

Features

- Slim and Low profile(88mm)
- Built-in active PFC function
- Fanless design, cooling by water conduction
- -10~+50°C working temperature
- Built-in CANbus communication protocol
- Protection: Short circuit/ Overload/ Over voltage/Over temperature
- Built-in remote ON/OFF control
- OVC III Operating altitude up to 3000 meter(Note.4)
- LED indicator for power on
- High efficiency up to 94.5%
- 3 years warranty

Description

The LMAD-8000 series is a 8000W AC-DC power supply module with three-phase four-wire (non Neutral wire) input and single DC output. It is a slim type power supply with 48mm of low profile design. Adopting the range 300~530VAC input ,the entire series provides an output voltage line of 100V. LMAD-8000 has the complete protection functions; it complies with the international safety regulations such as UL 62368-1. The AD-8000 series serves as a high performance power supply solution for Laser industry and other industrial applications.

Model Encoding

LMAD - 8000 - 380S - 100

① ② ③ ④

- ① Series name
- ② Rated Wattage
- ③ Triple input phase
- ④ Output Voltage

**Specification**

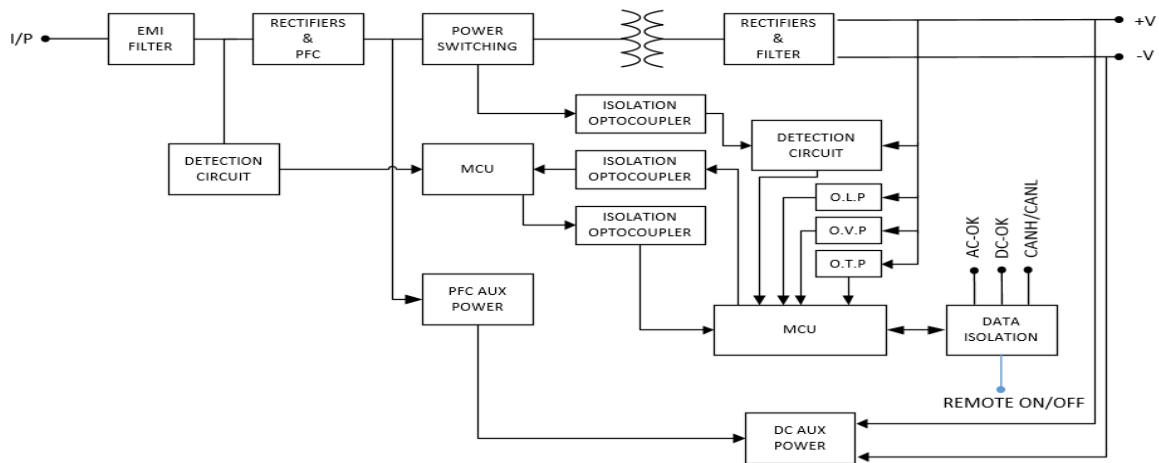
Model		LMAD8000-380S100
BASIC INDEX	SIZE	88 (Height) mm × 433.5 (Width) mm × 482.5 (Length) mm
	WEIGHT	≤ 10kg
	COOLING METHOD	Heat dissipation with internal water cooling plate
INPUT	VOLTAGE RANGE	300Vac ~ 530Vac
	VOLTAGE MODE	Three-phase, Three-wire with Ground
	FREQUENCY RANGE	47Hz ~ 63Hz Type:50Hz/60Hz
	AC CURRENT(Typ.)	13A / 380VAC
	POWER FACTOR(Typ.)	≥ 0.95/380VAC at full load
	EFFICIENCY(Typ.) Note.5	94.5%
	INRUSH CURRENT(Typ.)	Cold start 40A/380VAC
OUTPUT	DC VOLTAGE	100V
	RATED POWER	8000W
	RIPPLE&NOISE(max) Note.2	600mVp-p
	VOLTAGE ADJ. RANGE	96-104V; By CANbus
	VOLTAGE TOLERANCE Note.3	±0.5%
	LINE REGULATION	±0.5%
	LOAD REGULATION	±0.5%
	HOLD UP TIME(Typ.)	15ms/380VAC at 75% load 10ms/380VAC at full load
	STARTUP OUTPUT DELAY	≤8 S
ENVIRONMENT	WORKING TEMP.	-10℃ ~ +50℃ Ambient temperature
	STORAGE TEMP. , HUMIDITY	-40℃ ~ +70℃, 10% ~ 95% (Non condensing)
	WORKING HUMIDUTY	10% ~ 95% (Non condensing)
	WORKING ALTITUDE	≤3000m
PROTECTION	OVERLOAD	105~110% rated output power
	OVER VOLTAGE	115~120V Protection type:Shut down O/P voltage,re-power on to recover
	OVER TEMPERATURE	Protection type:Shut down O/P voltage,recovers automatically after temperature goes down
FUNCTION	REMOTE ON/OFF CONTROL	POWER ON: Short circuit POWER OFF: Open circuit
	AC-OK SIGNAL	The TTL signal out, AC ON =4.5-5.5V; AC OFF = -0.5~0.5V.
	DC-OK SIGNAL	The TTL signal out, DC ON =4.5-5.5V; DC OFF = -0.5~0.5V.



8000W Water Cooling with PFC Switching Supply **LMAD-8000 Series**

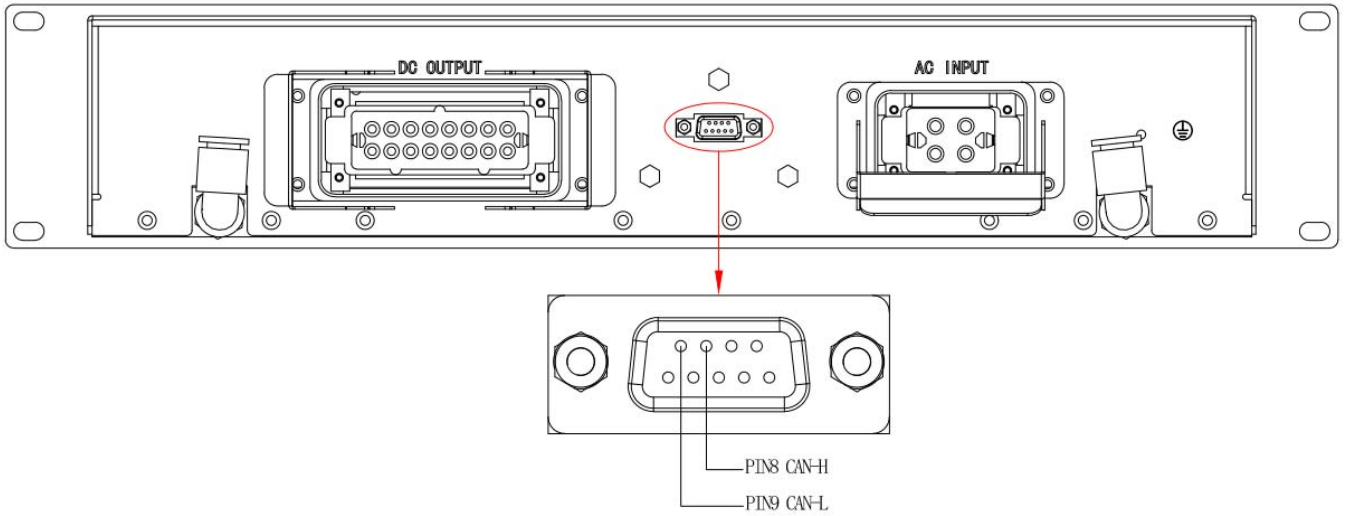
Model		LMAD8000-380S100		
SAFETY & EMC	SAFETY STANDARDS	UL62368-1, CAN/CSAC22.2 No.EN62368-1; design refers to EN61558-1, EN60335-1		
	WITHSTAND VOLTAGE	I/P-O/P: 3KVAC I/P-FG: 1.5KVAC O/P-FG: 1.25KVAC		
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG: 100M Ohms/500VDC/25 / 70%RH		
	EMC EMISSION	Parameter	Standard	Test Level
		Conducted	EN55032	Class A
		Radiated	EN55032	Class A
		Harmonic Current	EN61000-3-12	-----
	EMC IMMUNITY	Parameter	Standard	Test Level
		ESD	EN61000-4-2	Level3, 8KV air ; Level2, 4KV contact
		Radiated	EN61000-4-3	Level 3
EFT/Burst		EN61000-4-4	Level 3	
Conducted		EN61000-4-6	Level 3	
Surge		EN61000-6-2	2KV/Line-Line 4KV/Line-Earth	
Voltage Dips and Interruptions		EN61000-4-11	>95% dip 0.5 periods, 30% dip 25 periods,>95% interruptions 250 periods	
OTHERS	MTBF	100K hrs min.		
NOTE	<p>1.All parameters NOT specially mentioned are measured at 380VAC input, rated load at 25°C of ambient temperature.</p> <p>2.Ripple & noise are measured at 20MHZ of bandwidth by using a 12"twisted pair-wire terminated a 0.1uf & 47uf parallel capacitor.</p> <p>3.Tolerance: include set up tolerance, line regulation and load regulation.</p> <p>4.The ambient temperature derating of 3.5°C/1000m for operating altitude higher than 2000m(6500ft).</p> <p>5.The efficiency is measured at 75% load, output voltage is 100V.</p>			

BLOCK DIAGRAM



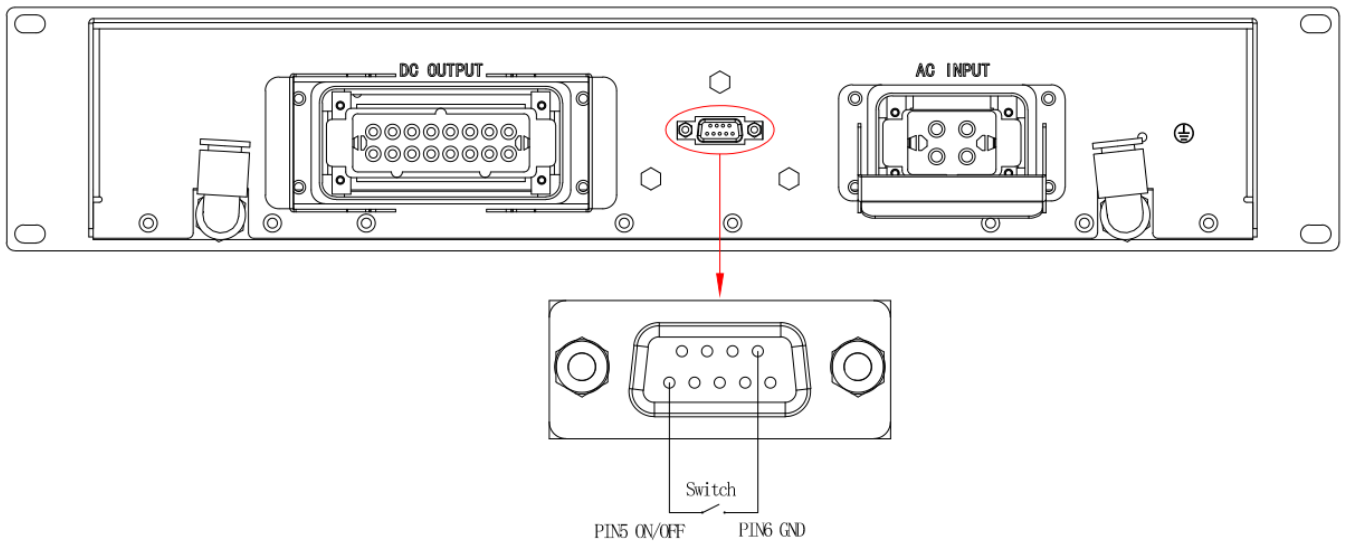
FUNCTION MANUAL

1. Output Voltage ADJ. & CANbus Communication Interface



LMAD-8000 series supports CANbus with maximum 100KHz bus speed, allowing information reading, status monitoring, output voltage adjust, etc. For details, please contact LM POWER.

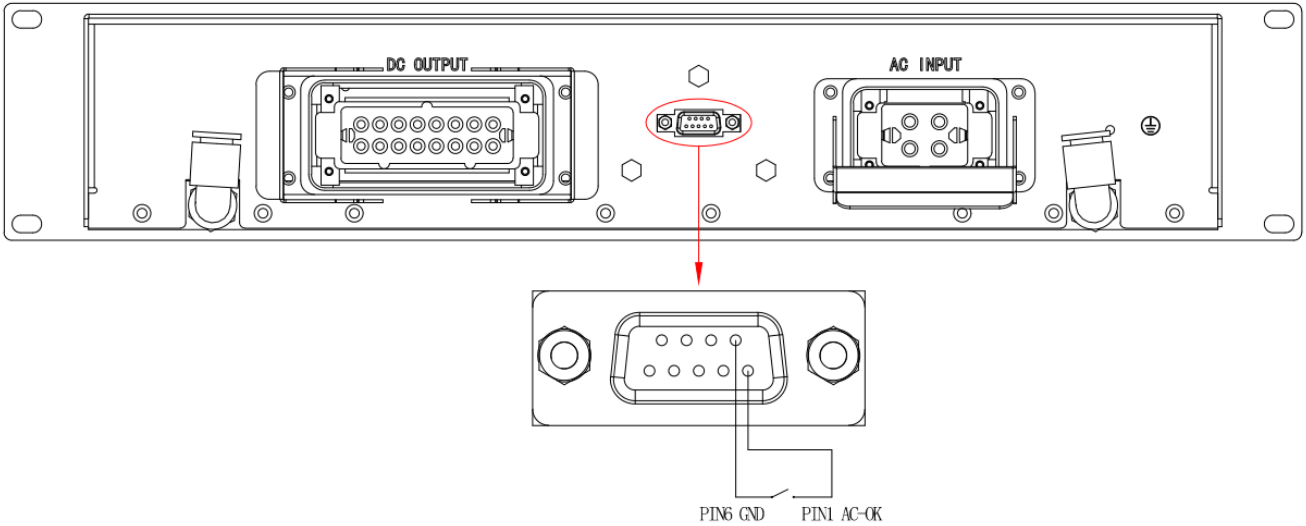
2. Remote ON-OFF Control



The power supply can be turned ON/OFF by using the "Remote ON-OFF function"

Remote ON-OFF	Power Supply Status
Short circuit	ON
Open circuit	OFF

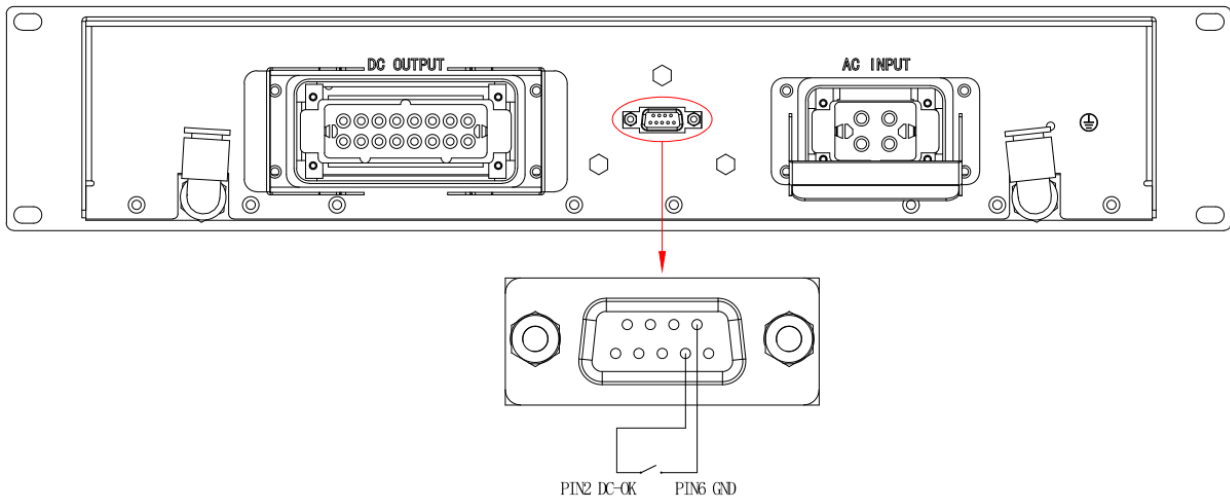
3. AC-OK Signal



AC-OK signal is a TTL level signal. The maximum sourcing current is 10mA and the maximum voltage is 5.5V.

AC-OK signal	Power Supply Status
"High" >4.5~5.5V	ON
"Low" <-0.5~0.5V	OFF

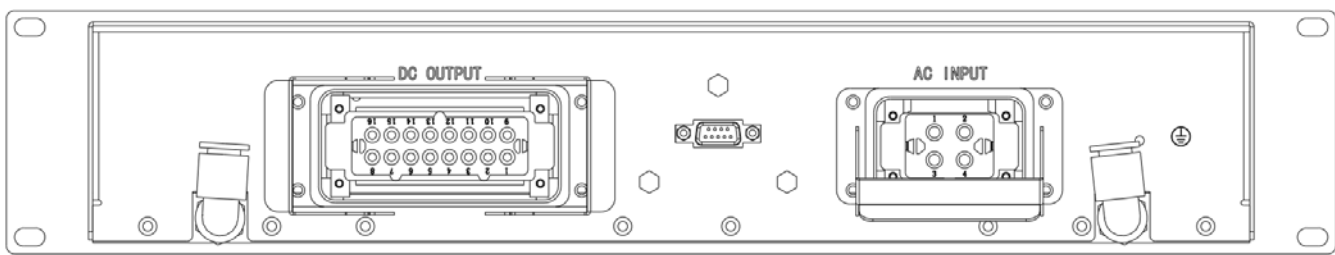
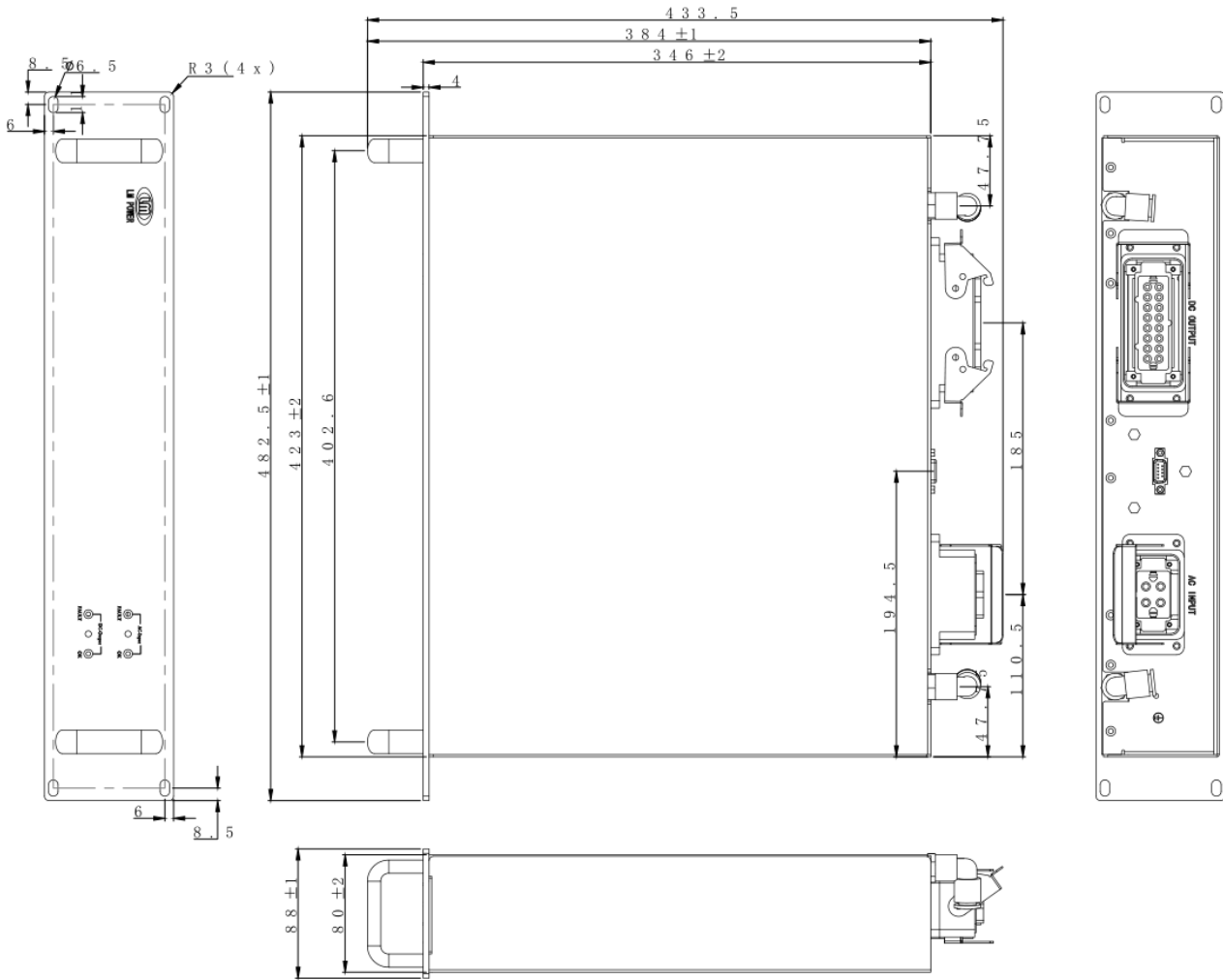
4. DC-OK Signal



DC-OK signal is a TTL level signal. The maximum sourcing current is 10mA and the maximum voltage is 5.5V.

DC-OK signal	Power Supply Status
"High" >4.5~5.5V	ON
"Low" <-0.5~0.5V	OFF

MECHANICAL SPECIFICATION



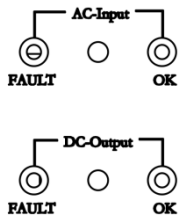
Pin No.	Assignment	Terminal
1	AC/L1	SINOCONTEC HR-004 or equivalent
2	AC/L2	
3	AC/L3	
4	⏏	

Pin No.	Assignment	Terminal
1-8	OUT+	SINOCONTEC HE-016 or equivalent
9-16	OUT-	

Input Terminal(TB1) Pin NO.Assignment

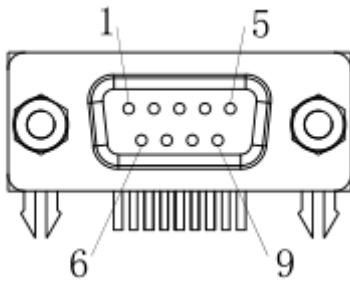
Output Terminal Pin No. Assignment

※A
C
※DC



※LED Status Indicators:

LED	
● Green	The AC power supply functions normally
● Green	The DC output functions normally
● Red	AC power supply Abnormal status
● Red	DC output Abnormal status



※Control Pin No.Assignment:

Pin No.	Function	Description
1	AC_OK	AC power supply status,The maximum sourcing current is 10mA and only for output.
2	DC_OK	DC output status,The maximum sourcing current is 10mA and only for output.
3	Voutdisp	When output voltage is 100V,the analog signal is 2.4-2.5V
4	Ioutdisp	When output current is 80A,the analog signal is 2.4-2.5V
5	ON/OFF	The unit can turn the output ON/OFF by electrical signal or dry contact between Remote ON/OFF and GND
6	GND	The signal return is isolated from the output terminals
7	NC	
8	CAN-H	For CANbus model: Data line used in CANbus interface.
9	CAN-L	For CANbus model: Data line used in CANbus interface.