

The 20W ultra-small series power supply module is a small volume, high efficiency power module for customers designed by Hi-Link. It has the advantage of global input voltage range, low temperature rise, low power consumption, high efficiency, high reliability, high security isolation etc. and has been widely used in smart home, automation control, communication equipment, instruments and other industries.

### Product Model

Model	Dimension (mm)	Output power (W)	Output Voltage (V)	Output Current (mA)	Notes
HLK-20M05	57*33*22.5	20	5	4000	
HLK-20M09			9	2200	
HLK-20M12			12	1600	
HLK-20M15			15	1300	
HLK-20M24			24	830	

### Product Characteristic

1. Ultra thin, ultra small, minimum volume in the industry
2. Universal input voltage (90~265Vac)
3. Low power consumption, environmental protection, no-load loss<0.1W
4. Low ripple and low noise
5. Good output short circuit, over-current protection and self-recovery
6. High efficiency and high power density
7. Input-output isolated voltage-proof 3000Vac
8. 100% full load aging and testing
9. High reliability, long life design, continuous working time more than 100000 hours
10. Meet UL, CE requirements; product design meets EMC and safety test requirements
11. Adopt high quality environmental protection waterproof heat conduction glue to fill seal, moisture-proof, anti-vibration, meet the IP65 standard of waterproof and dust proof
12. Economic solution, cost-effective
13. Working without an external circuit
14. 1 year warranty

### Environment Condition

Project Name	Technical Critical	Unit	Notes
Working temperature	-25—+60	°C	
Storage temperature	-40—+80	°C	
Relative humidity	5—95	%	
Heat dissipation mode	natural cooling		
Atmospheric pressure	80—106	Kpa	
Sea level elevation	≤2000	m	

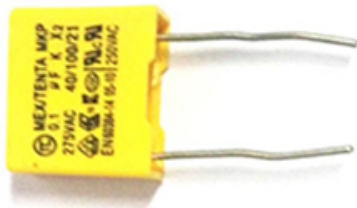
Vibrate	Vibration coefficient: 10~500Hz,2G10min./1cycle, 60min.each along X,Y,Z axes	Meet the requirements of secondary road transportation
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### Electrical Characteristics

Project Name	Technical Critical	Unit	Note
Rated input voltage	100-240	Vac	
Input voltage range	85-265	Vac	Or 70-350Vdc
Maximum input current	≤0.4	A	
Input surge current	≤34	A	
Input low start	≤50	mS	
Long-term reliability	MTBF≥100, 000	h	
External fuse recommendation	2A/250Vac		Slow fuse

### Input part

Recommended device	Function	Recommended value
F1/Fuse	Protect the circuit from damage when the module is abnormal	2A/250Vac, slow fuses
MOV1/Varistor	The cumulative surge is to protect the module from damage	10D561K
C1/Safety capacitance	Filtering, Security Protection (EMC certification)	0.22uF/275Vac
L1/Common mode inductance	EMI filter	Inductive value 10-30mH, Test Requirements: 1KHZ/0.3V, current 300-700mA



Safety capacitance



Common-mode inductance

#### Note:

- Fuse and varistor are basic protective circuits.
- If you need to pass the authentication, the Anchorage capacitance and common-mode inductance must not be omitted.

**Dimension and weight**

