

GST18U Series

18W AC-DC Reliable Green Industrial Adapter



Features

- **Global certificates**
- Universal AC input / Full range
- 2 pole USA plug, Class II power unit
- No load power consumption < 0.075W
- **Energy efficiency Level VI**
- Comply with EISA 2007/DoE and NRCAN
- 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

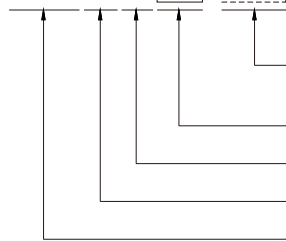
MW Search: <https://www.meanwell.com/serviceGTIN.aspx>

Description

GST18U is a highly reliable, 18W wall-mounted style single-output green adaptor series. This product is a class II power unit (no FG), equipped with a 2-Pin standard USA AC power plug, 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, GST18U is compliant with USA EISA 2007/DoE and Canada NRCAN. 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, providing the double insulation that effectively prevents electrical shock. GST18U is certified for the international safety regulations.

Model Encoding

GST 18 U 05 - P1J

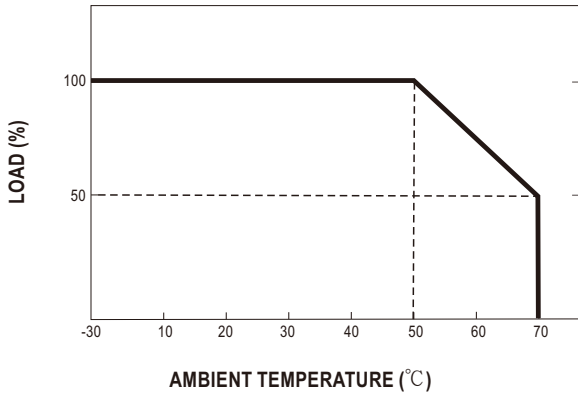


- DC plug type { P1J: Standard model, 2.1 ϕ x 5.5 ϕ x 11 mm, C+, tuning fork type
Other options available by customer requested (see Page 4~5)
- Output voltage
- USA 2 pin AC plug
- Rated wattage
- Series name

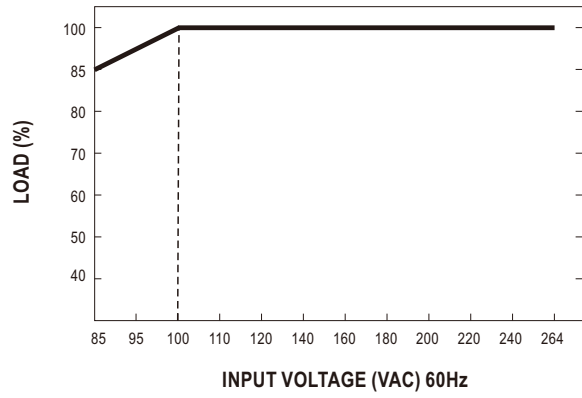
SPECIFICATION

ORDER NO.	GST18U05-P1J	GST18U07-P1J	GST18U09-P1J	GST18U12-P1J	GST18U15-P1J	GST18U18-P1J	GST18U24-P1J	GST18U28-P1J	GST18U48-P1J		
OUTPUT	SAFETY MODEL NO.	GST18U05	GST18U07	GST18U09	GST18U12	GST18U15	GST18U18	GST18U24	GST18U28	GST18U48	
	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.)	0.25mA / 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. 8)	SAFETY STANDARDS	UL62368-1, CSA C22.2 No.62368-1, BSMI CNS15598-1, EAC TP TC 004 approved									
	WITHSTAND VOLTAGE	I/P-O/P:4242VDC									
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH									
	EMC EMISSION	Parameter	Standard						Test Level / Note		
	Conducted emission	FCC PART 15 / CISPR22, CAN ICES-3(B)/NMB-3(B) CNS15936, EAC TP TC 020						Class B			
	Radiated emission	FCC PART 15 / CISPR22, CAN ICES-3(B)/NMB-3(B) CNS15936, EAC TP TC 020						Class B			
OTHERS	MTBF	3879.7K hrs min. Telcordia SR-332 (Bellcore) ; 668.4K hrs min. MIL-HDBK-217F (25°C)									
	DIMENSION	79*54*33mm (L*W*H)									
	PACKING	198g; 60pcs/12.9Kg/1.15CUFT									
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 115VAC 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 0.1 μF & 47 μF 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 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)</p> <p>※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx</p>										

Derating Curve



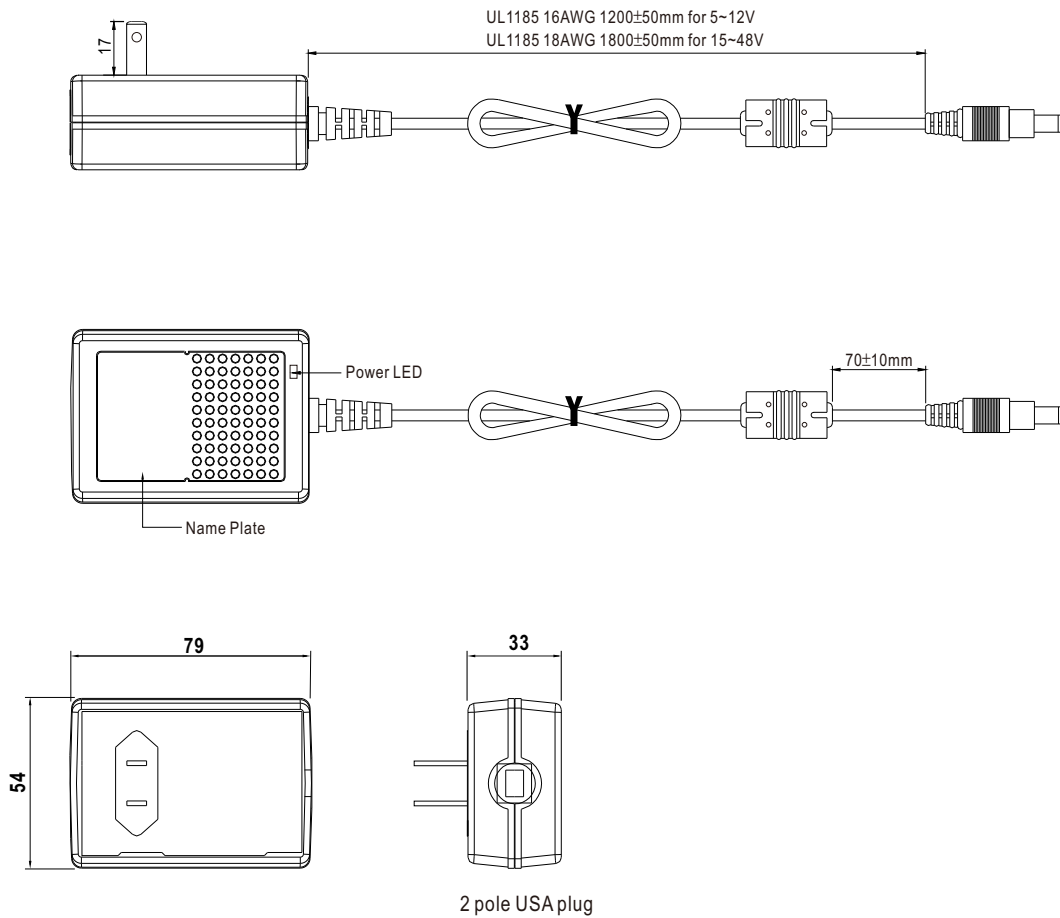
Static Characteristics



Mechanical Specification

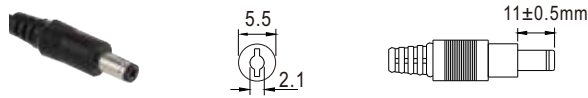


(Unit: mm, tolerance ± 1 mm)

Case No. GSM36



DC output plug

Standard plug: P1J

P1J	Pin Assignment
	
	Outside  Inside

DC plug changeable through:

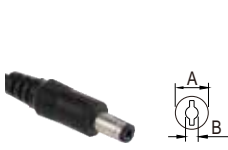


- (1) Customization of the standard part with an optional DC plug according to the table (MOQ applicable)
- (2) Quick adapter accessory (sold separately without MOQ)

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		
 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.)
 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>