25W AC-DC Reliable Green Industrial Adaptor GST25B series

User's Manual

Video

UL62368-1 BS EN/EN62368-1 R33100 RoHS J62368-1 K60950-1 AS/NZS60950-1 GB4943.1 IS13252

MS IEC60950-1 (optional) IEC62368-1 TPTC004 Energy Verified Rendement Énergétique Vérifié

ECO Household Automate Industrial Security Network Telecom

Features

- **Global certificates**
- Universal AC input / Full range
- 2 pole AC inlet IEC320-C8,Class II 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℃ wide range working temperature
- LED indicator for power on
- Various DC plug quick adapter accessory available (Plug kit sold sperately, 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

GST25B is a highly reliable, 25W desktop style single-output green adaptor series. This product is a class II power unit (no FG), equipped with a standard IEC320-C8 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,GST25B 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, providing the double insulation that effectively prevents electrical shock. GST25B is certified for the international safety regulations.

Model Encoding

GST 25 B 05 - P1J

- DC plug type: P1J: Standard model,2.1 ϕ x5.5 ϕ x11mm,C+,tuning fork type; Other options available by customer requested (see Page 4~5)
- Output voltage
- IEC320-C8 AC inlet
- Rated wattage
- Series name

MEAN WELL

25W AC-DC Reliable Green Industrial Adaptor

GST25B series

SPECIFICATION

ORDER NO.		GST25B05-P1J	GST25B07-P1J	GST25B09-P1J	GST25B12-P1J	GST25B15-P1J	GST25B18-P1J	GST25B24-P1J	GST25B28-P1J	GST25B48-P1J
OUTPUT	SAFETY MODEL NO.	GST25B05	GST25B07	GST25B09	GST25B12	GST25B15	GST25B18	GST25B24	GST25B28	GST25B48
	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℃ (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% / ℃ (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 CNS14336, CCC GB4943.1,AS/NZS 60950.1,PSE J62368-1 , BIS IS13252, KC K60950-1, 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℃/ 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),CNS13438,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),CNS13438,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	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

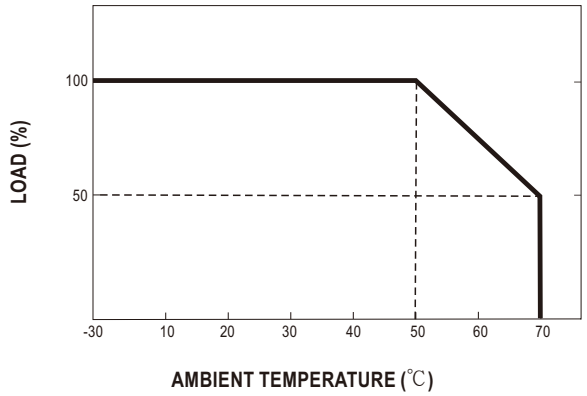
OTHERS	MTBF	3879.7K hrs min. Telcordia SR-332 (Bellcore) ; 674.6K hrs min. MIL-HDBK-217F (25℃)
	DIMENSION	79*54*33mm (L*W*H)
	PACKING	191.5g; 60pcs/12.5Kg/1.15CUFT
CONNECTOR	PLUG	See page 4~5 ; Other type available by customer requested
	CABLE	See page 4~5 ; Other type available by customer requested

NOTE

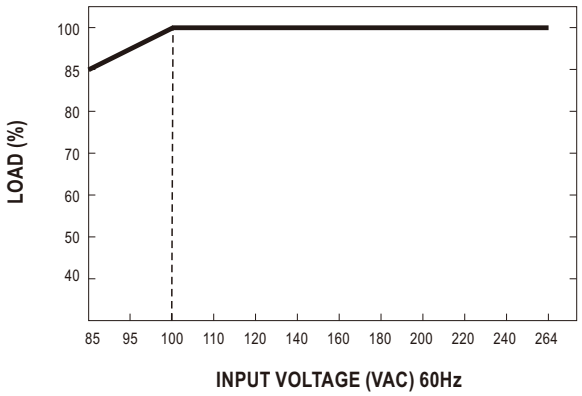
1.All parameters are specified at 230VAC input, rated load, 25℃ 70% RH ambient.
2.DC voltage: The output voltage set at point measure by plug terminal & 50% load.
3.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1μf & 47μf capacitor.
4.Tolerance: includes set up 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. GST25B □ -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

■ Derating Curve

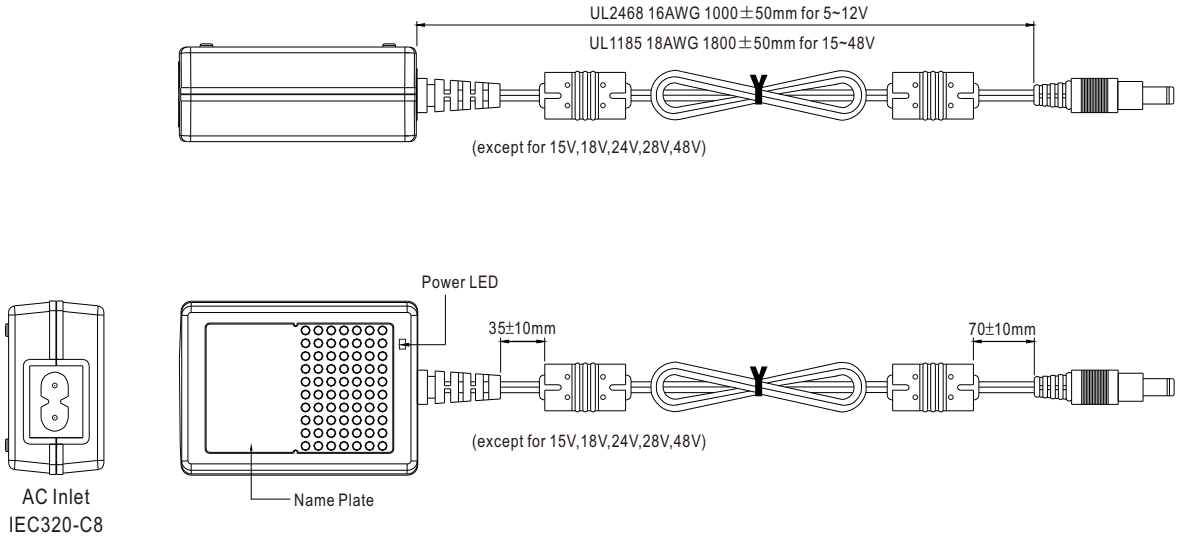


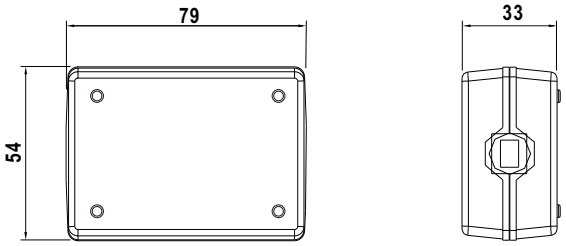
■ Static Characteristics



■ Mechanical Specification

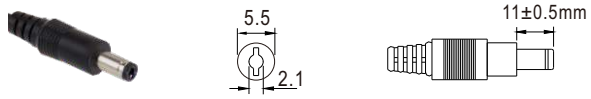
Unit:mm





■ DC output plug

◎ Standard plug: P1J

P1J	Pin Assignment
	 Outside Inside

◎ DC plug changeable through:

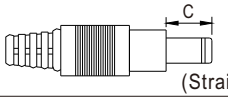
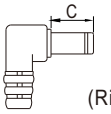
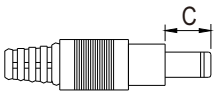
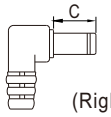
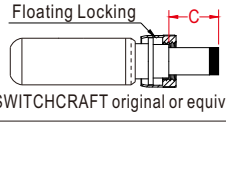
(1) Customization of the standard part with an optional DC plug according to the table (MOQ applicable)

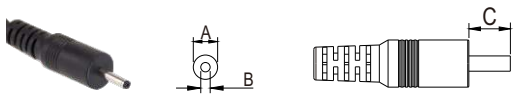
(2) Quick adapter accessory (sold separately without MOQ)

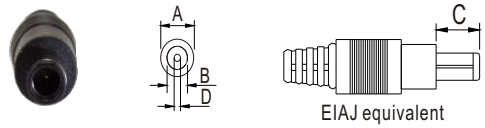
Please refer to below table and online selection guide : https://www.meanwell.com/upload/pdf/DC_plug.pdf

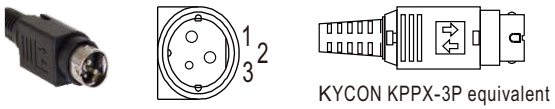
Example quick adapter accessory:

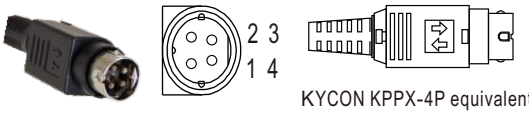
◎ Optional DC plug: (Available in customized cable or quick adapter)

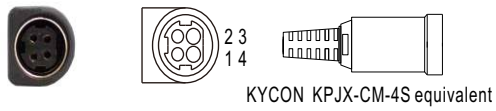
Tuning Fork Style		Type No.	A OD	B ID	C L	Quick Adapter Accessory
	 (Straight)	P1I	5.5	2.1	9.5	Available (Current rating: 7.5A max.)
		P1L	5.5	2.5	9.5	
		P1M	5.5	2.5	11.0	
	 (Right-angled)	P1IR	5.5	2.1	9.5	
		P1JR	5.5	2.1	11.0	
		P1LR	5.5	2.5	9.5	
		P1MR	5.5	2.5	11.0	
Barrel Style		Type No.	A OD	B ID	C L	
	 (Straight)	P2I	5.5	2.1	9.5	None
		P2J	5.5	2.1	11.0	
		P2L	5.5	2.5	9.5	
		P2M	5.5	2.5	11.0	
	 (Right-angled)	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	
	 SWITCHCRAFT original or equivalent	P2S(S761K)	5.53	2.03	12.06	None
		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	
 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	
	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