



## ■ Features

- Over international AC input voltage available (85-265Vac)
- High performance double quasi resonant PFC controller used in large power without stroboscopic lighting LED
- Constant current design
- Protections: Short circuit, open circuit, over-load, over-current
- IP20 design
- No-flicker High PF
- No load power consumption <2.5W
- High reliability, low cost
- 3 years warranty

## ■ Description

HZD100AXI series is a 70W-100W economical AC/DC LED power supply PCBA series. Incorporating a built-in active PFC design, It provides a high Power Factor value. In addition, with no-load low power consumption be less than 0.5W, and the setup time less than 500ms. With anti-lightning protection function.

## ■ Applications

- Indoor LED lighting
- LED office lighting
- LED commercial lighting
- LED decorative lighting

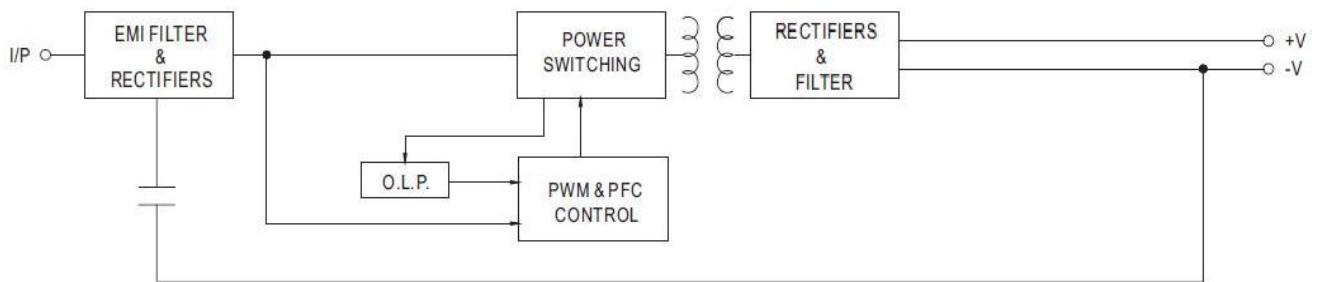
SPECIFICATION SHEET

MODEL		HZD100AXI 2000	HZD100AXI 2500		
OUTPUT	RATED CURRENT	2000mA	2500mA		
	OPERATING VOLTAGE RANGE Note.5	36~48V	36-42V		
	CURRENT ACCURACY Note.3	3.00%			
	RATED POWER	100W	100W		
	RIPPLE & NOISE (max.) Note.2	<10%	<10%		
	NO LOAD OUTPUT VOLTAGE (max.)	54V	48V		
	SETUP TIME	500ms / 220VAC at full load;			
INPUT	VOLTAGE RANGE Note.4	85~ 265VAC			
	FREQUENCY RANGE	47 ~ 63Hz			
	POWER FACTOR	PF $\geq$ 0.98/85VAC,PF>0.95/265VAC(at full load)(Please refer to "Power Factor Characteristic" curve)			
	TOTAL HARMONIC DISTORTION	THD< 15% when output loading $\leq$ 70% ;THD< 10% when full output loading @85V			
	EFFICIENCY (Typ.)	90%	89%		
	AC CURRENT (Typ.)	0.46A/220VAC	0.46A/220VAC		
	INRUSH CURRENT(Typ.)	Max 50A (twidth=75 $\mu$ s measured at full load ) at 220VAC			
PROTECTION	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed.			
	OVER TEMPERATURE	Hiccup mode, recovers automatically after temperature goes down.			
ENVIRONMENT	WORKING TEMP.	-30 ~ +40 $^{\circ}$ C			
	WORKING HUMIDITY	20 ~ 70% RH non-condensing			
	STORAGE TEMP., HUMIDITY	-40 ~ +80 $^{\circ}$ C, 10 ~ 95% RH			
SAFETY & EMC	SAFETY STANDARDS	ENEC EN61347-1; EN61347-2-13; EN62384			
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC			
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25 $^{\circ}$ C/ 70% RH			
	EMC EMISSION	EN55015, EN61000-3-2 Class C ( $\geq$ 75% load) ; EN61000-3-3; 2003			
	EMC IMMUNITY	EN61547: 2009 light industry level, criteria B (Surge 2KV)			
OTHERS	DIMENSION	190*66*39MM (L*W*H)			
	PACKING	0.255Kg;50pcs/14.75kg/0.041m <sup>3</sup>			
NOTE	<p>1. All parameters NOT specially mentioned are measured at 220VAC input, rated load and 25<math>^{\circ}</math>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 0.1<math>\mu</math>f &amp; 47<math>\mu</math>f parallel capacitor.</p> <p>3. Please see AC input voltage drop vs. output current characteristics table.</p> <p>4. Derating may be needed under low input voltage, please check the static characteristic for more details.</p> <p>5. Constant current operation region is within 50% ~100% rated output voltage. This is the suitable operation region for LED related applications, but please reconfirm special electrical requirements for some specific system design.</p> <p>6. 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</p> <p>7. Direct connecting to LEDs is suggested, but is not suitable for using additional drivers.</p>				

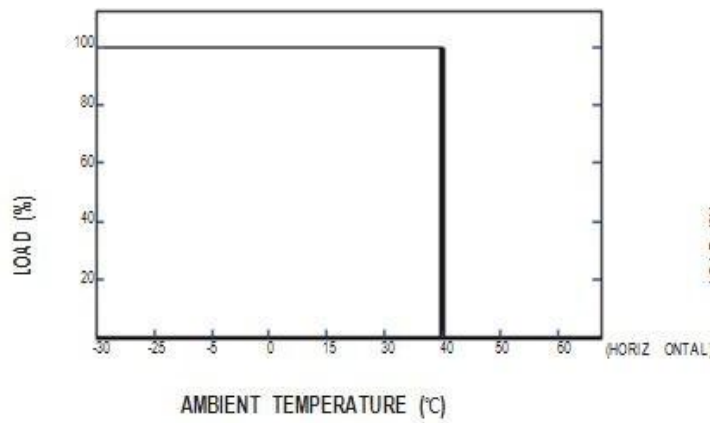
■ Mechanical Specification



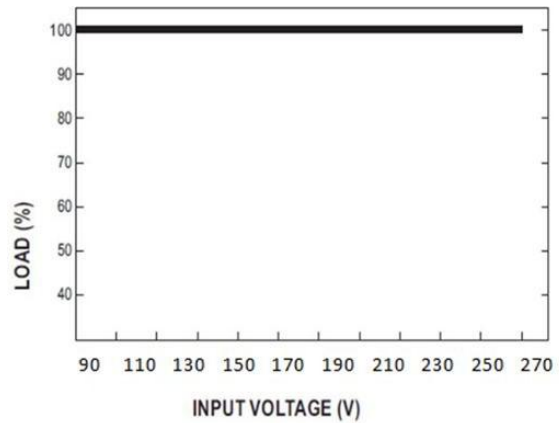
■ Block Diagram



■ Derating Curve

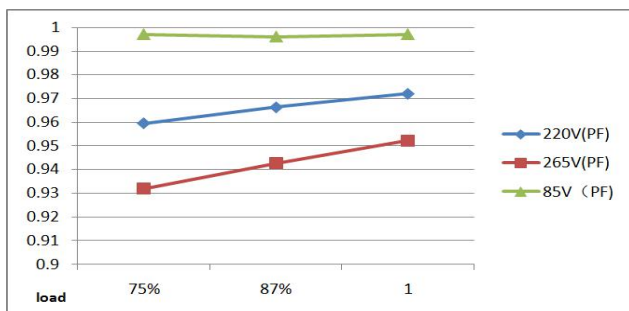


■ Static Characteristics



■ PowerFactorCharacteristic

2000MA LOAD



■ EFFICIENCY vs LOAD

2000MA LOAD

