



User's Manual



Video



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

Applications

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

GTIN CODE

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

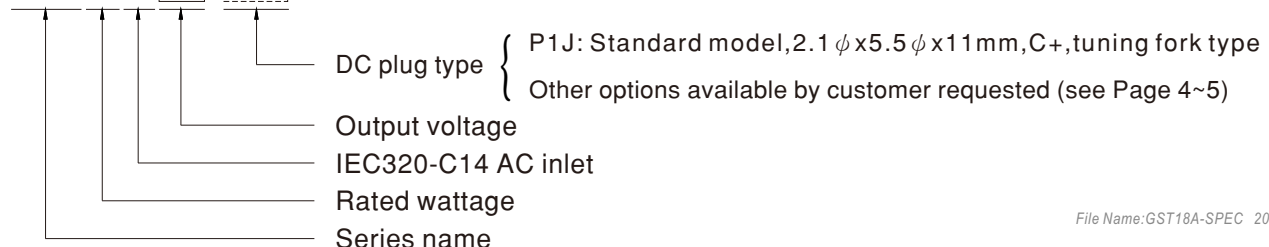
Description

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

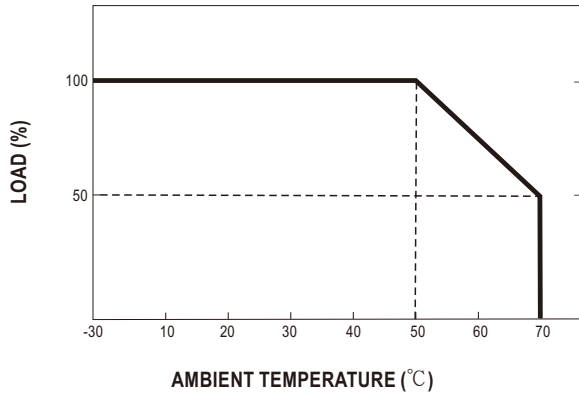
GST 18 A 05 - P1J



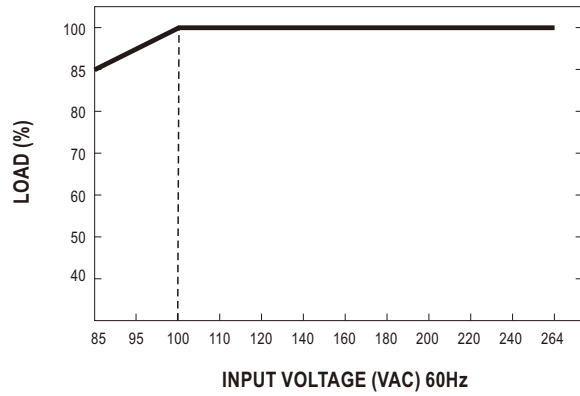
SPECIFICATION

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% / °C (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 BS EN/EN62368-1, BSMI CNS15598-1, CCC GB4943.1, PSE J62368-1, AS/NZS 62368.1, BIS IS13252, KC K60950-1, EAC TP TC 004 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	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											

Derating Curve



Static Characteristics

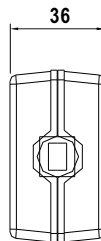
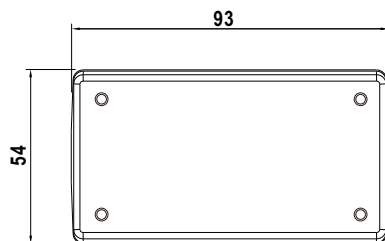
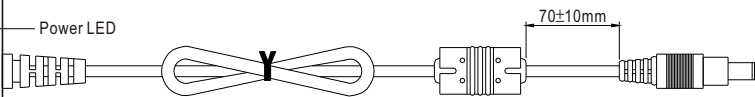
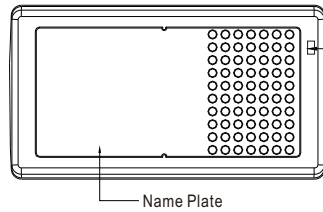
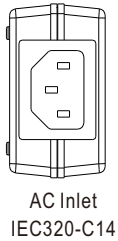
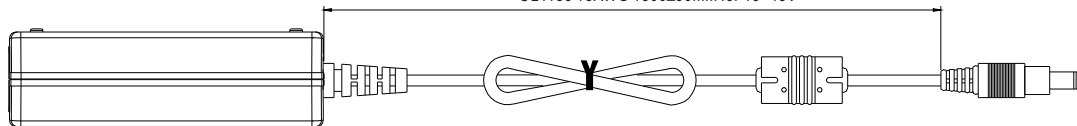


Mechanical Specification

(Unit: mm, tolerance ± 1 mm)

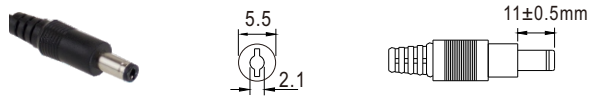
Case No, GSM36

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



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:

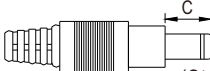
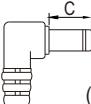
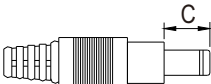
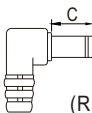
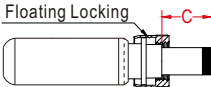
- Customization of the standard part with an optional DC plug according to the table (MOQ applicable)
- Quick adapter accessory (sold separately without MOQ)

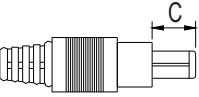
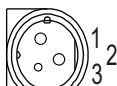
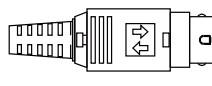
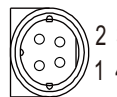
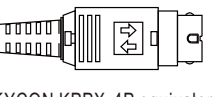
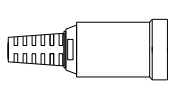
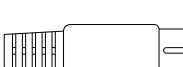
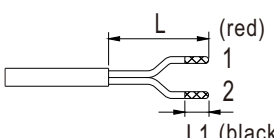
Please refer to below table and online selection guide : https://www.meanwell.com/upload/pdf/DC_plug.pdf

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	

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	Available (Current rating: 7.5A max.)
   EIAJ equivalent	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		Available (Current rating: 7.5A max.)		
   KYCON KPPX-3P equivalent	R6B	PIN No.	Output			
		1	+Vo			
		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	PIN No.	Output			
		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	PIN No.	Output			
		1	+Vo			
		2	-Vo			
		3	-Vo			
		4	+Vo			
DIN 5 Pin (male)	Type No.	Pin Assignment		Available (Current rating: 7.5A max.)		
  	R1B	PIN No.	Output			
		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: 25 mm, L1: 5 mm) (NOTE: The wire color is for reference only, please refer to the actual product)	by customer	PIN No.	Output			
		1	+Vo			
		2	-Vo			

Installation Manual

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