

# IRA-160

## 160WAC-DC High Reliability Industrial Adaptor

### Features

- Universal AC input / Full range
- 3 pole IE320-C14 AC inlet
- Built-in PFC (power factor controller)
- No load power consumption < 0.15W
- Energy efficiency Level VI
- Compliant with EISA 2007/DoE, NRCAN, AU/NZ MEPS, EU ErP, and CoC Version 5
- Class I power (with earth pin)
- Short circuit, overload, over voltage, and over temperature protection
- Enclosed in plastic case
- Fanless with -30 to 70 °C working temperature
- LED power-on indicator
- 3 years warranty



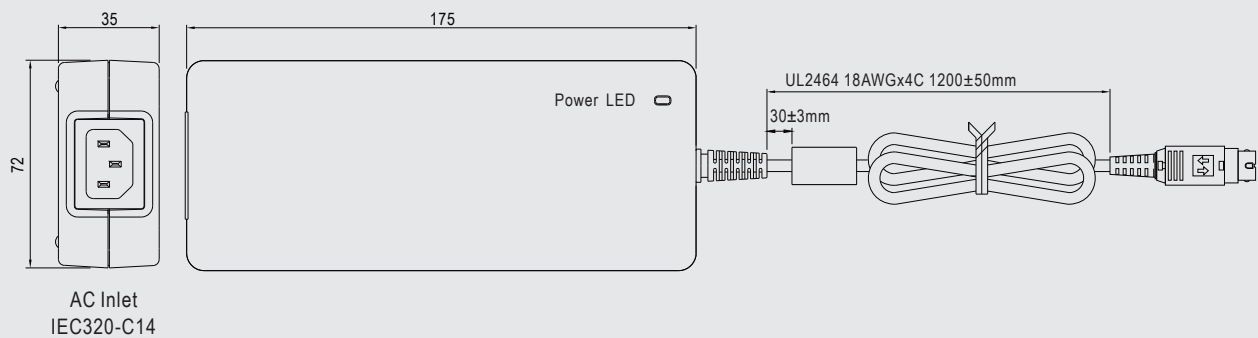
### Specifications

ORDER NO.		IRA-160	
OUTPUT	SAFETY MODEL NO.	IRA-160	
	DC VOLTAGE	48V	
	RATED CURRENT	3.34A	
	CURRENT RANGE	0 ~ 3.34A	
	RATED POWER (max.)	160W	
	RIPPLE & NOISE (max.)	200mVp-p	
	VOLTAGE TOLERANCE	±3.0%	
	LINE REGULATION	±1.0%	
	LOAD REGULATION	±3.0%	
	SETUP, RISE TIME	2000ms, 50ms / 230VAC    2500ms, 50ms / 115VAC at full load	
	HOLD UP TIME (Typ.)	20ms / 230VAC    20ms / 115VAC at full load	
INPUT	VOLTAGE RANGE	85 ~ 264VAC    120 ~ 370VDC	
	FREQUENCY RANGE	47 ~ 63Hz	
	POWER FACTOR (Typ.)	12V/15V:PF>0.93 / 230VAC    20V,24V,48V:PF>0.94 / 230VAC    PF>0.98 / 115VAC at full load	
	EFFICIENCY (Typ.)	94%	
	AC CURRENT	1.85A / 115VAC    1A / 230VAC	
	INRUSH CURRENT (max.)	Cold start   60 / 115AC    120A / 230VAC	
PROTECTION	LEAKAGE CURRENT(max.)	0.75mA / 240VAC	
	OVERLOAD	105 ~ 150% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed	
	OVER VOLTAGE	105 ~ 135% rated output voltage Protection type : Hiccup mode @ 10%load	
	OVER TEMPERATURE	Protection type : Shut down o/p voltage, re-power on to recover	

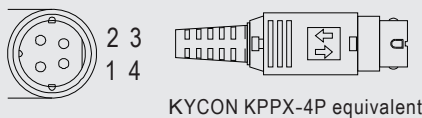
## Specifications

ENVIRONMENT	WORKING TEMP.	-30 ~ +70°C (Refer to "Derating Curve")
	WORKING HUMIDITY	20% ~ 90% RH non-condensing
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C , 10 ~ 95% RH non-condensing
	TEMP. COEFFICIENT	$\pm 0.03\%$ / °C (0~50°C )
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes
SAFETY & EMC	SAFETY STANDARDS <b>Note. 8</b>	EN55032(CISPR32), FCC PART 15 / CISPR22 CAN ICES-3(B)/NMB-3(B), CNS13438, GB17625.1 EAC TP TC 020, MSIP KN32 EN61000-3-2 GB9254, EN61000-3-3, EN61000-4-2, 3, 4, 5, 6, 8, 11
	WITHSTAND VOLTAGE	I/P-O/P: 3KVAC I/P-FG: 2KVAC O/P-FG: SHORT
	ISOLATION RESISTANCE	I/P-O/P: 100M Ohms / 500VDC / 25°C / 70% RH
OTHERS	MTBF	236.4K hrs min. MIL-HDBK-217F(25°C)
	DIMENSION	175*72*35mm (L*W*H)
	PACKING	0.66Kg; 20pcs/ 14.2Kg/ 1.06CUFT
CONNECTOR	PLUG	See page 4-5 ; Other type available by customer requested
	CABLE	See page 4-5 ; Other type available by customer requested
NOTE	1. All parameters are specified at 230VAC input, rated load, 25°C 70% RH ambient. 2. DC voltage: The output voltage set at point measure by plug terminal & 50% load. 3. Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1 $\mu$ f & 47 $\mu$ f capacitor. 4. Tolerance: includes set up tolerance, line regulation, load regulation. 5. Line regulation is measured from low line to high line at rated load. 6. Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time.	

## Dimension

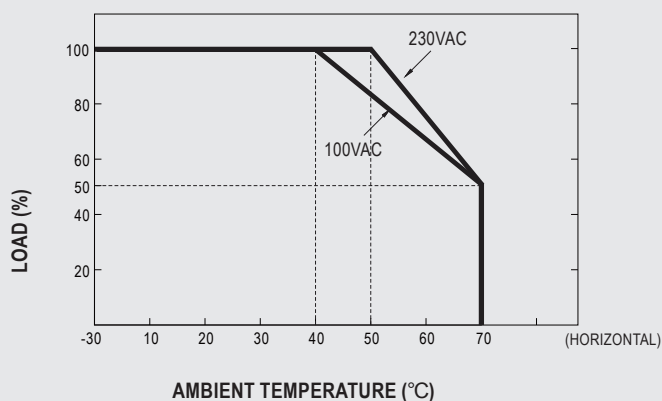


Min. DIN 4 Pin with Lock (male)



Type No.	Pin Assignment	
	PIN No.	Output
R7B	1	+Vo
	2	-Vo
	3	-Vo
	4	+Vo

## Derating Curve



## Static Characteristics

