



E-Star Power Development Co., Ltd. (E-STAR)

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**25W Wall Mount power supply < GST25U**



**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
- 3 years warranty

**Applications**

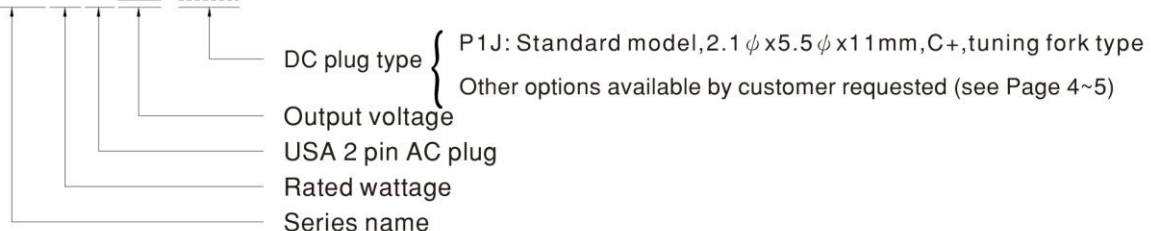
- Consumer electronic devices
- Telecommunication devices
- Office facilities
- Industrial equipments

**Description**

GST25U 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 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, GST25U 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. GST25U is certified for the international safety regulations.

**Model Encoding**

**GST 25 U 05 -P1J**





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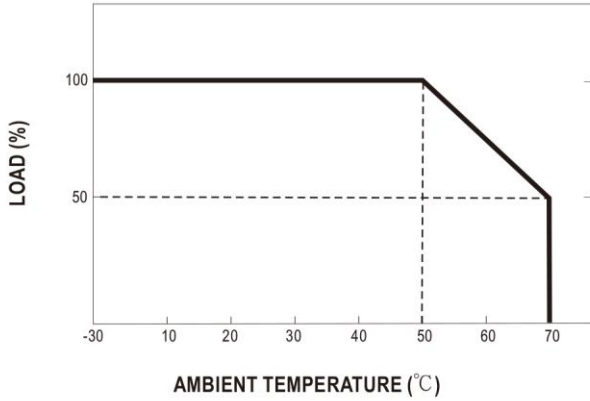
**SPECIFICATION**

ORDER NO.		GST25U05-P1J	GST25U07-P1J	GST25U09-P1J	GST25U12-P1J	GST25U15-P1J	GST25U18-P1J	GST25U24-P1J	GST25U28-P1J	GST25U48-P1J	
OUTPUT	SAFETY MODEL NO.	GST25U05	GST25U07	GST25U09	GST25U12	GST25U15	GST25U18	GST25U24	GST25U28	GST25U48	
	DC VOLTAGE <small>Note.2</small>	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.) <small>Note.3</small>	80mVp-p	80mVp-p	80mVp-p	80mVp-p	100mVp-p	100mVp-p	150mVp-p	150mVp-p	150mVp-p	
	VOLTAGE TOLERANCE <small>Note.4</small>	±5.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±2.0%	±2.0%	±2.0%	
	LINE REGULATION <small>Note.5</small>	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	
	LOAD REGULATION <small>Note.6</small>	±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 <small>Note.7</small>	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 <small>(Note. 8)</small>	SAFETY STANDARDS	UL62368-1, CSA C22.2 No. 62368-1, BSMI CNS14336-1, 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) CNS13438, EAC TP TC 020						Class B		
Radiated emission	FCC PART 15 / CISPR22, CAN ICES-3(B)/NMB-3(B) CNS13438, EAC TP TC 020						Class B				
OTHERS	MTBF	500Khrs 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 &amp; 50% load.</p> <p>3. Ripple &amp; noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1µf &amp; 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 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."</p>										

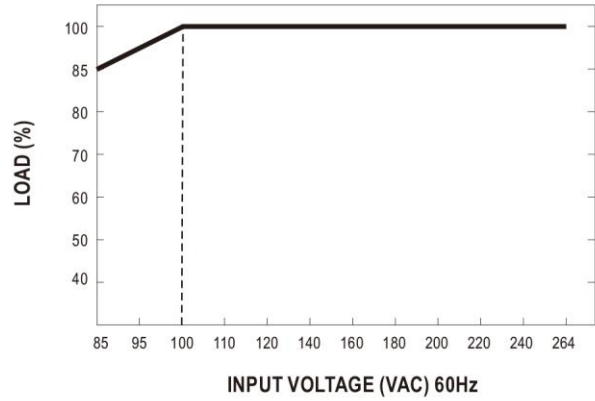


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**Derating Curve**

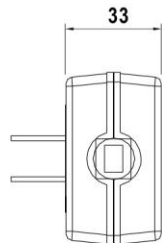
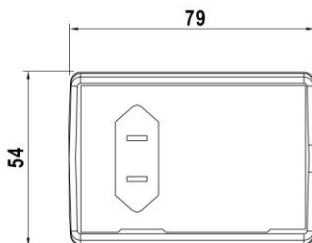
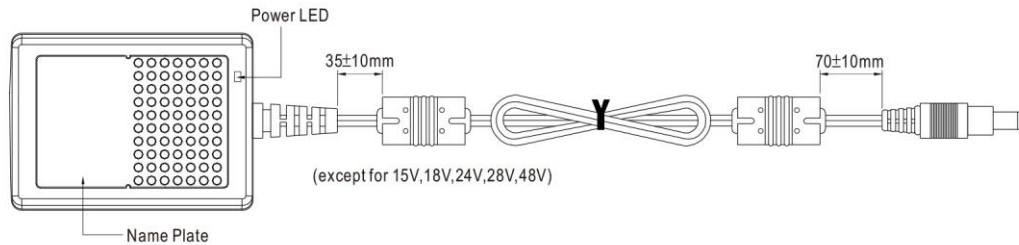
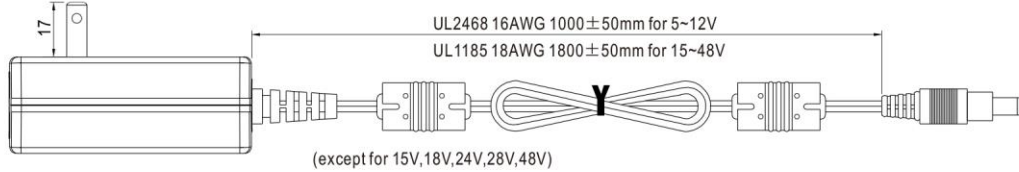


**Static Characteristics**



**Mechanical Specification**

Unit:mm






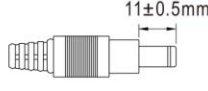

2 pole USA plug



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■ 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)

Example quick adapter accessory:

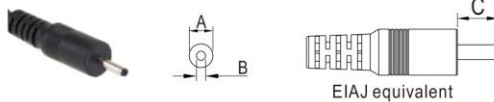
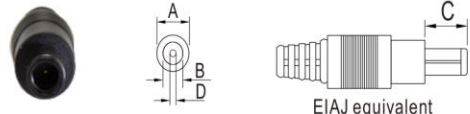

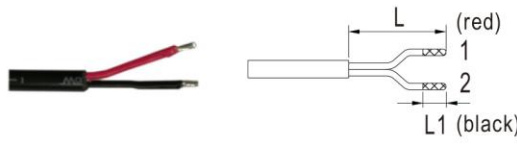


◎ Optional DC plug: (Available in customized cable or quick adapter)

Tuning Fork Style	Type No.	A	B	C	Quick Adapter Accessory	
		OD	ID	L		
 	(Straight)	P1I	5.5	2.1	9.5	Available (Current rating: 7.5A max.)
	(Straight)	P1L	5.5	2.5	9.5	
	(Straight)	P1M	5.5	2.5	11.0	
	(Right-angled)	P1IR	5.5	2.1	9.5	
	(Right-angled)	P1JR	5.5	2.1	11.0	
	(Right-angled)	P1LR	5.5	2.5	9.5	
 	(Straight)	P2I	5.5	2.1	9.5	None
	(Straight)	P2J	5.5	2.1	11.0	
	(Straight)	P2L	5.5	2.5	9.5	
	(Straight)	P2M	5.5	2.5	11.0	
	(Right-angled)	P2IR	5.5	2.1	9.5	
	(Right-angled)	P2JR	5.5	2.1	11.0	
	(Right-angled)	P2LR	5.5	2.5	9.5	
	(Right-angled)	P2MR	5.5	2.5	11.0	
 	Floating Locking 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	



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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					