



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 power (with earth pin)
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Fanless design with -30~+70 working temperature
- Fully enclosed plastic case
- LED indicator for power on
- 3 years warranty

Applications

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

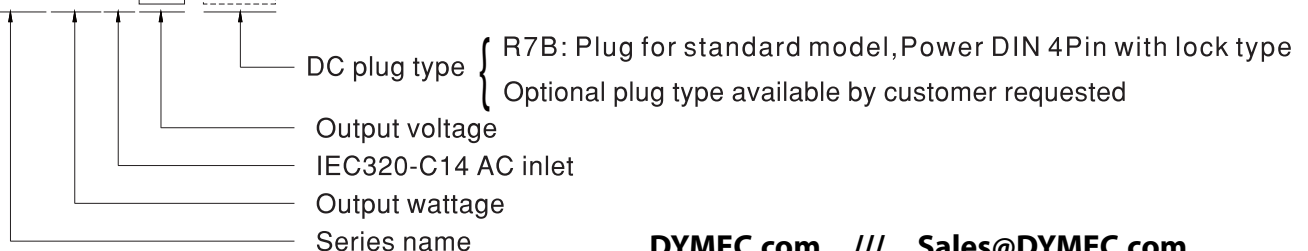
Description

GST220A is a highly reliable, 220W desktop style single-output green adaptor series. This product is a class 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 94.5% and the extremely low no-load power consumption below 0.15W, GST220A 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. GST220A is certified for the international safety regulations.

Model Encoding

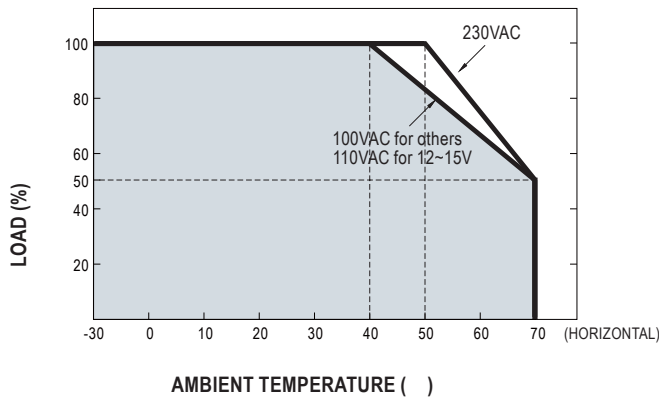
GST 220A 12 - R7B



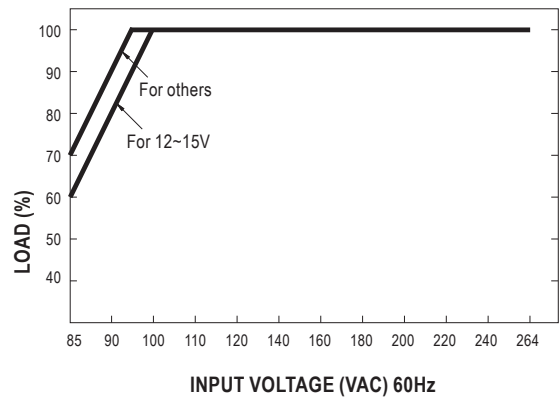
SPECIFICATION

ORDER NO.		KY-PSGST220A12-R7B	KY-PSGST220A15-R7B	KY-PSGST220A20-R7B	KY-PSGST220A24-R7B	KY-PSGST220A48-R7B
OUTPUT	SAFETY MODEL NO.	KY-PSGST220A12	KY-GST220A15	GST220A20	GST220A24	GST220A48
	DC VOLTAGE <small>Note.2</small>	12 Volts	15 Volts	20 Volts	24 Volts	48 Volts
	RATED CURRENT	15A	13.4A	11A	9.2A	4.6A
	CURRENT RANGE	0 ~ 15A	0 ~ 13.4A	0 ~ 11A	0 ~ 9.2A	0 ~ 4.6A
	RATED POWER (max.)	180W	201W	220W	221W	221W
	RIPPLE & NOISE (max.) <small>Note.3</small>	80mVp-p	100mVp-p	150mVp-p	180mVp-p	240mVp-p
	VOLTAGE TOLERANCE <small>Note.4</small>	± 5.0%	± 5.0%	± 4.0%	± 3.0%	± 2.0%
	LINE REGULATION <small>Note.5</small>	± 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 <small>Note.6</small>	2000ms, 50ms / 230VAC 2000ms, 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.)	PF>0.91 / 230VAC PF>0.98 / 115VAC at full load				
	EFFICIENCY (Typ.)	90%	90%	92%	93.5%	94.5%
	AC CURRENT (Typ.)	4A / 115VAC 2A / 230VAC				
	INRUSH CURRENT (max.)	120A / 230VAC				
PROTECTION	LEAKAGE CURRENT(max.)	0.75mA / 240VAC				
	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 : Hiccup mode @ 10%load				
	OVER TEMPERATURE	Shut down o/p voltage, recovers automatically after temperature goes down				
ENVIRONMENT	WORKING TEMP.	-40 ~ +80 (Refer to "Derating Curve")				
	WORKING HUMIDITY	20% ~ 90% RH non-condensing				
	STORAGE TEMP., HUMIDITY	-40 ~ +85 , 10 ~ 95% RH				
	TEMP. COEFFICIENT	± 0.03% / (0~50)				
	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 / 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	209.4K hrs min. MIL-HDBK-217F(25)				
	DIMENSION	210*85*46mm (L*W*H)				
	PACKING	1.1Kg; 12pcs/14.2Kg/0.96CUFT				
CONNECTOR	PLUG	See page 3 ; Other type available by customer requested				
	CABLE	See page 3 ; Other type available by customer requested				
NOTE		1. All parameters are specified at 230VAC input, rated load, 25 ~ 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 0.1uf & 47uf 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.				

Derating Curve

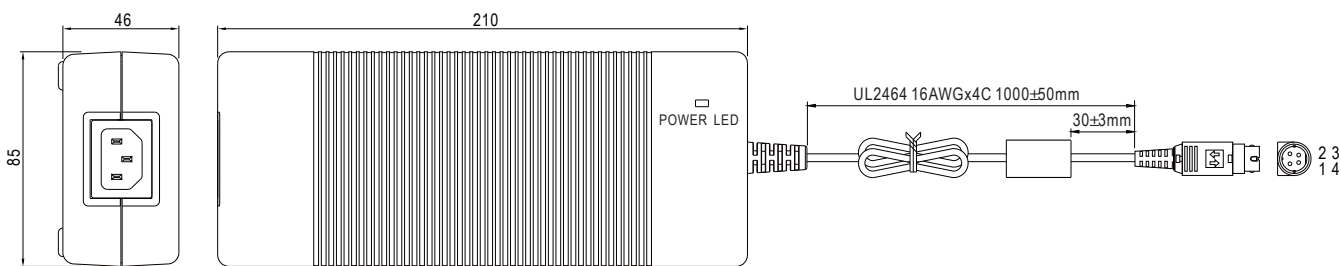


Static Characteristics



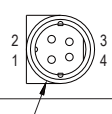
Mechanical Specification

Case No. 961A 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

R7B		
	PIN NO.	OUTPUT
	1,4	+V
	2,3	-V

AC FG
-V connected to AC FG

