

## ■ Features

- **Global certificates**
- Universal AC input / Full range
- 3 pole AC inlet IEC320-C14, Class I power unit
- Built-in active PFC function
- No load power consumption < 0.5W
- **Energy efficiency Level VI**
- Comply with EISA 2007/DoE, NRCAN, Korea K-MEPS, AU/NZ MEPS, EU ErP
- 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

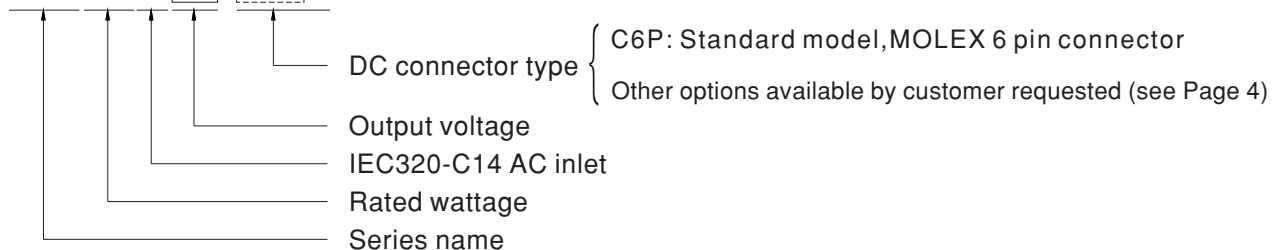
## ■ Description

GST280A is a highly reliable, 280W 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 85 VAC 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 0.5W, GST280A is compliant with USA EISA 2007/DoE, Canada NRCAN, Australia and New Zealand MEPS, Korea K-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. GST280A is certified for the international safety regulations.

## ■ Model Encoding

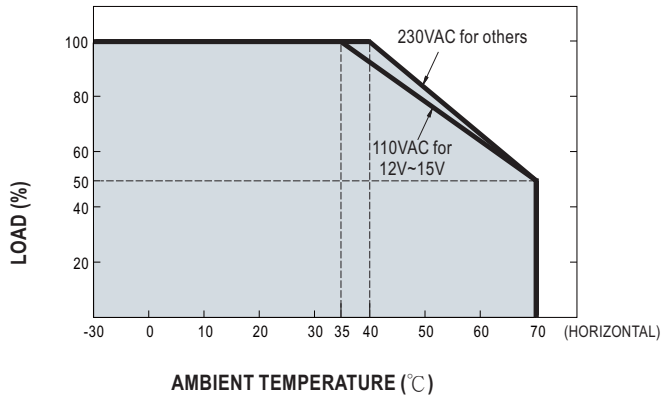
**GST 280A 12 -C6P**



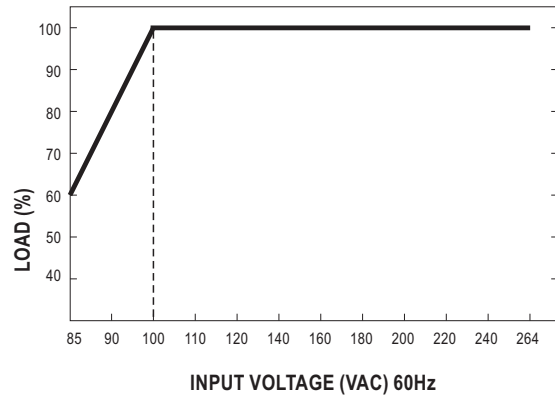
**SPECIFICATION**

ORDER NO.		GST280A12-C6P	GST280A15-C6P	GST280A20-C6P	GST280A24-C6P	GST280A48-C6P	
OUTPUT	SAFETY MODEL NO.	GST280A12	GST280A15	GST280A20	GST280A24	GST280A48	
	DC VOLTAGE <span style="float:right">Note.2</span>	12V	15V	20V	24V	48V	
	RATED CURRENT	21A	17A	13A	11.67A	5.84A	
	CURRENT RANGE	0 ~ 21A	0 ~ 17A	0 ~ 13A	0 ~ 11.67A	0 ~ 5.84A	
	RATED POWER (max.)	252W	255W	260W	280.08W	280.32W	
	RIPPLE & NOISE (max.) <span style="float:right">Note.3</span>	120mVp-p	120mVp-p	150mVp-p	200mVp-p	200mVp-p	
	VOLTAGE TOLERANCE <span style="float:right">Note.4</span>	±5.0%	±5.0%	±4.0%	±3.0%	±2.0%	
	LINE REGULATION <span style="float:right">Note.5</span>	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	
	LOAD REGULATION	±5.0%	±5.0%	±4.0%	±3.0%	±2.0%	
	SETUP, RISE TIME <span style="float:right">Note.6</span>	2000ms, 20ms / 230VAC      2000ms, 20ms / 115VAC at full load					
HOLD UP TIME (Typ.)	16ms / 230VAC      16ms / 115VAC at full load						
INPUT	VOLTAGE RANGE <span style="float:right">Note.7</span>	85 ~ 264VAC    120 ~ 370VDC					
	FREQUENCY RANGE	47 ~ 63Hz					
	POWER FACTOR (Typ.)	PF>0.95 / 230VAC    PF>0.98 / 115VAC at full load					
	EFFICIENCY (Typ.)	89.5%	90%	92%	93%	94%	
	AC CURRENT (Typ.)	3A / 115VAC      1.5A / 230VAC					
	INRUSH CURRENT (max.)	Cold start 60 / 115AC    120A / 230VAC					
	LEAKAGE CURRENT(max.)	1.5mA / 240VAC					
PROTECTION	OVERLOAD	105 ~ 135% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed					
	OVER VOLTAGE	105 ~ 135% rated output voltage Protection type : Shut down o/p voltage, re-power on to recover					
	OVER TEMPERATURE	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	-40 ~ +85°C, 10 ~ 95% RH non-condensing					
	TEMP. COEFFICIENT	±0.03% / °C (0~40°C)					
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes					
SAFETY & EMC (Note. 9)	SAFETY STANDARDS <span style="float:right">Note. 8</span>	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-F/G: 2KVAC    O/P-F/G: SHORT					
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH					
	EMC EMISSION	Parameter	Standard			Test Level / Note	
		Conducted emission	EN55032(CISPR32),FCC PART 15 / CISPR22 CAN ICES-3(B)/NMB-3(B),CNS13438,GB17625.1 EAC TP TC 020,MSIP KN32			Class B	
		Radiated emission	EN55032(CISPR32),FCC PART 15 / CISPR22 CAN ICES-3(B)/NMB-3(B),CNS13438,GB17625.1 EAC TP TC 020,MSIP KN32			Class B	
		Harmonic current	EN61000-3-2,GB9254			Class A	
		Voltage flicker	EN61000-3-3			-----	
	EMC IMMUNITY	Parameter	Standard			Test Level /Note	
		ESD	EN61000-4-2			Level 4, 15KV air; Level 4, 8KV contact	
RF field susceptibility		EN61000-4-3			Level 2, 3V/m		
EFT bursts		EN61000-4-4			Level 2, 1KV		
Surge susceptibility		EN61000-4-5			Level 3, 1KV/Line-Line , 2KV/Line-FG		
Conducted susceptibility		EN61000-4-6			Level 2, 3V		
Magnetic field immunity		EN61000-4-8			Level 2, 3A/m		
Voltage dips , interruption		EN61000-4-11			>95% dip 0. 5 periods, 30% dip 25 periods, >95% interruptions 250 periods		
OTHERS	MTBF	181.24Khrs min. MIL-HDBK-217F(25°C)					
	DIMENSION	220*95*46mm (L*W*H)					
	PACKING	1.25Kg; 12pcs/16Kg/1.27CUFT					
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 0.1μf & 47μf 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. 7. Derating may be needed under low input voltage. Please check the derating curve for more details. 8. The demand for Malaysia safety is processed with the order no. GST280A □ -SIRIM by request. Please contact MEAN WELL for details. 9. 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> )						

### Derating Curve

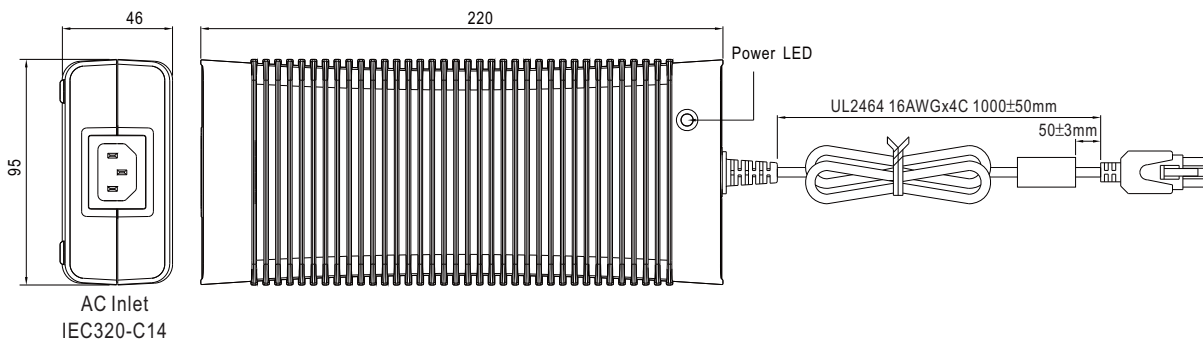


### Static Characteristics





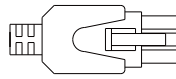

### Mechanical Specification

Case No. GS280A Unit:mm



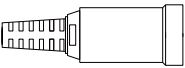





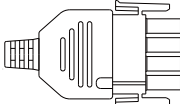


### DC output plug

⊙ Standard plug: C6P

C6P			Pin Assignment		
				<b>PIN NO.</b>	<b>OUTPUT</b>
			-V connected to AC FG	1,2,3	+Vo
				4,5,6	-Vo

◎ Optional DC plug:

Min. DIN 4 Pin with Lock (female)	Type No.	Pin Assignment	
		PIN No.	Output
   <p>KYCON KPJX-CM-4S equivalent</p>	R7BF	1	+Vo
		2	-Vo
		3	-Vo
		4	+Vo
NEUTRIK XLR NC4FX equivalent	Type No.	Pin Assignment	
  	MIC4	1	+Vo
		2	+Vo
		3	-Vo
		4	-Vo
AMP 1-480702-0 (6.35mm) equivalent	Type No.	Pin Assignment	
   <p>FG not connected to output connector</p>	C4P	1	+Vo
		2	+Vo
		3	-Vo
		4	-Vo

■ **Installation Manual**

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