3W Ultra-compact Power Module HLK-PM01 230V AC to 5V/3W DC

220V AC to 5V DC, 600mA PCB Mounted Step-Down Power Supply Module

Features
- Meet UL, CE requirements,
- Ultra-thin, ultra-small
- All voltage input (AC: 90 ~ 264V)
- Low ripple and low noise
- Output overload and short circuit protection
- High efficiency, high power density
- The product is designed to meet the requirements of EMC and Safety Test
- Low power consumption, environmental protection, no-load loss <0.1W

Electrical Characteristics
- Rated input voltage: 100-240 VAC
- Input voltage range: 90-264 VAC
- Maximum input voltage: ≤270 VAC
- Maximum input current: ≤0.2 A
- Input current surge: ≤10 A
- Enter slow start: ≤50 ms
- Input Low Voltage Efficiency: Vin=110VAC, Output full-load≥69%
- Input High Voltage Efficiency: Vin=220VAC, output full-load≥70%
- Long-term reliability: MTBF≥100,000 h
- Load rated output voltage: +5 VDC ±0.1
- Full rated output voltage: +5 VDC ±0.2
- Short-term maximum output current: ≥1000 mA
- The maximum output current for a long time: ≥600 mA
- Voltage Regulation: ±0.2%
- Load Regulation: ±0.5%
- Output ripple and noise (mVp-p): ≤50 mV
  - Rated input voltage, full load. Using 20MHz of bandwidth,
  - The load side 10uF and 0.1uF capacitor to be tested.
- Switch overshoot amplitude: \( \leq 5\% VO \) (Rated input voltage and output load plus 10%)
- Output over-current protection: 150-200% of the output maximum load (A)
- Output short circuit protection: Direct short circuit at the normal output, automatically resume normal operation after a short circuit removal

Safety Characteristics:
- Designed with the input of 0.5A UL certified insurance;
- PCB board using double-sided copper clad plate production, material for the 94-V0 fire rating level;
- Safety standards: Compliance with UL1012, EN60950, UL60950
- Insulation voltage: I / P-O / P: 2500VAC
- Insulation resistance: I / PO / P > 100M Ohms / 500VDC 25 °C 70% RH
- Conduction and radiation: comply with EN55011, EN55022 (CISPR22)
- Electrostatic discharge: IEC / EN 61000-4-2 level 4 8kV / 15kV
- RF radiation Immunity: IEC / EN 61000-4-3

![Diagram of 5V to MySensors, 600mA max draw](image)
### Dimensions:

- **Weight:** ≤20g
- **Pin Function:**
<table>
<thead>
<tr>
<th>Pin</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AC</td>
</tr>
<tr>
<td>2</td>
<td>AC</td>
</tr>
<tr>
<td>3</td>
<td>-V0</td>
</tr>
<tr>
<td>4</td>
<td>+V0</td>
</tr>
</tbody>
</table>

![Diagram of electronic component](image-url)