

LM-30 SERIES

----STANDARD 30W AC-DC MODULAR POWER SUPPLY



PRODUCT FEATURES

- Wide voltage input range: 90–305VAC (127–432VDC)
- Operating temperature: -30°C to +70°C
- Comprehensive protection features, high efficiency and high reliability
- Stable voltage output with low ripple noise
- Industrial product technical design

APPLIED RANGE

Power systems for wireless networks, telecommunications/data communications, power systems, industrial control systems, measurement instruments, and intelligent fields. Ideal for designs requiring wide input range fluctuation, power isolation, and compact PCB space, while enabling modular product functionality and enhanced reliability.

PRODUCT MODEL

Model	Output Voltage Vo	Output Io	Productiveness (TYP)	Certificate
LM30-S05A1	5V	6000mA	85%	CE
LM30-S09A1	9V	3333mA	87%	CE
LM30-S12A1	12V	2500mA	89%	UL/CE
LM30-S15A1	15V	2000mA	89%	CE
LM30-S24A1	24V	1250mA	89%	UL/CE

FOR OTHER SPECIFICATIONS OR MODELS, PLEASE CONTACT OUR COMPANY DIRECTLY.

INPUT CHARACTERISTICS

Input voltage range	90 ~ 305VAC (127 ~ 432VDC)	
Incoming frequency	47 ~ 63Hz	
Input currenton	800mA (MAX) @115VAc	500mA (MAX)@ 230VAc
External fuse (recommended)	3.15A/350V slow break	

OUTPUT CHARACTERISTIC

Output voltage regulation accuracy	±4%
Line regulation	±0.5% (typ)

30W AC/DC Power Module

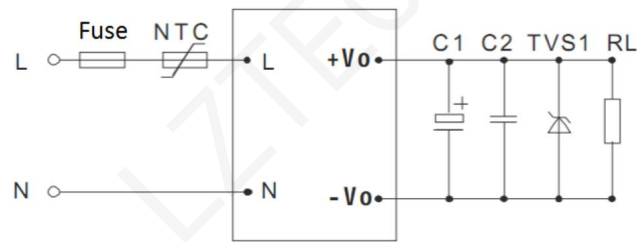
Load adjustment rate (10%~100%)	±1% (typ)
Minimum load	10%
Output ripple + noise (peak-to-peak)	100mV(typ) (20MHz Bandwidth)
Short-circuit Protection	Can Sustain Prolonged Short Circuit With Self-recovery
Overcurrent Protection	≥1.2 times

GENERAL CHARACTERISTIC

Temperature Characteristic	Working temperature	-30°C ~ +70°C
	Power derating	3.75% / °C ,
	Storage temperature	-40°C ~ +90°C
Power Outage Duration		40ms(typ)/ at Vin:320Vdc
Humidity		85%RH(max)
Thermoluminescence		0.02%/°C
Switching Frequency		65kHz(typ)
Isolation Voltage	Input--Output	4000Vac/1Min
Leakage Current		<5mA RMS typ. 230VAC/50Hz
Electromagnetic Compatibility Electrostatic Discharge	IEC/EN 61000-4-2 level 3 6kV/8kV	
RF radiation Immunity	IEC/EN 61000-4-3	
Electric Fast Transient Pulse Train	IEC/EN 61000-4-4 level 3 2 kV	
* Surge	IEC/EN 61000-4-5 level 3 1kV/2kV	
Conduction/Radiation	EN55032 CLASS B	
Security Classification	IEC/EN/UL/BS62368-1, GB4943.1, EN61558-1, EN60335-1	
Shell Grade	UL94V-0 flame retardant plastic	
Install	PCB	
MTBF	>200,000h @25°C	

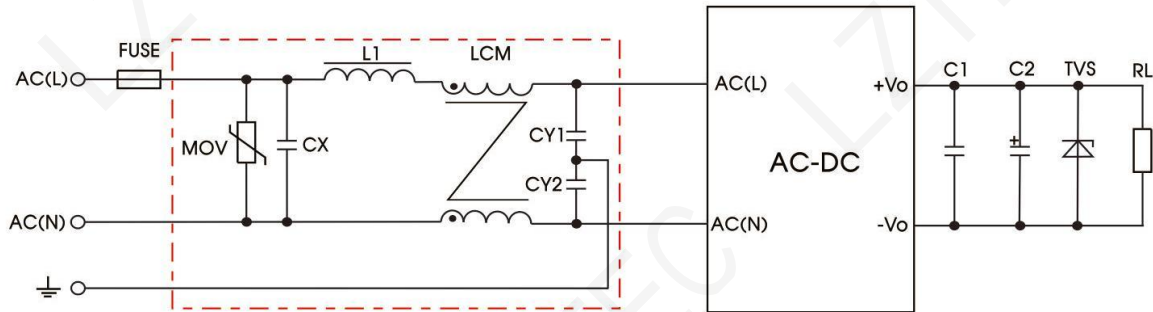
- Unless otherwise stated, all parameters are measured at 230Vac input, rated load and 25°C ambient temperature.
- Output derating is required at low input voltage, refer to the input derating curve.
- Accuracy includes design tolerance, line regulation and load regulation.
- Ripple & Noise: Measured at 20MHz bandwidth with twisted pair and 0.1μF+47μF parallel terminal capacitors.
- This power supply is a component; system EMC shall be confirmed by the end-equipment manufacturer.
- Start-up time is tested under cold start; frequent power cycling may increase start-up time.
- Input current and safety specs vary slightly with different certifications.
- For altitude over 2000m (6500FT), operating temperature decreases by 3.5°C per 1000m.

TYPICAL APPLICATION



FUSE	NTC	C1	C2	TVS1
3.15A/350V Slow Break	3Ω/3W	1uF/50V	100uF/35V	SMBJ30A

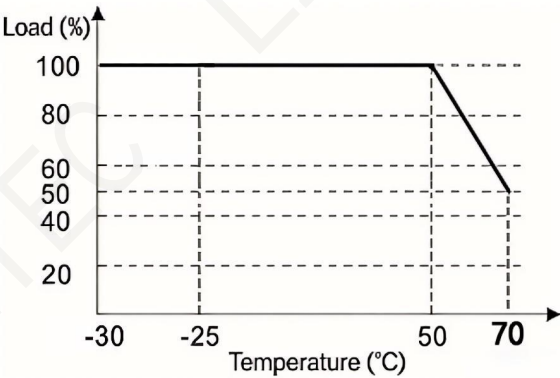
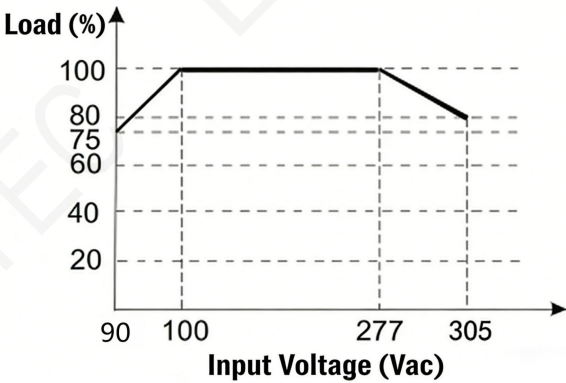
EMC Recommended Circuit



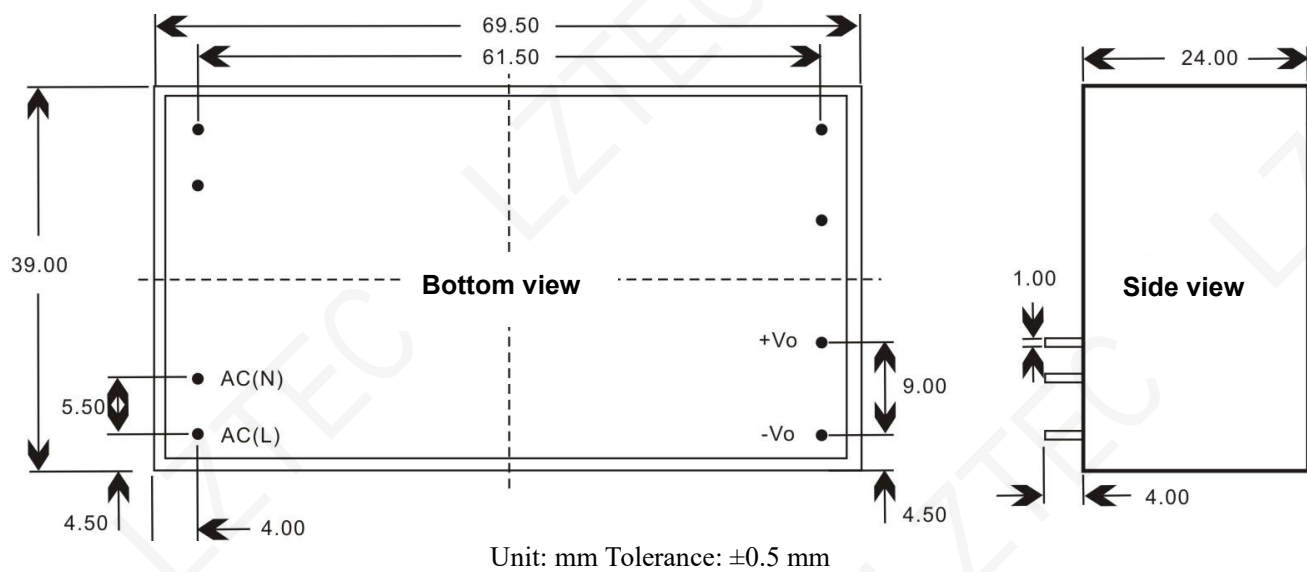
Device	Recommended Value
MOV	14D561
CY1、CY2	2.2nF/400VAC
CX	0.33uF/310VAC
LCM	>20mH
L1	1.2mH/0.5A
FUSE	3.15A/350V, Slow-Break

DIAGRAM OF INPUT VOLTAGE AND LOAD

PLOT OF TEMPERATURE VERSUS LOAD



APPEARANCE AND SIZE



Zhuhai LIZHI Technology Co., LTD.
Email: sales@lyztec.com
Web: www.lyztec.com
EN-Web: en.lyztec.com