



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

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**40W Wall Mount power supply < SGA40U**



**Features**

- Ultra slim
- 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
- Protections: Short circuit / Overload / Over voltage
- Fully enclosed plastic case
- Pass LPS
- 54V model available for PoE(optional)
- **Various DC plug quick adapter accessory available**
- 3 years warranty

**Applications**

- Consumer electronic devices
- Telecommunication devices
- Office facilities
- Industrial equipments
- Power sourcing equipment of PoE

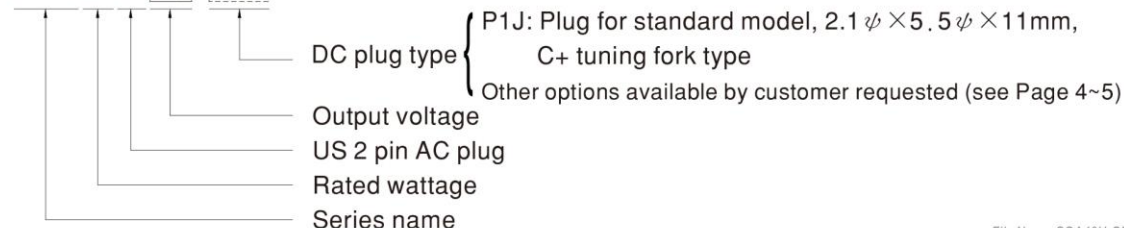
**Description**

SGA40U is a 40W ultra slim wall-mounted style single-output green adaptor series, which is compact and convenient for carry. SGA40U is a class II power unit (no FG) equipped with the standard 2-Pin U.S. plug, accepting the input range from 90VAC to 264VAC. The whole series provides different models with output voltages ranging between 5VDC and 48VDC that it 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, SGA40U is compliant with the latest U.S. energy regulation EISA 2007/DoE(Level VI). The supreme feature allows the adaptor to save the energy when it is under either the operating mode or the standby mode. The entire series is approved for international safety regulations; moreover, it adopts the 94V-0 flame retardant plastic case that it can effectively prevent users from electric hazards.

**Model Encoding**

**SGA 40 U 05 -P1J**





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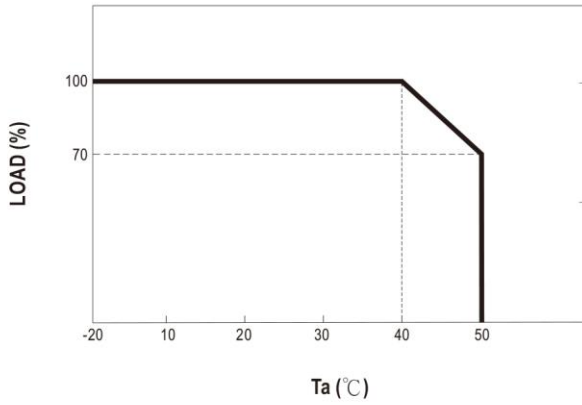
**SPECIFICATION**

ORDER NO.	SGA40U05-P1J	SGA40U09-P1J	SGA40U12-P1J	SGA40U15-P1J	SGA40U18-P1J	SGA40U24-P1J	SGA40U48-P1J	
OUTPUT	SAFETY MODEL NO.	SGA40U05	SGA40U09	SGA40U12	SGA40U15	SGA40U18	SGA40U24	SGA40U48
	DC VOLTAGE <small>Note.2</small>	5V	9V	12V	15V	18V	24V	48V
	RATED CURRENT	5A	4.44A	3.33A	2.66A	2.22A	1.66A	0.83A
	CURRENT RANGE	0 ~ 5A	0 ~ 4.44A	0 ~ 3.33A	0 ~ 2.66A	0 ~ 2.22A	0 ~ 1.66A	0 ~ 0.83A
	RATED POWER (max.)	25W	40W	40W	40W	40W	40W	40W
	RIPPLE & NOISE (max.) <small>Note.3</small>	120mVp-p	120mVp-p	120mVp-p	120mVp-p	120mVp-p	150mVp-p	150mVp-p
	VOLTAGE TOLERANCE <small>Note.4</small>	±5.0%	±5.0%	±3.0%	±2.0%	±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%
	LOAD REGULATION <small>Note.6</small>	±5.0%	±5.0%	±3.0%	±2.0%	±2.0%	±2.0%	±2.0%
	SETUP, RISE, HOLD UP TIME	1500ms, 100ms, 10ms/230VAC		1500ms, 100ms, 10ms/115VAC at full load				
INPUT	VOLTAGE RANGE <small>Note.7</small>	90 ~ 264VAC						
	FREQUENCY RANGE	47 ~ 63Hz						
	EFFICIENCY (Typ.)	83%	86.5%	86.5%	86.5%	87%	88%	89%
	AC CURRENT	1A / 115VAC		0.5A / 230VAC				
	INRUSH CURRENT (max.)	Cold start 40A / 115VAC		70A / 230VAC				
	LEAKAGE CURRENT(max.)	0.25mA / 240VAC						
PROTECTION	OVERLOAD	110 ~ 250% 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.	-20 ~ +50°C (Refer to "Derating Curve")						
	WORKING HUMIDITY	20% ~ 90% RH non-condensing						
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH non-condensing						
	TEMP. COEFFICIENT	±0.03% / °C (0 ~ 40°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, 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)				Class B	
Radiated emission	FCC PART 15 / CISPR22, CAN ICES-3(B)/NMB-3(B)				Class B			
OTHERS	LIFE	3 years : 100% load 40°C, 12hours / day						
	MTBF	400Khrs min. MIL-HDBK-217F(25°C)						
	DIMENSION	75.5*32*47.5mm (L*W*H)						
	PACKING	165g ; 60pcs / 13kg / CARTON						
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 0.1uf &amp; 47uf 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>							

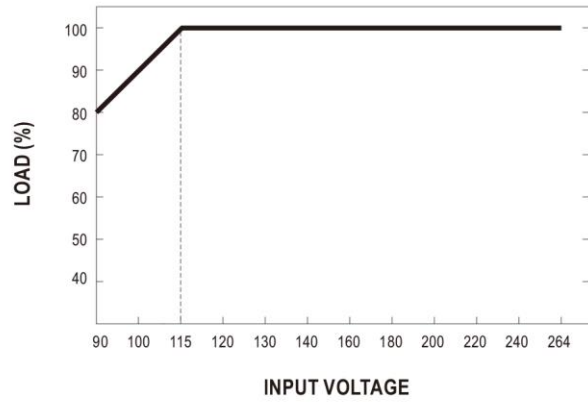


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**Derating Curve**

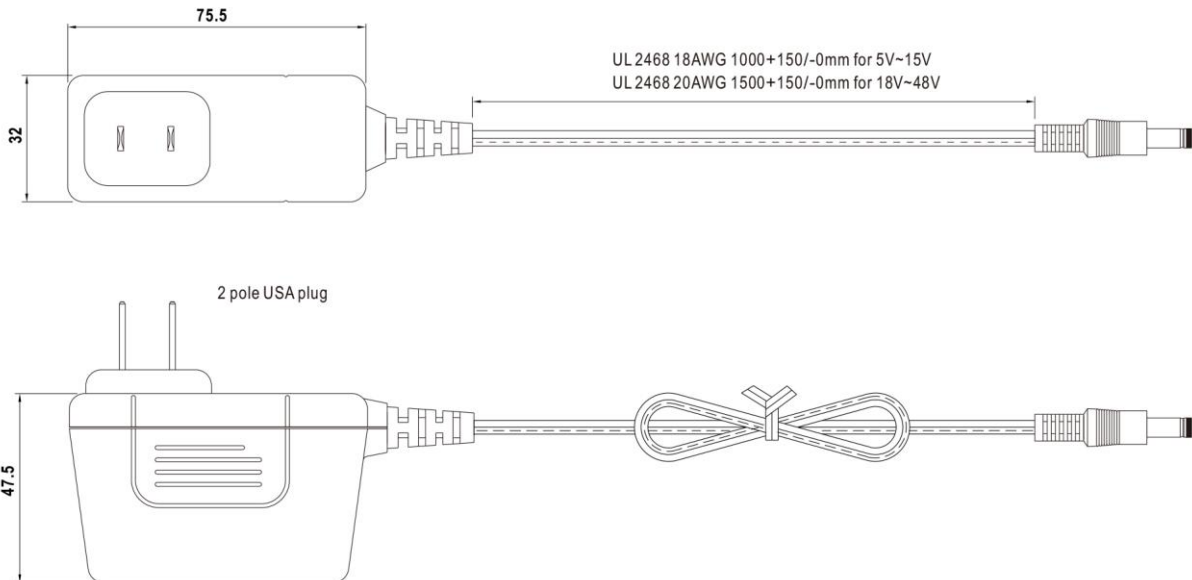


**Static Characteristics**



**Mechanical Specification**

Unit:mm





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■ DC output plug

◎ Standard plug: P1J

Unit:mm

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:



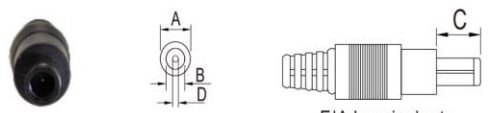
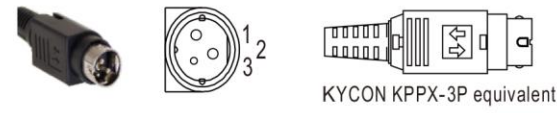
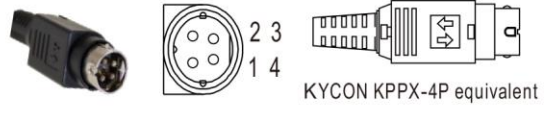



◎ Optional DC plug: (Available in customized cable or quick adapter)

Tuning Fork Style		Type No.	A	B	C	Quick Adapter Accessory
			OD	ID	L	
		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	
Barrel Style		Type No.	A	B	C	None
			OD	ID	L	
		P2I (Straight)	5.5	2.1	9.5	
		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	
Lock Style		Type No.	A	B	C	None
			OD	ID	L	
		P2S(S761K) Floating Locking	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	Available (Current rating: 5A max.)
			OD	ID	L	
		P3A	2.35	0.7	11.0	
		P3B	4.0	1.7	11.0	
		P3C	4.75	1.7	11.0	
			EIAJ equivalent			





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Center Pin Style	Type No.	A	B	C	D	Quick Adapter Accessory
		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				
 KYCON KPPX-3P equivalent	R6B	PIN No.	Output			
		1	+Vo			
		2	-Vo			
 KYCON KPPX-4P equivalent	R7B	PIN No.	Output			
		1	+Vo			
		2	-Vo			
		3	-Vo			
 KYCON KPJX-CM-4S equivalent	R7BF	PIN No.	Output			
		1	+Vo			
		2	-Vo			
		3	-Vo			
 KYCON KPJX-CM-4S equivalent	R7BF	PIN No.	Output			
		4	+Vo			
Stripped and tinned leads	Type No.	Pin Assignment				
 Length of Land L1 by request (MW's standard length, L: 25 mm, L1: 10 mm)	by customer	PIN No.	Output			
		1 (Ribbed or White)	+Vo			
		2 (Letter or Black)	-Vo			