

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

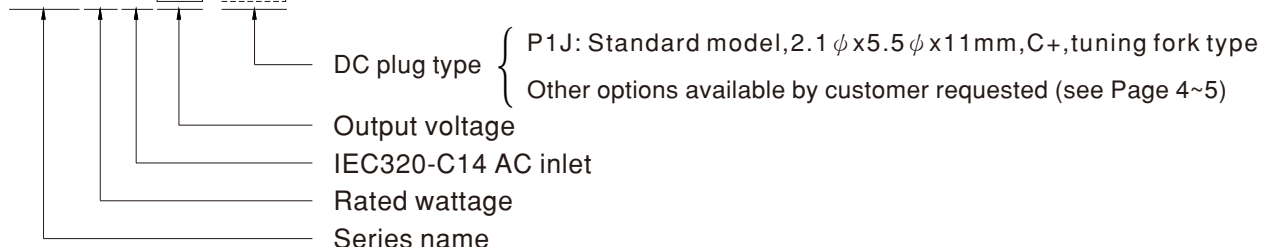
Description

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

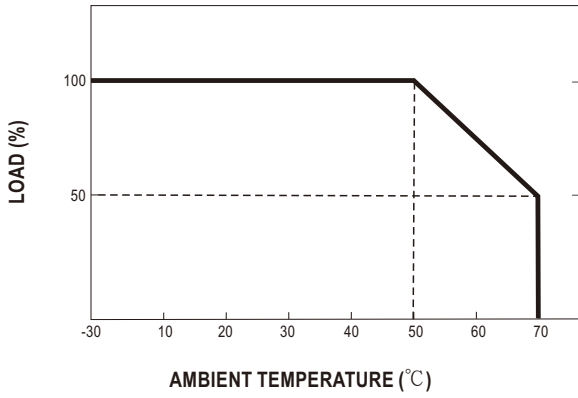




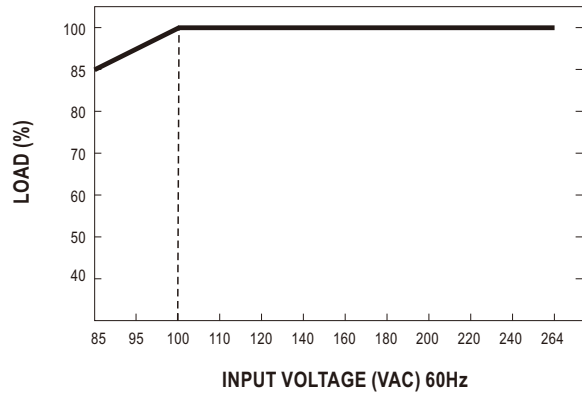
SPECIFICATION

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°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. 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°C / 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°C)									
	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	<p>1.All parameters are specified at 230VAC input, rated load, 25°C 70% RH ambient.</p> <p>2.DC voltage: The output voltage set at point measure by plug terminal & 50% load.</p> <p>3.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1µf & 47µf capacitor.</p> <p>4.Tolerance: includes set up tolerance, line regulation, load regulation.</p> <p>5.Line regulation is measured from low line to high line at rated load.</p> <p>6.Load regulation is measured from 10% to 100% rated load.</p> <p>7.Derating may be needed under low input voltage. Please check the derating curve for more details.</p> <p>8.The demand for Malaysia safety is processed with the order no. GST18A □ -SIRIM by request. Please contact MEAN WELL for details.</p> <p>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)</p>										

■ Derating Curve



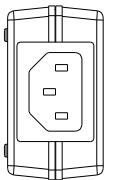
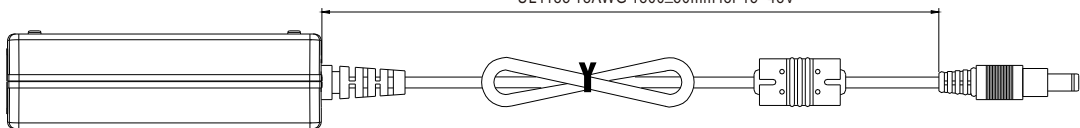
■ Static Characteristics



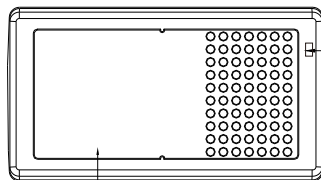
■ Mechanical Specification

Unit:mm

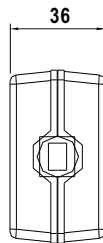
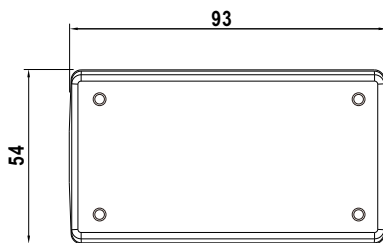
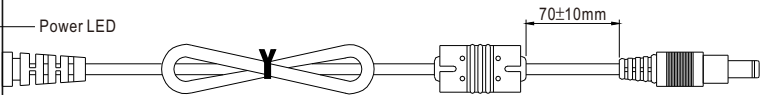
UL1185 16AWG 1200±50mm for 5~12V
 UL1185 18AWG 1800±50mm for 15~48V



AC Inlet
IEC320-C14



Name Plate



■ 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	B	C	Quick Adapter Accessory	
		OD	ID	L		
	P1I (Straight)	5.5	2.1	9.5	Available (Current rating: 7.5A max.)	
	P1L (Straight)	5.5	2.5	9.5		
	P1M (Straight)	5.5	2.5	11.0		
	P1IR (Right-angled)	5.5	2.1	9.5		
	P1JR (Right-angled)	5.5	2.1	11.0		
	P1LR (Right-angled)	5.5	2.5	9.5		
	P2I (Straight)	5.5	2.1	9.5	None	
	P2J (Straight)	5.5	2.1	11.0		
	P2L (Straight)	5.5	2.5	9.5		
	P2M (Straight)	5.5	2.5	11.0		
	P2IR (Right-angled)	5.5	2.1	9.5		
	P2JR (Right-angled)	5.5	2.1	11.0		
	P2LR (Right-angled)	5.5	2.5	9.5		
	P2MR (Right-angled)	5.5	2.5	11.0		
	Type No.	A	B	C	None	
		OD	ID	L		
		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	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.)
	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.)		
	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.)		
	R7B	PIN No.	Output			
		1	+Vo			
		2	-Vo			
		3	-Vo			
4	+Vo					
Min. DIN 4 Pin with Lock (female)	Type No.	Pin Assignment		None		
	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		
<p>Length of Land L1 by request (MW's standard length, L: 25 mm, L1: 5 mm)</p>	by customer	PIN No.	Output			
		1	+Vo			
2	-Vo					

■ Installation Manual

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