



**■ Features**

- **Global certificates**
- Universal AC input / Full range
- 3 pole AC inlet IEC320-C14
- Built-in active PFC function
- No load power consumption < 0.15W
- **Energy efficiency Level VI**
- Comply with EISA 2007/DoE, NRCAN, AU/NZ MEPS, EU ErP and CoC Version 5
- Class I power (with earth pin)
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Fanless design with -30~+70°C working temperature
- Fully enclosed plastic case
- LED indicator for power on
- 3 years warranty

**■ Applications**

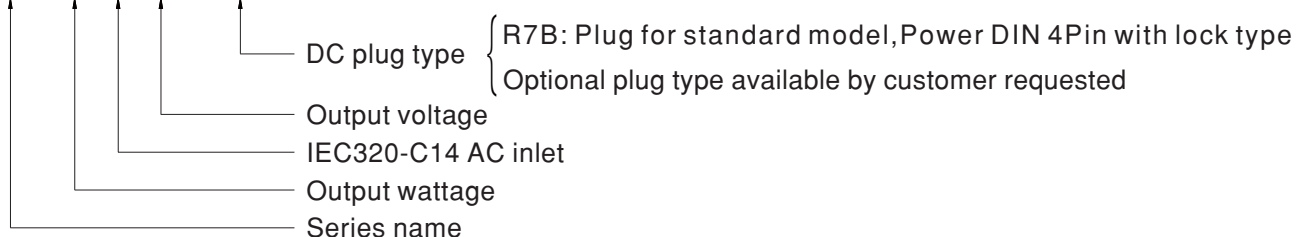
- Consumer electronic devices
- Telecommunication devices
- Office facilities
- Industrial equipments

**■ Description**

GST160A is a highly reliable, 160W desktop style single-output green adaptor series. This product is a class I power unit (with FG), equipped with a standard IEC320-C14 AC inlet and adopting the input range from 85VAC to 264VAC. The entire series supplies different models with output voltages ranging between 12VDC and 48VDC that can satisfy the demands for various types of consumer electronic devices. With the efficiency up to 94% and the extremely low no-load power consumption below 0.15W, GST160A is compliant with USA EISA 2007/DoE, Canada NRCAN, Australia and New Zealand MEPS, EU ErP, and Code of Conduct (CoC) Version 5. The supreme feature allows the adaptor to save the energy when it is either under the operating mode or the standby mode. The entire series utilizes the 94V-0 flame retardant plastic case. GST160A is certified for the international safety regulations.

**■ Model Encoding**

**GST 160A 12 -R7B**

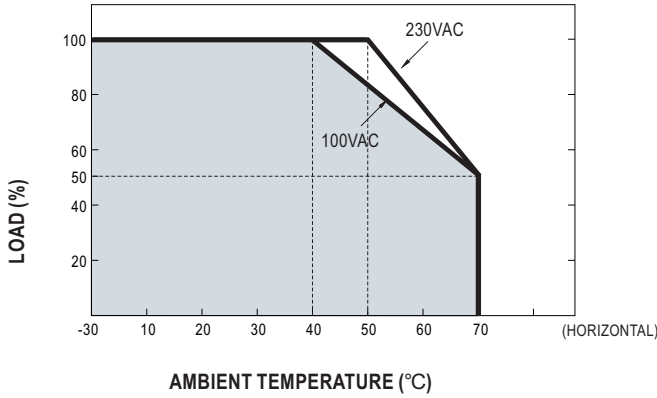




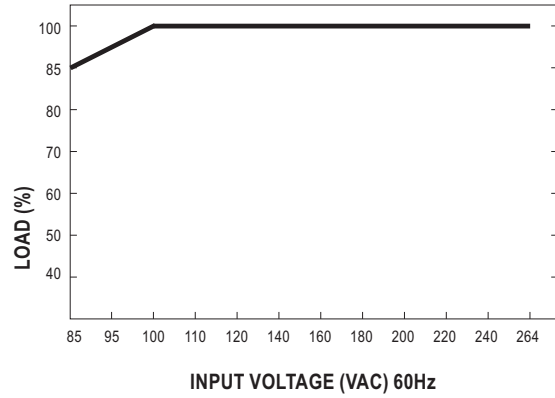
**SPECIFICATION**

ORDER NO.		GST160A12-R7B	GST160A15-R7B	GST160A20-R7B	GST160A24-R7B	GST160A36-R7B	GST160A48-R7B
OUTPUT	SAFETY MODEL NO.	GST160A12	GST160A15	GST160A20	GST160A24	GST160A36	GST160A48
	DC VOLTAGE <small>Note.2</small>	12V	15V	20V	24V	36V	48V
	RATED CURRENT	11.5A	9.6A	8A	6.67A	4.44A	3.34A
	CURRENT RANGE	0 ~ 11.5A	0 ~ 9.6A	0 ~ 8A	0 ~ 6.67A	0 ~ 4.44A	0 ~ 3.34A
	RATED POWER (max.)	138W	144W	160W	160W	160W	160W
	RIPPLE & NOISE (max.) <small>Note.3</small>	80mVp-p	100mVp-p	150mVp-p	180mVp-p	180mVp-p	240mVp-p
	VOLTAGE TOLERANCE <small>Note.4</small>	±5.0%	±5.0%	±4.0%	±3.0%	±3.0%	±3.0%
	LINE REGULATION <small>Note.5</small>	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LOAD REGULATION	±5.0%	±5.0%	±4.0%	±3.0%	±3.0%	±3.0%
	SETUP, RISE TIME <small>Note.6</small>	2000ms, 50ms / 230VAC    2500ms, 50ms / 115VAC at full load					
HOLD UP TIME (Typ.)	20ms / 230VAC    20ms / 115VAC at full load						
INPUT	VOLTAGE RANGE <small>Note.7</small>	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.)	90%	91%	93%	93%	92%	94%
	AC CURRENT	1.85A / 115VAC		1A / 230VAC			
	INRUSH CURRENT (max.)	120A / 230VAC					
	LEAKAGE CURRENT(max.)	0.75mA / 240VAC					
PROTECTION	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					
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					
	TEMP. COEFFICIENT	±0.03% / °C (0~50°C )					
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes					
SAFETY & EMC (Note. 9)	SAFETY STANDARDS <small>Note. 8</small>	UL60950-1, CSA C22.2, TUV EN60950-1, BSMI CNS14336, CCC GB4943, PSE J60950-1, AS/NZS 60950.1 , BIS IS13252, KC K60950-1, EAC TP TC 004 approved; SIRIM MS IEC60950-1 (optional) approved					
	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					
	EMC EMISSION	Compliance to EN55022 class B, EN61000-3-2,3, FCC PART 15 / CISPR22 class B, CAN ICES-3(B)/NMB-3(B),CNS13438 class B, GB9254, GB17625.1, EAC TP TC 020, MSIP KN32					
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, light industry level, criteria A, MSIP KN35					
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 3 ; Other type available by customer requested					
	CABLE	See page 3 ; Other type available by customer requested					
NOTE	<ol style="list-style-type: none"> <li>All parameters are specified at 230VAC input, rated load, 25°C 70% RH ambient.</li> <li>DC voltage: The output voltage set at point measure by plug terminal &amp; 50% load.</li> <li>Ripple &amp; noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf &amp; 47uf capacitor.</li> <li>Tolerance: includes set up tolerance, line regulation, load regulation.</li> <li>Line regulation is measured from low line to high line at rated load.</li> <li>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.</li> <li>Derating may be needed under low input voltage. Please check the derating curve for more details.</li> <li>The demand for Malaysia safety is processed with the order no. GST160A □ -SIRIM by request. Please contact MEAN WELL for details.</li> <li>The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a>)</li> </ol>						

### Derating Curve

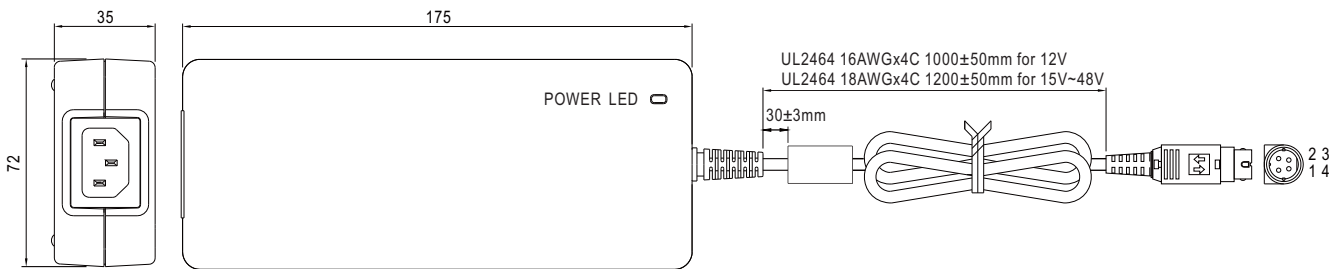


### Static Characteristics



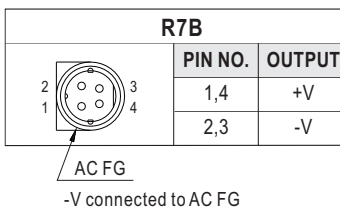
### Mechanical Specification

Case No. GS160A  
Unit:mm



### Plug Assignment

Output plug (Power DIN 4 pin with lock type) : KYCON KPPX-4P equivalent  
Mating plug (customer side , not provide with power supply) : KYCON KPJX-CM-4S equivalent



### Installation Manual

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