



REF

IP65   CB CE

## ■ Features

- Universal AC input / Full range (up to 305VAC)
- Built-in active PFC function
- Fanless design, cooling by free air convection
- -55~+70°C wide operating range
- Aluminum case and filling with heat-conducted silicone
- Meet 6KV surge immunity level
- Withstand 10G vibration test
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Operating altitude up to 5000 meters (Note.9)
- 6 years warranty

## ■ Applications

- Outdoor telecommunication equipment
- Outdoor electronic signage and billboard
- Petroleum plant or mine shaft facility

## ■ Description

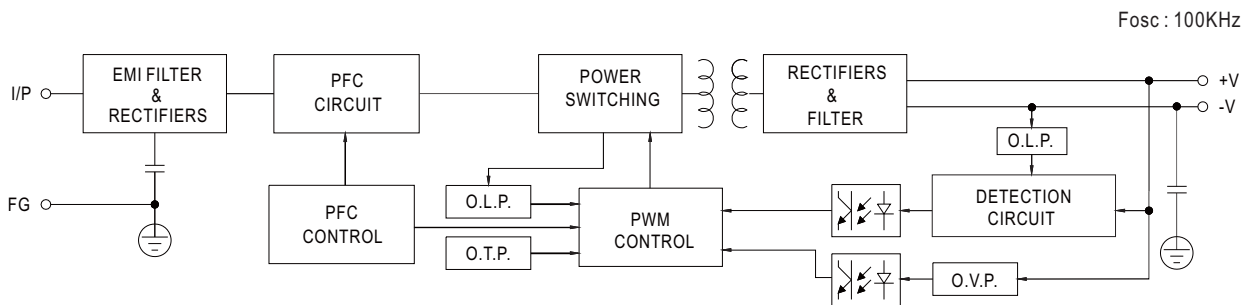
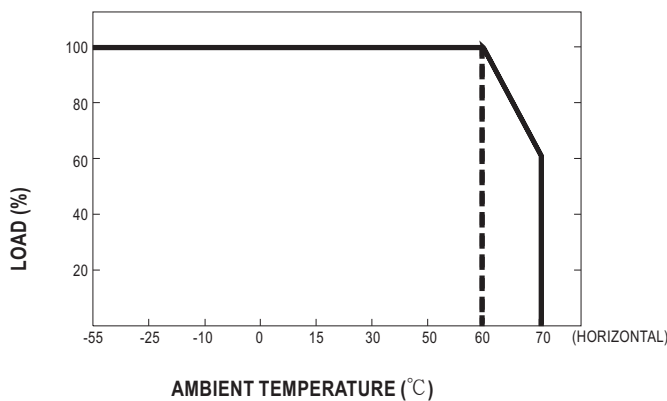
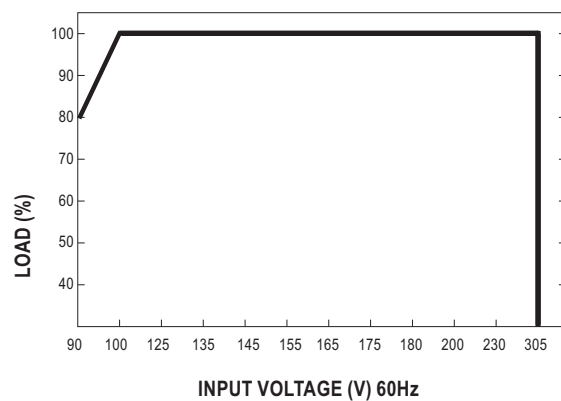
HEP-100 is a 100W industrial AC/DC power supply featuring the outstanding capability to operate under highly humid, dusty, oily, and high-vibration harsh environment. The entire series is housed with the aluminum case and fully potted with heat-conducted silicone. Thanks to state-of-the-art design, the working efficiency is up to 93%, enabling HEP-100 perfectly work between -55°C and +70°C under free air convection.



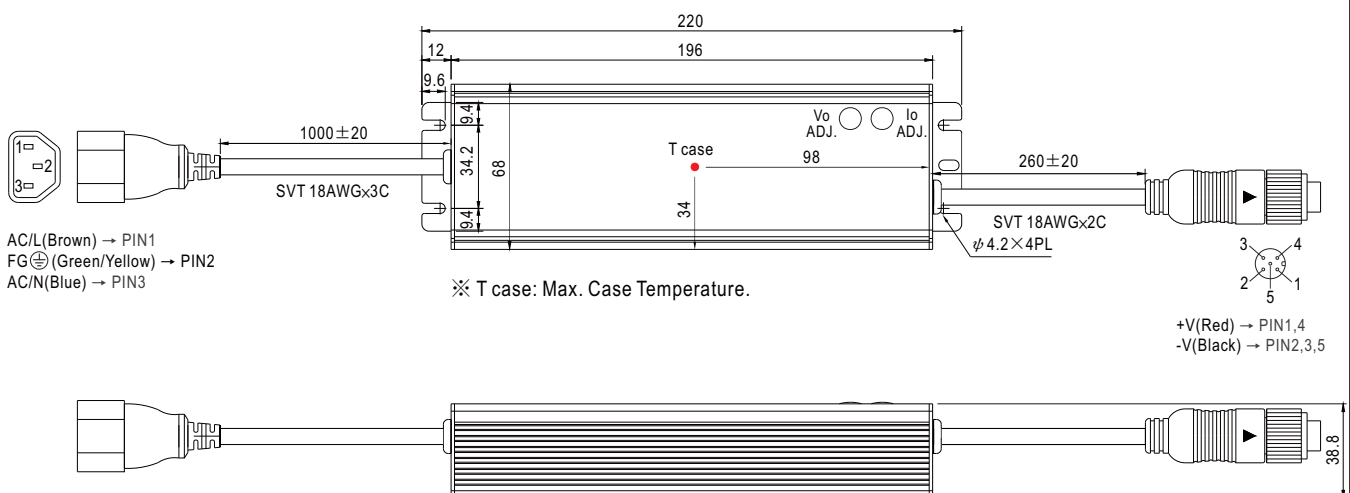
**SPECIFICATION**

<b>MODEL</b>		<b>HEP-100-12A</b>
<b>ORDER NAME</b>		HEP-100-12AIEI
<b>OUTPUT</b>	<b>DC VOLTAGE</b>	12V
	<b>RATED CURRENT</b>	8.34A
	<b>RATED POWER</b>	100.08W
	<b>RIPPLE &amp; NOISE (max.) Note.2</b>	120mVp-p
	<b>VOLTAGE ADJ. RANGE Note.5</b>	10.8 ~ 13.5V
	<b>CURRENT ADJ. RANGE</b>	Can be adjusted by internal potentiometer for A type only
		5 ~ 8.34A
	<b>VOLTAGE TOLERANCE Note.3</b>	± 1.0%
	<b>LINE REGULATION</b>	± 0.5%
	<b>LOAD REGULATION</b>	± 2.0%
<b>INPUT</b>	<b>SETUP, RISE TIME Note.7</b>	1200ms, 50ms/115VAC    500ms, 50ms/230VAC at full load
	<b>HOLD UP TIME (Typ.)</b>	16ms at full load    230VAC /115VAC
	<b>VOLTAGE RANGE Note.4</b>	90 ~ 305VAC    127 ~ 431VDC
	<b>FREQUENCY RANGE</b>	47 ~ 63Hz
	<b>POWER FACTOR (Typ.)</b>	PF>0.98/115VAC, PF>0.95/230VAC, PF>0.93/277VAC at full load
	<b>EFFICIENCY (Typ.)</b>	92%
	<b>AC CURRENT (Typ.)</b>	1.2A / 115VAC    0.55A / 230VAC    0.5A / 277VAC
<b>PROTECTION</b>	<b>INRUSH CURRENT(Typ.)</b>	COLD START 60A at 230VAC
	<b>LEAKAGE CURRENT</b>	<0.75mA / 277VAC
	<b>OVERLOAD</b>	105 ~ 125%
		Protection type : Constant current limiting, recovers automatically after fault condition is removed
	<b>SHORT CIRCUIT</b>	Constant current limiting, recovers automatically after fault condition is removed
<b>ENVIRONMENT</b>	<b>OVER VOLTAGE</b>	14 ~ 17V
	<b>OVER TEMPERATURE</b>	Protection type : Shut down o/p voltage with auto-recovery or re-power on to recovery
		Shut down o/p voltage, recovers automatically after temperature goes down
<b>SAFETY &amp; EMC</b>	<b>WORKING TEMP.</b>	-55 ~ +70°C (Refer to "Derating Curve")
	<b>WORKING HUMIDITY</b>	20 ~ 95% RH non-condensing
	<b>STORAGE TEMP., HUMIDITY</b>	-60 ~ +85°C, 10 ~ 95% RH
	<b>TEMP. COEFFICIENT</b>	± 0.03%/°C (0 ~ 60°C)
	<b>VIBRATION</b>	20 ~ 500Hz, 10G 12min./1cycle, period for 72min. each along X, Y, Z axes
<b>OTHERS</b>	<b>SAFETY STANDARDS Note.6</b>	UL60950-1, IP65 (or IP68 for HEP-100 Blank type) approved ; design refer to TUV EN60950-1
	<b>WITHSTAND VOLTAGE</b>	I/P-O/P:3.75KVAC    I/P-FG:2KVAC    O/P-FG:1.5KVAC
	<b>ISOLATION RESISTANCE</b>	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH
	<b>EMC EMISSION</b>	Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3
	<b>EMC IMMUNITY</b>	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level (surge 6KV), criteria A
<b>NOTE</b>	<b>MTBF</b>	164.7K hrs min.    MIL-HDBK-217F (25°C)
	<b>DIMENSION</b>	220*68*38.8mm (L*W*H)
	<b>PACKING</b>	1.12Kg; 12pcs/14.4Kg/0.8CUFT
<p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. Derating may be needed under low input voltages. Please check the static characteristics for more details.</p> <p>5. A type only.</p> <p>6. Safety and EMC design refer to EN60598-1, CNS15233, GB7000.1, FCC part18.</p> <p>7. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time.</p> <p>8. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.</p> <p>9. The ambient temperature derating of 3.5°C/1000m is needed for operating altitude greater than 2000m(6500ft).</p> <p>10. The water protection level test for the IP68 rating is performed 1000mm below the surface of the water for 1 month.</p>		



**■ Block Diagram****■ Derating Curve****■ Static Characteristics****■ Mechanical Specification**

Case No.994A Unit:mm



※ IP65 rated. Output voltage and constant current level can be adjusted through internal potentiometer.  
(Can access by removing the rubber stopper on the case.)

**■ Installation Manual**

Please refer to : <http://www.meanwell.com/manual.html>