



User's Manual



Video



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

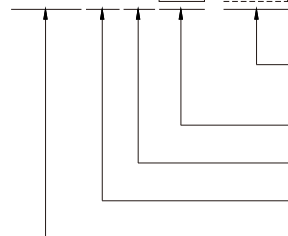
Description

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, 2.1 ϕ x 5.5 ϕ x 11mm, 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

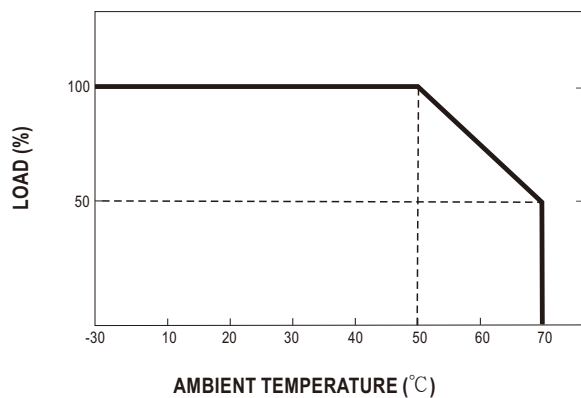
ORDER NO.		GST18A05-P1J	GST18A07-P1J	GST18A09-P1J	GST18A12-P1J	GST18A15-P1J	GST18A18-P1J	GST18A24-P1J	GST18A28-P1J	GST18A48-P1J	
OUTPUT	SAFETY MODEL NO.	GST18A05	GST18A07	GST18A09	GST18A12	GST18A15	GST18A18	GST18A24	GST18A28	GST18A48	
	DC VOLTAGE Note.2	5V	7.5V	9V	12V	15V	18V	24V	28V	48V	
	RATED CURRENT	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									
	WORKING TEMP.	-30 ~ +70℃ (Refer to "Derating Curve")									
ENVIRONMENT	WORKING HUMIDITY	20% ~ 90% RH non-condensing									
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 10 ~ 95% RH non-condensing									
	TEMP. COEFFICIENT	± 0.03% / °C (0 ~ 50℃)									
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes									
	SAFETY STANDARDS Note. 8	UL62368-1, CSA C22.2 No.62368-1, TUV BS EN/EN62368-1, BSMI CNS15598-1, CCC GB4943.1, PSE J62368-1, AS/NZS 60950.1, BIS IS13252, KC K60950-1, EAC TP TC 004 approved									
SAFETY & EMC (Note. 9)	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	BS EN/EN55032(CISPR32),FCC PART 15/CISPR22 CAN ICES-3(B)/NMB-3(B),CNS15936,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),CNS15936,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 3, 8KV air; Level 2, 4KV 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	3879.7K hrs min. Telcordia SR-332 (Bellcore) ; 668.4K hrs 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 0.1 μ F & 47 μ F 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 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 https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf) ※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx										



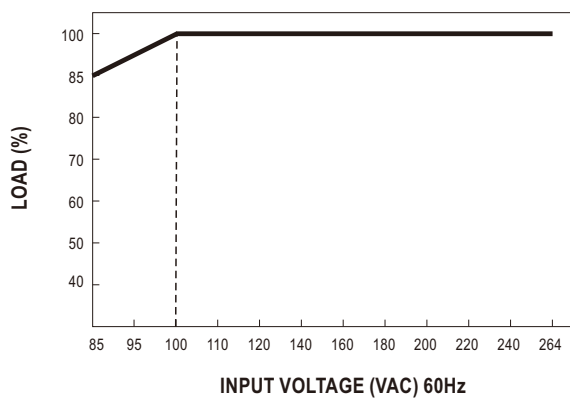
18W AC-DC Reliable Green Industrial Adaptor

GST18A series

Derating Curve



Static Characteristics

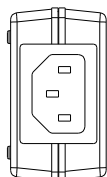
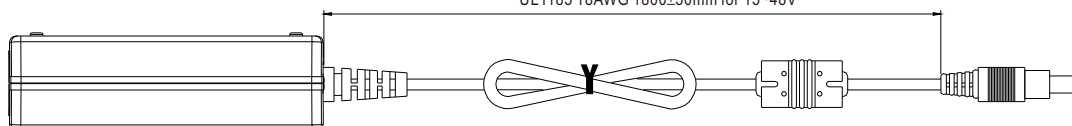


Mechanical Specification

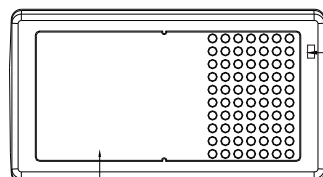
(Unit: mm, tolerance ± 1 mm)

Case No, GSM36

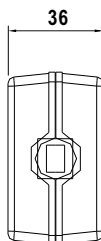
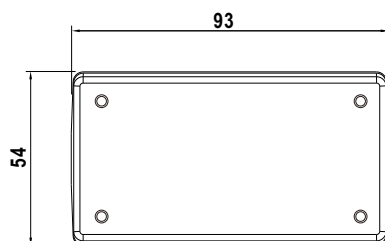
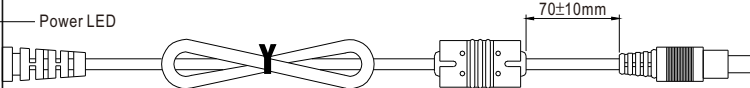
UL1185 16AWG 1200 $\pm$ 50mm for 5~12V
UL1185 18AWG 1800 $\pm$ 50mm for 15~48V



AC Inlet
IEC320-C14



Name Plate



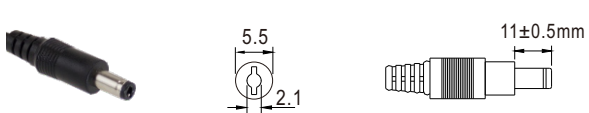


18W AC-DC Reliable Green Industrial Adaptor

GST18A series

■ 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:

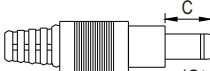
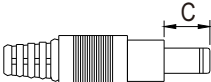
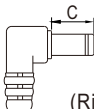
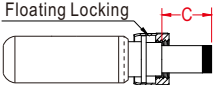
- (1) Customization of the standard part with an optional DC plug according to the table (MOQ applicable)
- (2) Quick adapter accessory (sold separately without MOQ)

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

Example quick adapter accessory:



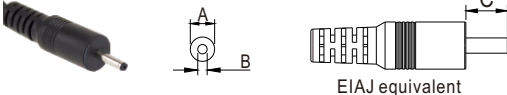
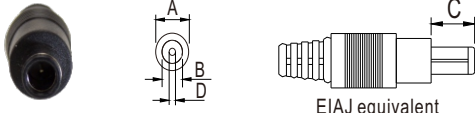
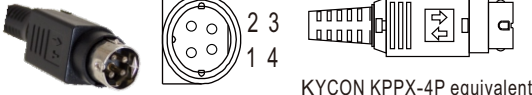
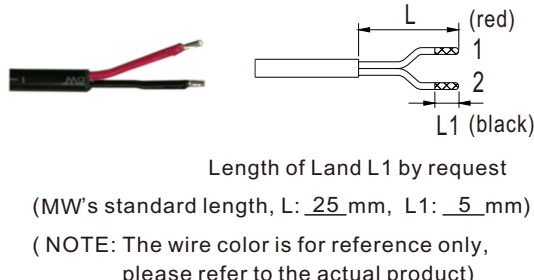
◎ Optional DC plug: (Available in customized cable or quick adapter)

Tuning Fork Style		Type No.	A OD	B ID	C L	Quick Adapter Accessory
 	 (Straight)	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	
	 (Right-angled)	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	None
 	 (Straight)	P2I	5.5	2.1	9.5	
		P2J	5.5	2.1	11.0	
		P2L	5.5	2.5	9.5	
	 (Right-angled)	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	None
 	 Floating Locking SWITCHCRAFT original or equivalent	P2S(S761K)	5.53	2.03	12.06	
		P2K(761K)	5.53	2.54	12.06	
		P2C(S760K)	5.53	2.03	9.52	
		P2D(760K)	5.53	2.54	9.52	



18W AC-DC Reliable Green Industrial Adaptor

GST18A series

Min. Pin Style	Type No.	A	B	C	Quick Adapter Accessory	
		OD	ID	L		
	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	
	P4A	5.5	3.4	11.0	1.0	
	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			
	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			
	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			
	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			
	by customer	1	+Vo	None		
		2	-Vo			

■ Installation Manual

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