

# CXLPA150F Series

## Single Output 150W AC-DC Enclosed



### General Description

This series is a single-output AC to DC **150W Enclosed** power supply. It can be operated from AC 85V to 305V with high efficiency performance for various ITE and industrial applications. It also complies worldwide Safety and EMC regulations.

### Features

- 85Vac to 305Vac input rating with PFC
- High Efficiency up to 92.5%
- IEC/EN 62368-1 design compliant
- -30 to +70°C wide operation temperature
- Built-in Remote-Control function
- Wide Range  $\pm 15\%$  output voltage adjustable
- Operation altitude up to 5000 meters
- Protections: Short-circuit/  
Over-voltage/ Over-current/  
Over temperature
- Design to meet SEMI F47
- 5 years warranty
- Made in Vietnam



### Applications

- Industrial equipment
- Test and measurement equipment
- Semicon equipment
- Lighting and building equipment
- LED display and entertainment equipment
- Network and Broadcast equipment

### Model Numbering

<b>CXLPA</b>	<b>150</b>	<b>F</b>	-	<b>XX</b>	-	<b>XX</b>
Enclosed	Output Power 150W => 150	Input F=>Wide input range		Output Voltage 5V => 5 12V => 12 15V => 15 24V => 24 36V => 36 48V => 48		

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## Electrical Specification

MODEL		CXLPA150F-5 (Note#5)	CXLPA150F-12	CXLPA150F-15 (Note#5)	CXLPA150F-24	CXLPA150F-36 (Note#5)	CXLPA150F-48 (Note#5)
OUTPUT	DC Voltage	5V	12V	15V	24V	36V	48V
	Rated Current	30A	12.5A	10A	6.3A	4.2A	3.2A
	Rated Power (Max.)	150W	150W	150W	151.2W	151.2W	153.6W
	Output Adj. Range (Note#6)	±10% 4.5 to 5.5V	±15% 10.2 to 13.8V	±15% 12.75 to 17.25V	±15% 20.4 to 27.6V	±8% 33.12 to 38.88V	±8% 44.16 to 51.84V
	Line Regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Load Regulation	±1%	±1%	±1%	±1%	±1%	±1%
	Startup Time; Rise Time (Max.)	1000ms; 50ms					
	Hold-up Time (Typ.)	20ms at 115Vac, Full Load					
	Ripple & Noise (Max.) (At Full Load) (Note#1)	100mVp-p	150mVp-p	150mVp-p	150mVp-p	250mVp-p	250mVp-p
	INPUT	Nominal Input Voltage Range	100 to 277Vac, 140 to 340Vdc (note#2)				
Input Voltage Range (note#4)		85 to 305Vac, 127 to 375Vdc (note#2)					
Input Frequency		47 to 63Hz					
Input Current (Typ.)		1.6A at 115Vac, 0.8A at 230Vac					
Inrush Current (Typ.)		60A at 230Vac (Cold Start)					
Power Factor (Min.)		0.9					
Efficiency (Typ.)		87.5%	90.5%	91.0%	92.0%	92.0%	92.5%
Leakage Current (Max.)		2mA at 240Vac/60Hz					
FUNCTION	Remote Control	Yes (Refer to Remote Control)					
PROTECTION	Over Voltage Protection	120% to 150% of rated voltage, latch-off protection					
	Over Current Protection	5V: 105% to 170% of rated current, Hiccup mode, auto recovery mode					
		12V to 48V: 105% to 135% of rated current, constant current limiting without shutdown and auto recovery mode					
	Short Current Protection	No damage, auto-recovery mode protection until fault is removed					
Over Temperature Protection	No damage, auto-recovery mode protection until fault is removed						

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ENVIRONMENT	Working Temperature	-30 to +70°C (Refer to "De-rating Curve")		
	Working Humidity	20% to 90% RH non-condensing		
	Storage Temperature/ Humidity	-40 to +85°C, 10 to 95% RH non-condensing		
	Vibration	10 to 500Hz, 2G, 10minute non-operating		
	Operating Altitude (Max.) (Note#3)	5000m		
	Shock	20G		
MECHANICAL	Input wire	AWG 22		
	Output wire	AWG 22-14		
	Terminal	Terminal block		
EMC & SEFETY	EMI	Conducted Emission	EN/BS EN 55032 (CISPR32), FCC: Class B	
		Radiated Emission	EN/BS EN 55032 (CISPR32), FCC: Class B	
		Harmonic Current	IEC61000-3-2, Class A	
		Voltage Flicker	IEC61000-3-3	
	EMS	ESD	IEC61000-4-2, Criteria A	
		Radiated Immunity	IEC61000-4-3, Criteria A	
		EFT/Burst	IEC61000-4-4, Criteria A	
		Surge	IEC61000-4-5, Criteria A	
		Conducted Immunity	IEC61000-4-6, Criteria A	
		Magnetic Field Immunity	IEC61000-4-8, Criteria A	
		Voltage Dips, interruption	IEC61000-4-11, Criteria A SEMI F47, Criteria A	
	Safety Standard			
	CB/IEC62368-1, TUV EN62368-1; UL 62368-1			
	Isolation Voltage		I/P-O/P: 4000VAC; I/P-FG: 2000VAC; O/P-FG: 500VAC	
	Isolation Resistance (Min.)		I/P-O/P: 100MΩ; I/P-FG: 100MΩ; O/P-FG: 100MΩ, at 500VDC, 70%RH	

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<b>ENVIRONMENTAL COMPLIANCE</b>	<b>RoHS Compliance</b>	2011/65/EU
<b>OTHERS</b>	<b>Warranty</b>	5 years
	<b>MTBF (Min.)</b>	2500K hours
	<b>Dimension (W x H x D)</b>	99mm*30mm*179mm
	<b>Weight (Max.)</b>	420g

### Notes

All specifications are defined at 230Vac/50Hz, rated current, and 25°C ambient unless otherwise specified.

#1: Ripple and noise are measured with a 0.1 μF ceramic capacitor and a 47 μF electrolytic capacitor connected in parallel with 30cm wire, using a 20 MHz bandwidth. Ripple and noise may be higher at light load than at full load.

#2: The safety approval is for only AC input, and the internal fuse is only applicable to AC input. A DC-rated fuse shall be connected to the input when the unit is operated with a DC input and connect +pole to L and -pole to N.

#3: When operating altitude is higher than 2000m (6500 feet), the environment temperature de-rating factor is 0.36°C /100m. For models with fans, the environment temperature decreases by 0.5°C /100m.

#4: The input voltage de-rating is applicable only for CXLPA150F-5.

#5: Specifications for 5V, 15V, 36V and 48V models are preliminary and subject to change without notice until releasing.

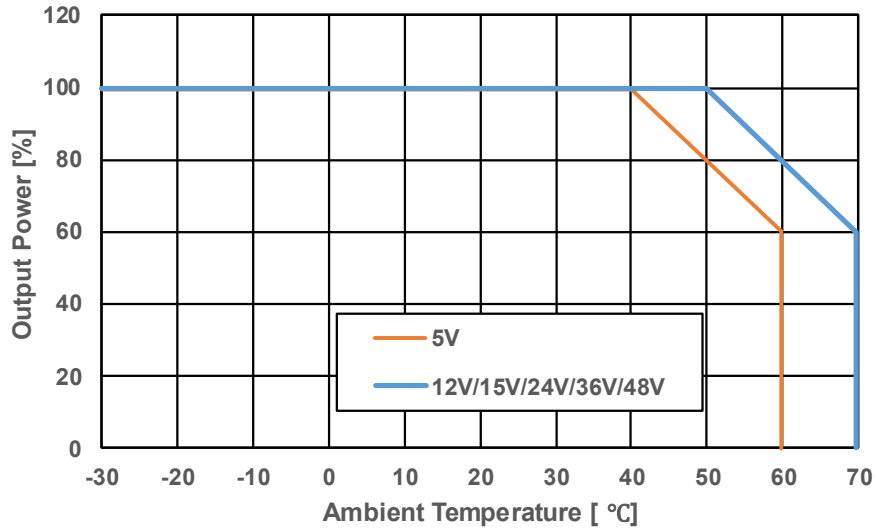
#6: The safety approval is different. Please contact us for details.

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## Output Power VS Ambient Temperature:

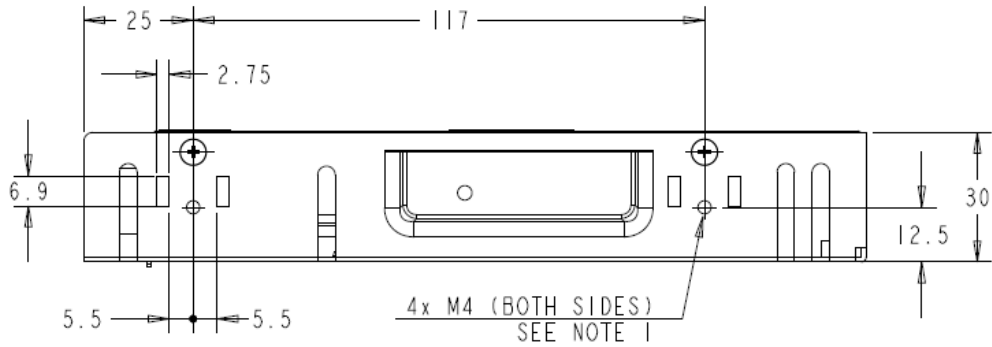
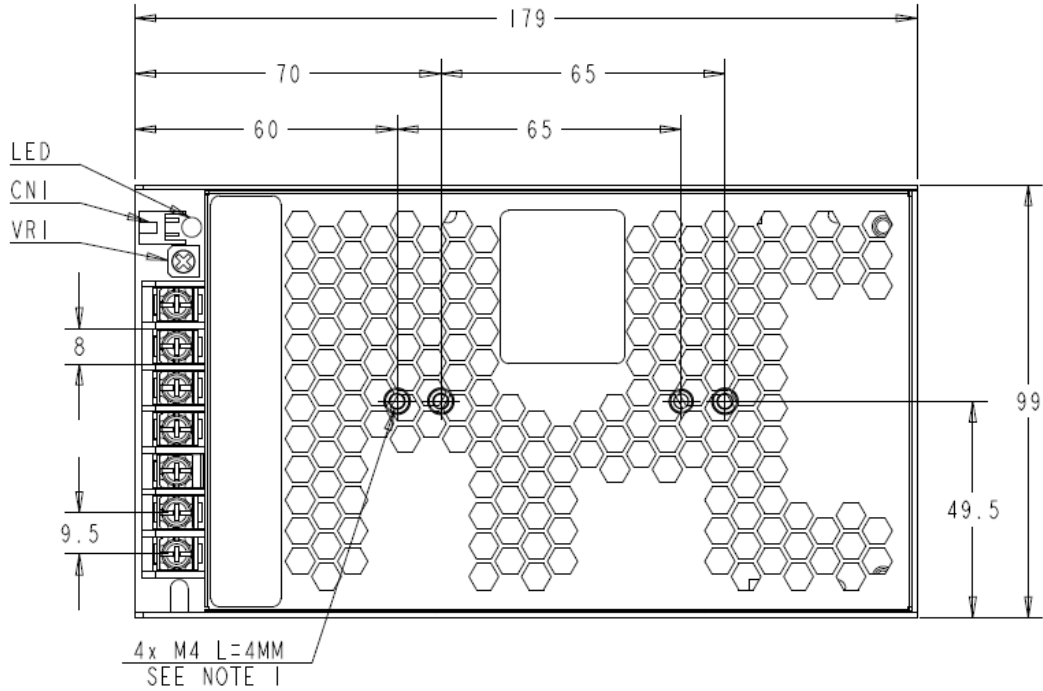


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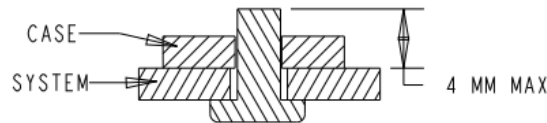
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## Mechanical & Connector Information



- NOTES:
1. SCREW LENGTH(L) EMBEDS PSU CASE TO BE NO LONGER THAN 4 MM.
  2. OTHERWISE TO BE SPECIFIED, TOLERANCE TO BE  $\pm 0.5$ MM

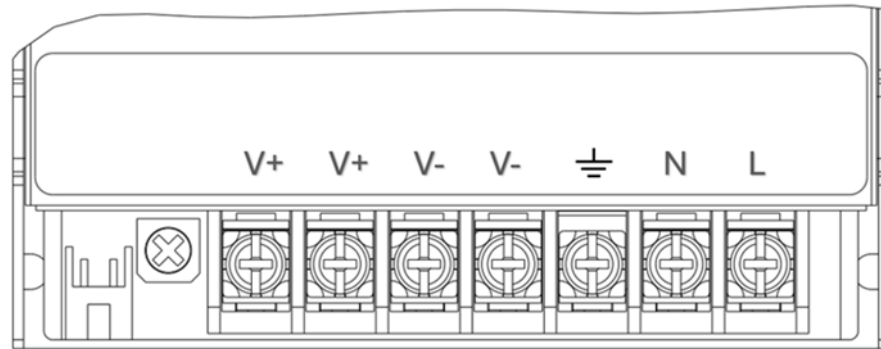


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## Terminal Connector



## Remote Control

CN1: < 0~0.8VDC POWER ON, 4~10VDC POWER OFF

