



25W AC-DC Reliable Green Industrial Adaptor

GST25E series

User's Manual



■ Features

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

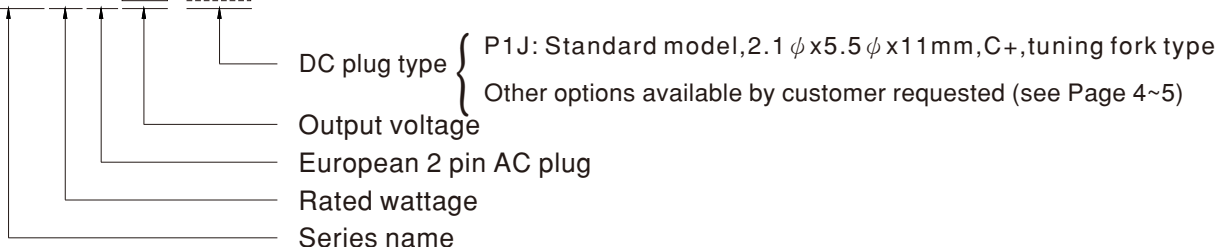
- Consumer electronic devices
- Telecommunication devices
- Office facilities
- Industrial equipments

■ Description

GST25E is a highly reliable, 25W wall-mounted style single-output green adaptor series. This product is a class II power unit (no FG), equipped with a 2-Pin standard European 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, GST25E is compliant with 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, providing the double insulation that effectively prevents electrical shock. GST25E is certified for the international safety regulations.

■ Model Encoding

GST 25 E 05 -P1J





SPECIFICATION

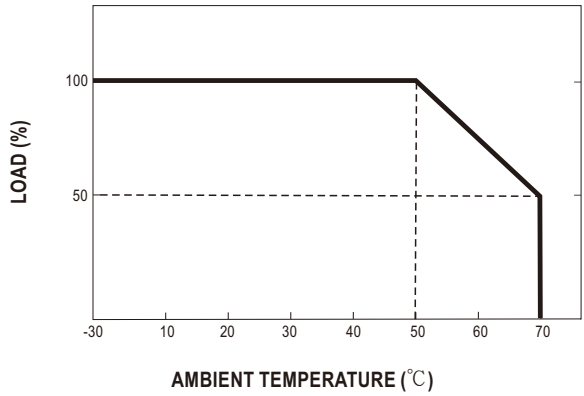
ORDER NO.		GST25E05-P1J	GST25E07-P1J	GST25E09-P1J	GST25E12-P1J	GST25E15-P1J	GST25E18-P1J	GST25E24-P1J	GST25E28-P1J	GST25E48-P1J	
OUTPUT	SAFETY MODEL NO.	GST25E05	GST25E07	GST25E09	GST25E12	GST25E15	GST25E18	GST25E24	GST25E28	GST25E48	
	DC VOLTAGE Note.2	5V	7.5V	9V	12V	15V	18V	24V	28V	48V	
	RATED CURRENT	4.0A	2.93A	2.55A	2.08A	1.66A	1.38A	1.04A	0.89A	0.52A	
	CURRENT RANGE	0 ~ 4.0A	0 ~ 2.93A	0 ~ 2.55A	0 ~ 2.08A	0 ~ 1.66A	0 ~ 1.38A	0 ~ 1.04A	0 ~ 0.89A	0 ~ 0.52A	
	RATED POWER (max.)	20W	22W	23W	25W	25W	25W	25W	25W	25W	
	RIPPLE & NOISE (max.) Note.3	80mVp-p	80mVp-p	80mVp-p	80mVp-p	100mVp-p	100mVp-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.)	81.5%	84.5%	85%	86.5%	87%	87%	88%	88%	89%	
	AC CURRENT	0.6A / 115VAC 0.35A / 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									
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	TUV BS EN/EN62368-1, EAC TP TC 004 approved; SIRIM MS IEC60950-1 (optional) 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	BS EN/EN55032(CISPR32), EAC TP TC 020					Class B			
		Radiated emission	BS EN/EN55032(CISPR32), EAC TP TC 020					Class B			
		Harmonic current	BS EN/EN61000-3-2					Class A			
		Voltage flicker	BS EN/EN61000-3-3					-----			
	EMC IMMUNITY	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			
		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	500Khrs min. MIL-HDBK-217F(25°C)							
DIMENSION	79*54*33mm (L*W*H)										
PACKING	202.5g; 60pcs/13.2Kg/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	1.All parameters are specified at 230VAC input, rated load, 25°C 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. GST25E □ -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) ※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx										



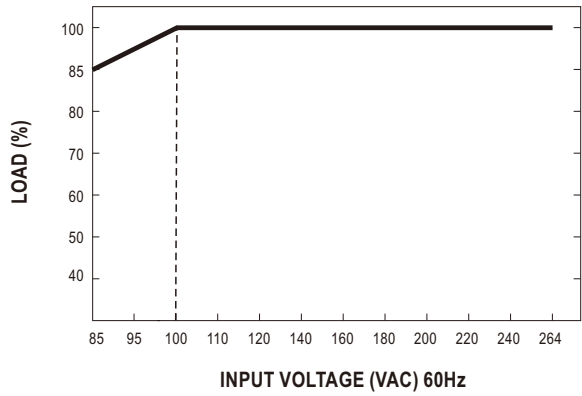
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Derating Curve

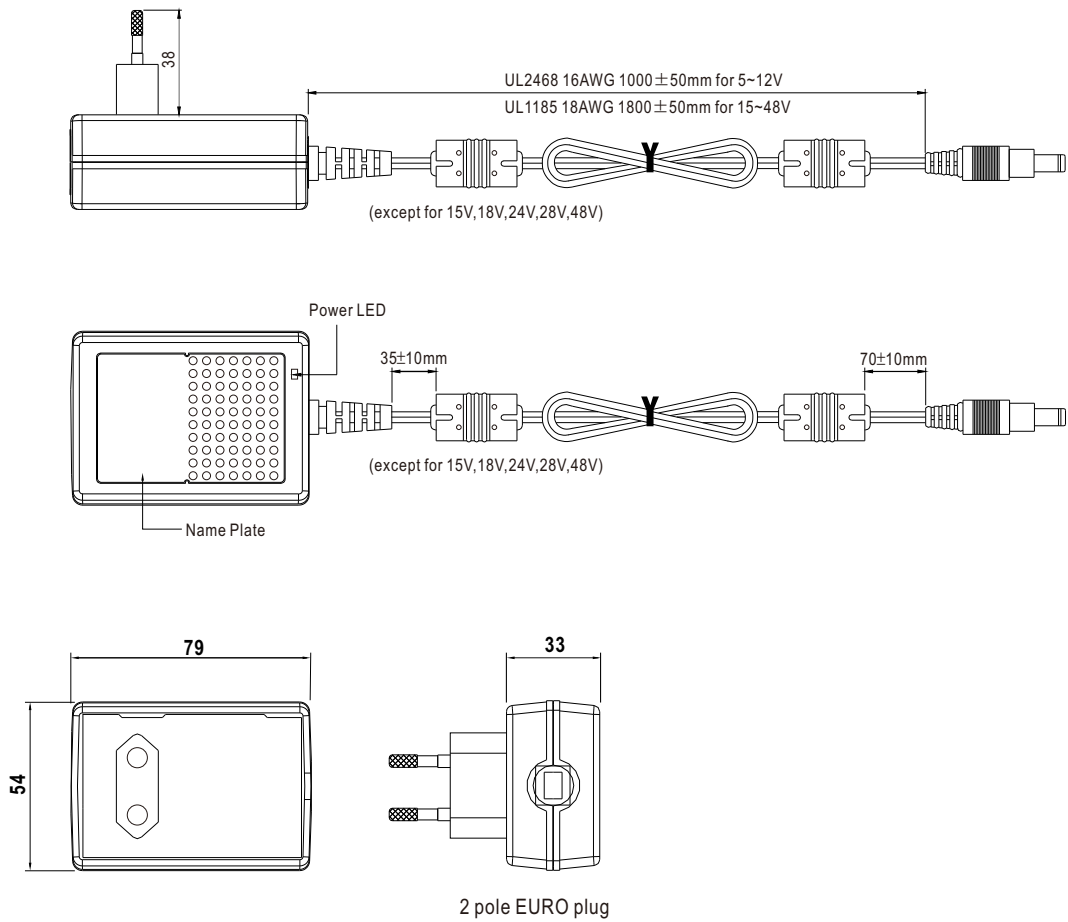


Static Characteristics



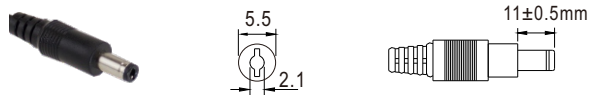
Mechanical Specification

Unit:mm



DC output plug

Standard plug: P1J

P1J	Pin Assignment
	
	Outside  Inside

DC plug changeable through:

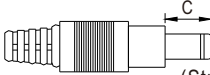
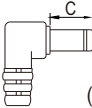
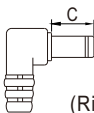
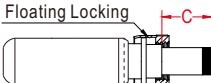
- Customization of the standard part with an optional DC plug according to the table (MOQ applicable)
- Quick adapter accessory (sold separately without MOQ)

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	



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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	
		OD	ID	L	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			
 Length of Land L1 by request (MW's standard length, L: 25 mm, L1: 5 mm)	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>