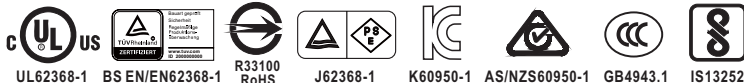




User's Manual



Video



UL62368-1 BS EN/EN62368-1 R33100 RoHS J62368-1 K60950-1 AS/NZS60950-1 GB4943.1 IS13252



MS IEC60950-1 (optional) IEC62368-1 TPTC004

Energy Verified
Rendement
Énergétique Vérifié



Features

- **Global certificates**
- Universal AC input / Full range
- 3 pole AC inlet IEC320-C14, Class I power unit
- No load power consumption < 0.075W
- **Energy efficiency Level VI**
- Comply with EISA 2007/DoE, NRCAN, Korea K-MEPS, AU/NZ MEPS, EU ErP and CoC Version 5
- Protections: Short circuit / Overload / Over voltage
- Fully enclosed plastic case
- Pass LPS
- -30~+70°C wide range working temperature
- LED indicator for power on
- **Various DC plug quick adapter accessory available**
(Plug kit sold separately, please refer to : https://www.meanwell.com/upload/pdf/DC_plug.pdf)
- 3 years warranty

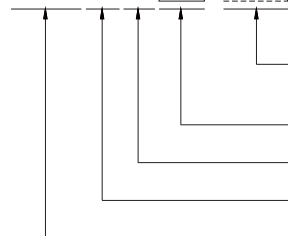
Description

GST40A is a highly reliable, 40W 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 90VAC to 264VAC. The entire series supplies different models with output voltages ranging between 5VDC and 48VDC that can satisfy the demands for various types of consumer electronic devices.

With the efficiency up to 92% and the extremely low no-load power consumption below 0.075W, GST40A 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. GST40A is certified for the international safety regulations.

Model Encoding

GST 40 A 05 -P1J



DC plug type { P1J: Standard model, 2.1 ϕ x 5.5 ϕ x 11 mm, C+, tuning fork type
Other options available by customer requested (see Page 4~5)

Output voltage
IEC320-C14 AC inlet
Rated wattage
Series name

Applications

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

GTIN CODE

MW Search: <https://www.meanwell.com/serviceGTIN.aspx>



SPECIFICATION

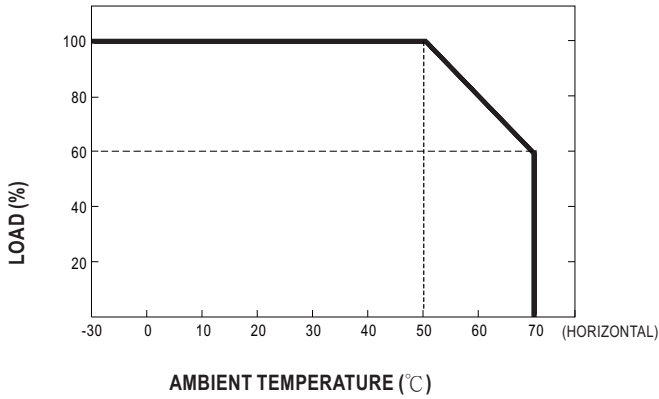
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OUTPUT	SAFETY MODEL NO.	GST40A05	GST40A07	GST40A09	GST40A12	GST40A15	GST40A18	GST40A24	GST40A48		
	DC VOLTAGE Note.2	5V	7.5V	9V	12V	15V	18V	24V	48V		
	RATED CURRENT	5A	5.34A	4.45A	3.34A	2.67A	2.22A	1.67A	0.84A		
	CURRENT RANGE	0 ~ 5A	0 ~ 5.34A	0 ~ 4.45A	0 ~ 3.34A	0 ~ 2.67A	0 ~ 2.22A	0 ~ 1.67A	0 ~ 0.84A		
	RATED POWER (max.)	25W	40W	40W	40W	40W	40W	40W	40W		
	RIPPLE & NOISE (max.) Note.3	120mVp-p	120mVp-p	120mVp-p	120mVp-p	120mVp-p	120mVp-p	150mVp-p	200mVp-p		
	VOLTAGE TOLERANCE Note.4	±5.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±2.5%	±2.5%		
	LINE REGULATION Note.5	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%		
	LOAD REGULATION	±5.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±2.5%	±2.5%		
	SETUP, RISE TIME Note.6	1000ms, 50ms / 230VAC 1000ms, 50ms / 115VAC at full load									
HOLD UP TIME (Typ.)	50ms / 230VAC 15ms / 115VAC at full load										
INPUT	VOLTAGE RANGE	90 ~ 264VAC									
	FREQUENCY RANGE	47 ~ 63Hz									
	EFFICIENCY (Typ.)	84.5%	87.5%	88.5%	89.5%	90%	90%	91%	92%		
	AC CURRENT (Typ.)	1A / 115VAC 0.5A / 230VAC									
	INRUSH CURRENT (max.)	Cold start 35A / 115VAC 65A / 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	5.2 ~ 6.8V	7.8 ~ 10.2V	9.4 ~ 12.2V	12.6 ~ 16.2V	15.7 ~ 20.3V	18.9 ~ 24.3V	25.2 ~ 32.4V	50.4 ~ 64.8V	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	-40 ~ +85°C, 10 ~ 95% RH non-condensing									
	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 Note. 7	UL62368-1, CSA C22.2 No.62368-1, TUV BS EN/EN62368-1, BSMI CNS 14336-1, CCC GB4943.1, PSE J62368-1, 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:0.5KVAC									
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH									
	EMC EMISSION	Parameter	Standard						Test Level / Note		
		Conducted emission	BS EN/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	BS EN/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	BS EN/EN61000-3-2, GB9254						Class A		
		Voltage flicker	BS EN/EN61000-3-3						-----		
	EMC IMMUNITY	BS EN/EN55035									
		Parameter	Standard						Test Level / Note		
ESD		BS EN/EN61000-4-2						Level 4, 15KV air; Level 4, 8KV contact			
RF field susceptibility		BS EN/EN61000-4-3						Level 2, 3V/m			
EFT bursts		BS EN/EN61000-4-4						Level 2, 1KV			
Surge susceptibility		BS EN/EN61000-4-5						Level 3, 1KV/Line-Line, 2KV/Line-FG			
Conducted susceptibility		BS EN/EN61000-4-6						Level 2, 3V			
Magnetic field immunity		BS EN/EN61000-4-8						Level 2, 3A/m			
Voltage dips, interruption	BS EN/EN61000-4-11						>95% dip 0.5 periods, 30% dip 25 periods, >95% interruptions 250 periods				
OTHERS	MTBF	3493.6K hrs min. Telcordia SR-332 (Bellcore) ; 728.2K hrs min. MIL-HDBK-217F (25°C)									
	DIMENSION	125*50*31.5mm (L*W*H)									
	PACKING	0.28Kg; 40pcs/12.02Kg/1.04CUFT									
CONNECTOR	PLUG	See page 4~5 ; Other type available by customer requested									
	CABLE	See page 4~5 ; Other type available by customer requested									
NOTE	<ol style="list-style-type: none"> All parameters are specified at 230VAC input, rated load, 25°C 70% RH ambient. DC voltage: The output voltage set at point measure by plug terminal & 50% load. Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1 μF & 47 μF capacitor. Tolerance: includes set up tolerance, line regulation, load regulation. Line regulation is measured from low line to high line at rated load. 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. The demand for Malaysia safety is processed with the order no. GST40A □ -SIRIM by request. Please contact MEAN WELL for details. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft). 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 http://www.meanwell.com) <p>※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx</p>										



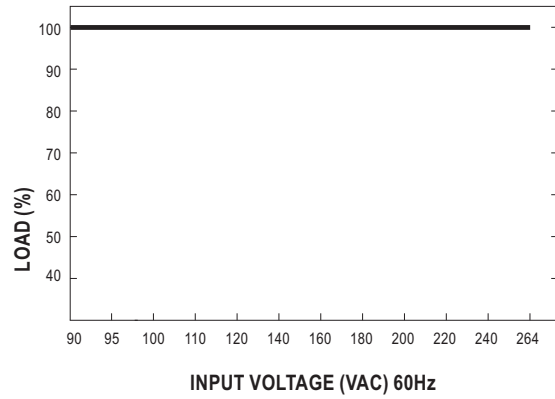
40W AC-DC Reliable Green Industrial Adaptor

GST40A series

■ Derating Curve

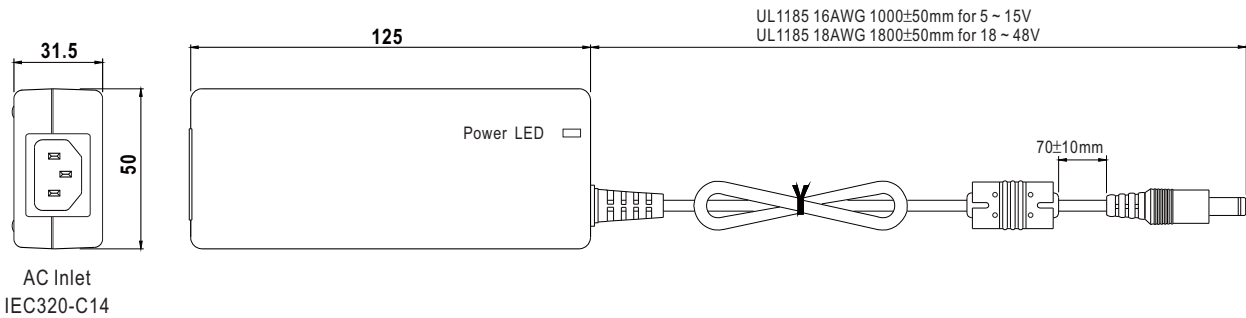


■ Static Characteristics



■ Mechanical Specification

Case No. GS60A Unit:mm



■ DC output plug

◎ Standard plug: P1J

P1J	Pin Assignment
	Outside ⊖ ⊕ Inside -V not connected to AC FG



40W AC-DC Reliable Green Industrial Adaptor

GST40A series

◎ DC plug changeable through:

(1) Customization of the standard part with an optional DC plug according to the table (MOQ applicable)


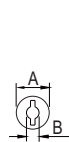
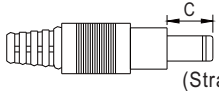
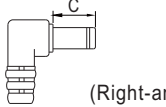


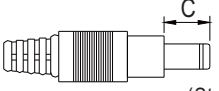
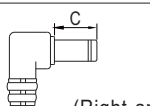


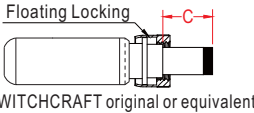






(2) Quick adapter accessory (sold separately without MOQ)

Please refer to below table and online selection guide : https://www.meanwell.com/upload/pdf/DC_plug.pdf

Example quick adapter accessory:




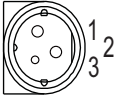
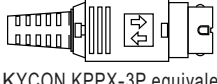

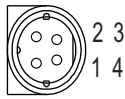
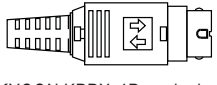







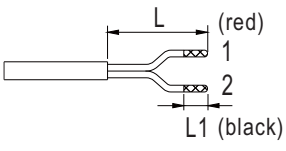
◎ Optional DC plug: (Available in customized cable or quick adapter)

Tuning Fork Style		Type No.	A	B	C	Quick Adapter Accessory	
			OD	ID	L		
 	 (Straight)	P1I	5.5	2.1	9.5	Available (Current rating: 7.5A max.)	
		P1L	5.5	2.5	9.5		
	 (Right-angled)	P1M	5.5	2.5	11.0		
		P1IR	5.5	2.1	9.5		
		P1JR	5.5	2.1	11.0		
		P1LR	5.5	2.5	9.5		
Barrel Style		Type No.	A	B	C	None	
			OD	ID	L		
 	 (Straight)	P2I	5.5	2.1	9.5	None	
		P2J	5.5	2.1	11.0		
	 (Right-angled)	P2L	5.5	2.5	9.5		
		P2M	5.5	2.5	11.0		
		P2IR	5.5	2.1	9.5		
		P2JR	5.5	2.1	11.0		
		P2LR	5.5	2.5	9.5		
		P2MR	5.5	2.5	11.0		
Lock Style		Type No.	A	B	C	None	
			OD	ID	L		
   Floating Locking SWITCHCRAFT original or equivalent	P2S(S761K)	5.53	2.03	12.06	None		
	P2K(761K)	5.53	2.54	12.06			
	P2C(S760K)	5.53	2.03	9.52			
	P2D(760K)	5.53	2.54	9.52			
Min. Pin Style		Type No.	A	B	C	Available (Current rating: 5A max.)	
			OD	ID	L		
   EIAJ equivalent	P3A	2.35	0.7	11.0	Available (Current rating: 5A max.)		
	P3B	4.0	1.7	11.0			
	P3C	4.75	1.7	11.0			
Center Pin Style		Type No.	A	B	C	D	Available (Current rating: 7.5A max.)
			OD	ID	L	Center Pin	
   EIAJ equivalent	P4A	5.5	3.4	11.0	1.0	Available (Current rating: 7.5A max.)	
	P4B	6.5	4.4	11.0	1.4		
	P4C	7.4	5.1	11.0	0.6		



40W AC-DC Reliable Green Industrial Adaptor

GST40A series

Min. DIN 3 Pin with Lock (male)	Type No.	Pin Assignment		Quick Adapter Accessory
		PIN No.	Output	
   KYCON KPPX-3P equivalent	R6B	1	+Vo	Available (Current rating: 7.5A max.)
		2	-Vo	
		3	+Vo	
Min. DIN 4 Pin with Lock (male)	Type No.	Pin Assignment		Available (Current rating: 7.5A max.)
   KYCON KPPX-4P equivalent	R7B	1	+Vo	
		2	-Vo	
		3	-Vo	
		4	+Vo	
Min. DIN 4 Pin with Lock (female)	Type No.	Pin Assignment		None
   KYCON KPJX-CM-4S equivalent	R7BF	1	+Vo	
		2	-Vo	
		3	-Vo	
		4	+Vo	
DIN 5 Pin (male)	Type No.	Pin Assignment		Available (Current rating: 7.5A max.)
  	R1B	1	-Vo	
		2	-Vo	
		3	+Vo	
		4	-Vo	
		5	+Vo	
Stripped and tinned leads	Type No.	Pin Assignment		None
  Length of Land L1 by request (MW's standard length, L: <u>25</u> mm, L1: <u>5</u> mm) (NOTE: The wire color is for reference only, please refer to the actual product)	by customer	1	+Vo	
		2	-Vo	

■ Installation Manual

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