GST18A series

18W AC-DC Reliable Green Industrial Adaptor

UL62368-1 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

ECO Household Automate Industrial Security Network Telecom

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℃ wide range working temperature
- LED indicator for power on
- Various DC plug quick adapter accessory available (Plug kit sold sperately, please refer to : https://www.meanwell.com/upload/pdf/DC_plug.pdf)
- 3 years warranty

Applications

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

Description

GST18A is a highly reliable, 18W 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 5VDC and 48VDC that can satisfy the demands for various types of consumer electronic devices.

With the efficiency up to 89% and the extremely low no-load power consumption below 0.075W, GST18A 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.GST18A is certified for the international safety regulations.

Model Encoding

GST 18 A 05 -P1J

- DC plug type
  - P1J: Standard model,2.1φx5.5φx11mm,C+,tuning fork type
  - Other options available by customer requested (see Page 4~5)
- Output voltage
- IEC320-C14 AC inlet
- Rated wattage
- Series name

MEAN WELL

18W AC-DC Reliable Green Industrial Adaptor

GST18A series

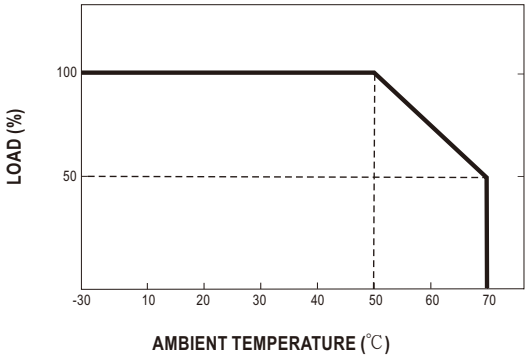
SPECIFICATION

ORDER NO.		GST18A05-P1J	GST18A07-P1J	GST18A09-P1J	GST18A12-P1J	GST18A15-P1J	GST18A18-P1J	GST18A24-P1J	GST18A28-P1J	GST18A48-P1J
OUTPUT	SAFETY MODEL NO.	GST18A05	GST18A07	GST18A09	GST18A12	GST18A15	GST18A18	GST18A24	GST18A28	GST18A48
	DC VOLTAGE Note.2	5V	7.5V	9V	12V	15V	18V	24V	28V	48V
	RATED CURRENT	3.0A	2.0A	2.0A	1.50A	1.20A	1.0A	0.75A	0.64A	0.375A
	CURRENT RANGE	0 ~ 3.0A	0 ~ 2.0A	0 ~2.0A	0 ~ 1.50A	0 ~ 1.20A	0 ~ 1.0A	0 ~ 0.75A	0 ~ 0.64A	0 ~ 0.375A
	RATED POWER (max.)	15W	15W	18W	18W	18W	18W	18W	18W	18W
	RIPPLE & NOISE (max.) Note.3	80mVp-p	80mVp-p	80mVp-p	80mVp-p	100mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p
	VOLTAGE TOLERANCE Note.4	±5.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±2.0%	±2.0%	±2.0%
	LINE REGULATION Note.5	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LOAD REGULATION Note.6	±5.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±2.0%	±2.0%	±2.0%
	SETUP, RISE, HOLD UP TIME	1000ms, 30ms, 50ms/230VAC 1500ms, 30ms, 15ms/115VAC at full load								
INPUT	VOLTAGE RANGE Note.7	85 ~ 264VAC								
	FREQUENCY RANGE	47 ~ 63Hz								
	EFFICIENCY (Typ.)	81%	85%	85%	86%	87%	88%	88%	88.5%	89%
	AC CURRENT	0.5A / 115VAC 0.3A / 230VAC								
	INRUSH CURRENT (max.)	Cold start 35A / 115VAC 65A / 230VAC								
	LEAKAGE CURRENT(max.)	0.75mA / 240VAC								
PROTECTION	OVERLOAD	110 ~ 150% rated output power								
		Protection type : Hiccup mode, recovers automatically after fault condition is removed								
	OVER VOLTAGE	110 ~ 140% rated output voltage								
		Protection type : Clamp by zener diode, output short								
ENVIRONMENT	WORKING TEMP.	-30 ~ +70℃ (Refer to "Derating Curve")								
	WORKING HUMIDITY	20% ~ 90% RH non-condensing								
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 10 ~ 95% RH non-condensing								
	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 Note. 8	UL62368-1, CSA C22.2 No.62368-1, TUV 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 IEC62368-1 (optional) approved								
	WITHSTAND VOLTAGE	I/P-O/P:4242VDC , I/P-FG:2121VDC								
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG:100M Ohms / 500VDC / 25℃ / 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 3, 8KV air; Level 2, 4KV 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	500Khrs min. MIL-HDBK-217F(25℃)								
	DIMENSION	93*54*36mm (L*W*H)								
	PACKING	209g; 60pcs/13.5Kg/1.02CUFT								
CONNECTOR	PLUG	See page 4~5 ; Other type available by customer requested								
	CABLE	See page 4~5 ; Other type available by customer requested								

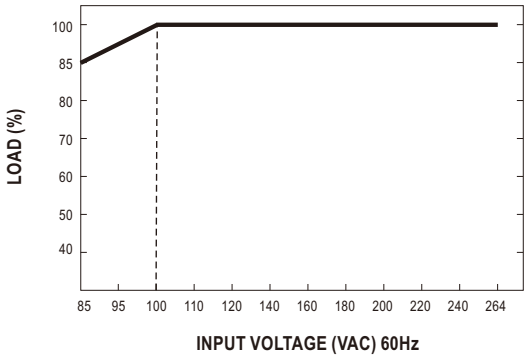
NOTE

1. All parameters are specified at 230VAC input, rated load, 25℃ 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. Load regulation is measured from 10% to 100% rated load.
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. GST18A □ -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 http://www.meanwell.com)

■ Derating Curve

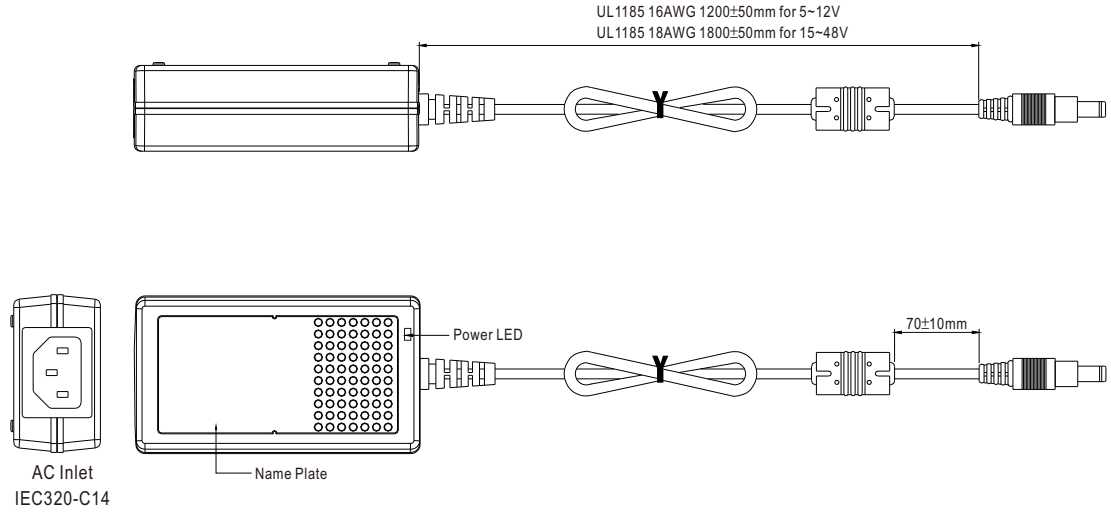


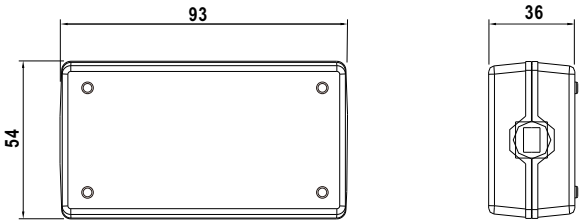
■ Static Characteristics



■ Mechanical Specification

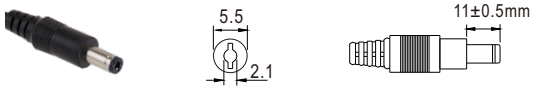
Unit:mm





■ DC output plug

◎ Standard plug: P1J

P1J	Pin Assignment
	Outside Inside -V not connected to AC FG(standard) -V connected to AC FG(optional)

◎ DC plug changeable through:

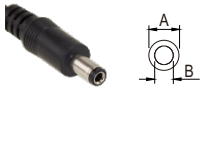
(1) Customization of the standard part with an optional DC plug according to the table (MOQ applicable)

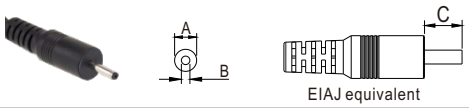
(2) Quick adapter accessory (sold separately without MOQ)

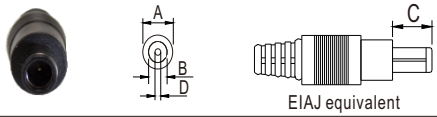
Please refer to below table and online selection guide : https://www.meanwell.com/upload/pdf/DC_plug.pdf

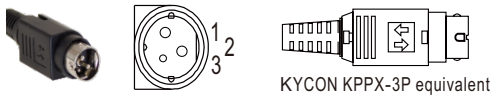
Example quick adapter accessory:

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

Tuning Fork Style	Type No.	A / OD	B / ID	C / L	Quick Adapter Accessory
	P1I	5.5	2.1	9.5	Available (Current rating: 7.5A max.)
	P1L	5.5	2.5	9.5	
	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	
	P1MR	5.5	2.5	11.0	
Barrel Style	**Type No.**	**A / OD**	**B / ID**	**C / L**	
	P2I	5.5	2.1	9.5	None
	P2J	5.5	2.1	11.0	
	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 / OD**	**B / ID**	**C / L**	
	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 OD	B ID	C L	Quick Adapter Accessory
 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 OD	B ID	C L	D 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	

Min. DIN 3 Pin with Lock (male)	Type No.	Pin Assignment		
		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		
		PIN No.	Output	
KYCON KPPX-4P equivalent	R7B	1	+Vo	Available (Current rating: 7.5A max.)
		2	-Vo	
		3	-Vo	
		4	+Vo	

Min. DIN 4 Pin with Lock (female)	Type No.	Pin Assignment		
		PIN No.	Output	
KYCON KPJX-CM-4S equivalent	R7BF	1	+Vo	None
		2	-Vo	
		3	-Vo	
		4	+Vo	

DIN 5 Pin (male)	Type No.	Pin Assignment		
		PIN No.	Output	
	R1B	1	-Vo	Available (Current rating: 7.5A max.)
		2	-Vo	
		3	+Vo	
		4	-Vo	
		5	+Vo	

Stripped and tinned leads	Type No.	Pin Assignment		
		PIN No.	Output	
Length of Land L1 by request (MW's standard length, L: 25 mm, L1: 5 mm)	by customer	1	+Vo	None
		2	-Vo	

■ Installation Manual

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