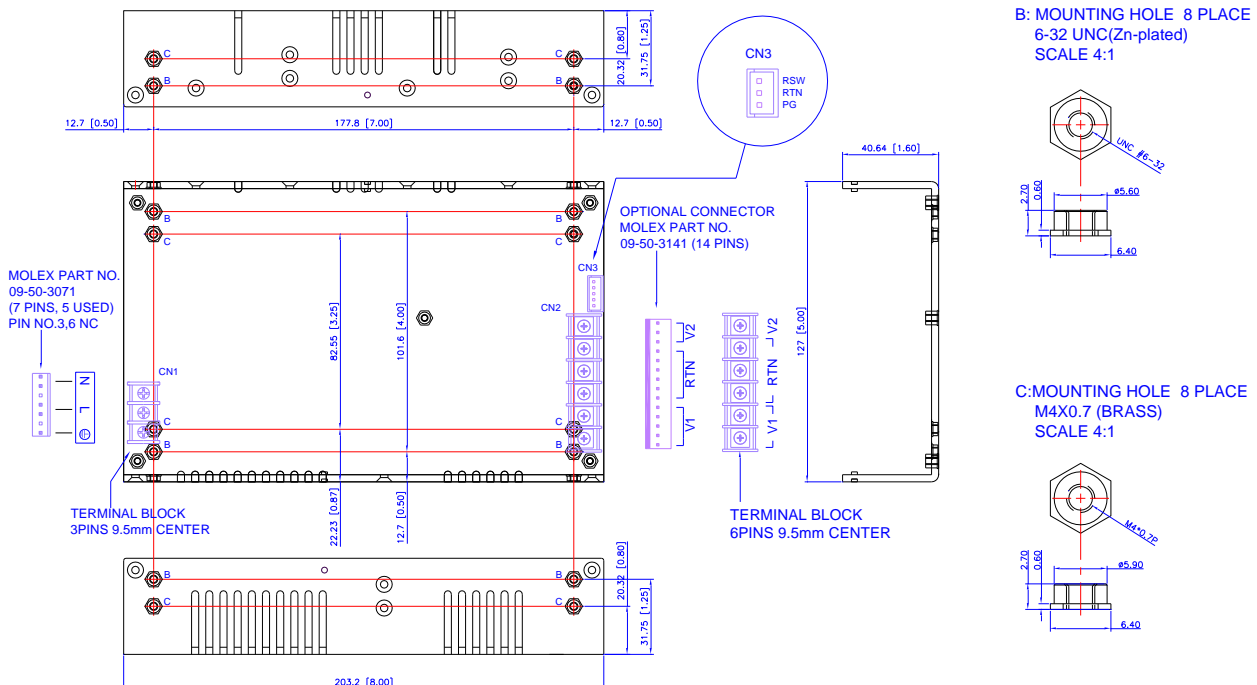
Model Number	Output Voltage	Output Current	Total Regulation	Ripple & Noise
		Max. Load Convection		
PRL1201D-0512	V1: +5V	35A	+/- 5%	+/-1%
	V2: +12V	16.67A	+/- 5%	+/-1%
PRL1201D-0524	V1: +5V	35A	+/- 5%	+/-1%
	V2: +24V	8.33A	+/- 5%	+/-1%
PRL1201D-1224	V1: +12V	25A	+/- 5%	+/-1%
	V2: +24V	12.5A	+/- 5%	+/-1%

NOTE:

- * PRL1201D series are designated as PRL1201D-y where y can be 0512,0524,1224
- * 10% minimum load is required for all outputs to maintain the ripple and regulation Output is fully isolated
- * Total combined power of V1 and V2:
400W Max. for PRL1201D-1224 convection cooling.
300W Max. for other models convection cooling.
- * Ripple and noise is measured from 10KHZ to 20MHz bandwidth at output terminals with parallel 0.1μF ceramic and 22μF electrolytic capacitors.

OUTLINE DRAWING:

PRL1201DU Series (U-Chassis Type): 8(L) x 5(W) x 1.6(H)inches; Weight: 1KG





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I/O Connector pin assignment:

AC Input Connector(CN1):

Mating Molex Part No. 09-50-3071 or equivalent (7 pin,5 used)

Howder Terminal block Part No. HD-121-3P

Output Connector (CN2):

Howder Terminal block Part No. HD-121-6P

Mating Molex Part No. 09-50-3141 (14 pin)

Output Pin Assignment: (See below table).

Logic signal connectors (CN3):

Mating JST XHP-3 or equivalent (CHYAO SHIUNN JS-1001-03)

Mating Pins: JST SXH-002T-P0.6 FOR AWG 30 TO 26

PIN1: PG PIN2: RTN PIN3: RSW

Mounting Inserts: 6-32, M4 4Places individually with maximum penetration 0.15" on bottom side and 0.25" on both side

	V1+	V0-	V2+
MOLEX	PINS 1-5	PINS 6-11	PINS 12-14
HOWDER	PINS 1-2	PINS 3-5	PINS 6