



User's Manual



Video



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**
(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
- Power sourcing equipment of PoE

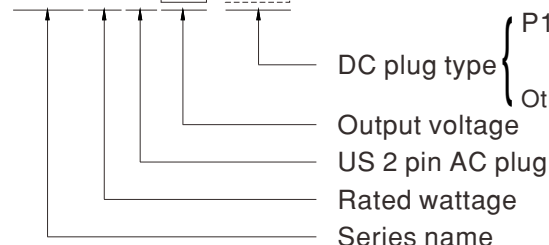
Description

SGA18U is a 18W ultra slim wall-mounted style single-output green adaptor series, which is compact and convenient for carry. SGA18U 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 86% and the extremely low no-load power consumption below 0.075W, SGA18U 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 18 U 05 - P1J


P1J: Plug for standard model, 2.1 ψ \times 5.5 ψ \times 11mm,

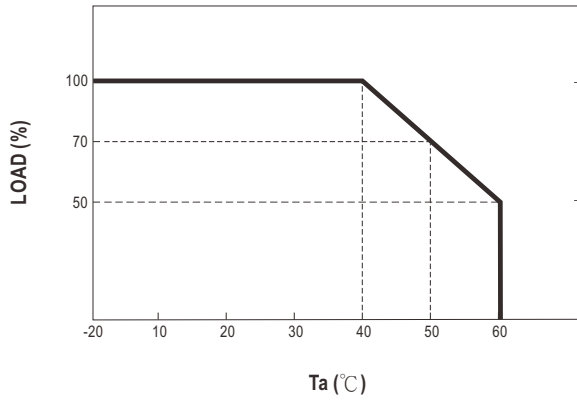
C+ tuning fork type

Other options available by customer requested (see Page 4~5)

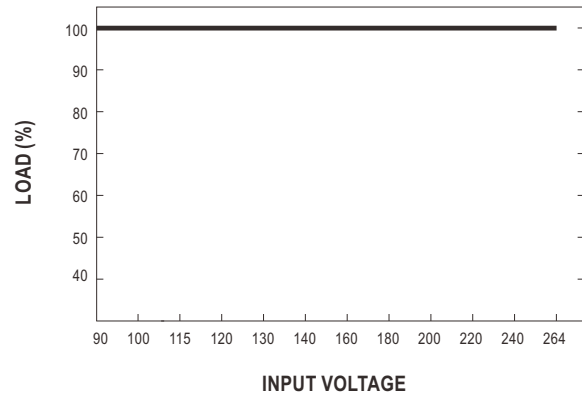
**SPECIFICATION**

ORDER NO.		SGA18U05-P1J	SGA18U09-P1J	SGA18U12-P1J	SGA18U15-P1J	SGA18U18-P1J	SGA18U24-P1J	SGA18U48-P1J
OUTPUT	SAFETY MODEL NO.	SGA18U05	SGA18U09	SGA18U12	SGA18U15	SGA18U18	SGA18U24	SGA18U48
	DC VOLTAGE Note.2	5V	9V	12V	15V	18V	24V	48V
	RATED CURRENT	3A	2A	1.5A	1.2A	1A	0.75A	0.375A
	CURRENT RANGE	0 ~ 3A	0 ~ 2A	0 ~ 1.5A	0 ~ 1.2A	0 ~ 1A	0 ~ 0.75A	0 ~ 0.375A
	RATED POWER (max.)	15W	18W	18W	18W	18W	18W	18W
	RIPPLE & NOISE (max.) Note.3	80mVp-p	80mVp-p	80mVp-p	80mVp-p	80mVp-p	100mVp-p	120mVp-p
	VOLTAGE TOLERANCE Note.4	± 5.0%	± 5.0%	± 3.0%	± 3.0%	± 3.0%	± 2.0%	± 2.0%
	LINE REGULATION Note.5	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%
	LOAD REGULATION Note.6	± 5.0%	± 5.0%	± 3.0%	± 3.0%	± 3.0%	± 2.0%	± 2.0%
SETUP, RISE, HOLD UP TIME		1500ms, 30ms, 10ms/230VAC 1500ms, 30ms, 10ms/115VAC at full load						
INPUT	VOLTAGE RANGE	90 ~ 264VAC						
	FREQUENCY RANGE	47 ~ 63Hz						
	EFFICIENCY (Typ.)	80.5%	84%	84%	84%	84.5%	85%	86%
	AC CURRENT	0.5A / 115VAC 0.25A / 230VAC						
	INRUSH CURRENT (max.)	Cold start 30A / 115VAC 45A / 230VAC						
	LEAKAGE CURRENT(max.)	0.25mA / 240VAC						
PROTECTION	OVERLOAD	120 ~ 180% 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 ~ +60℃ (Refer to "Derating Curve")						
	WORKING HUMIDITY	20% ~ 90% RH non-condensing						
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH non-condensing						
	TEMP. COEFFICIENT	± 0.03% / °C (0 ~ 40℃)						
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes						
SAFETY & EMC (Note. 7)	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℃/ 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℃, 8hours / day						
	MTBF	450Khrs min. MIL-HDBK-217F(25℃)						
	DIMENSION	75.5*32*47.5mm (L*W*H)						
	PACKING	150g ; 60pcs / 10kg / 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	1.All parameters are specified at 115VAC 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 0.1uf & 47uf 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.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

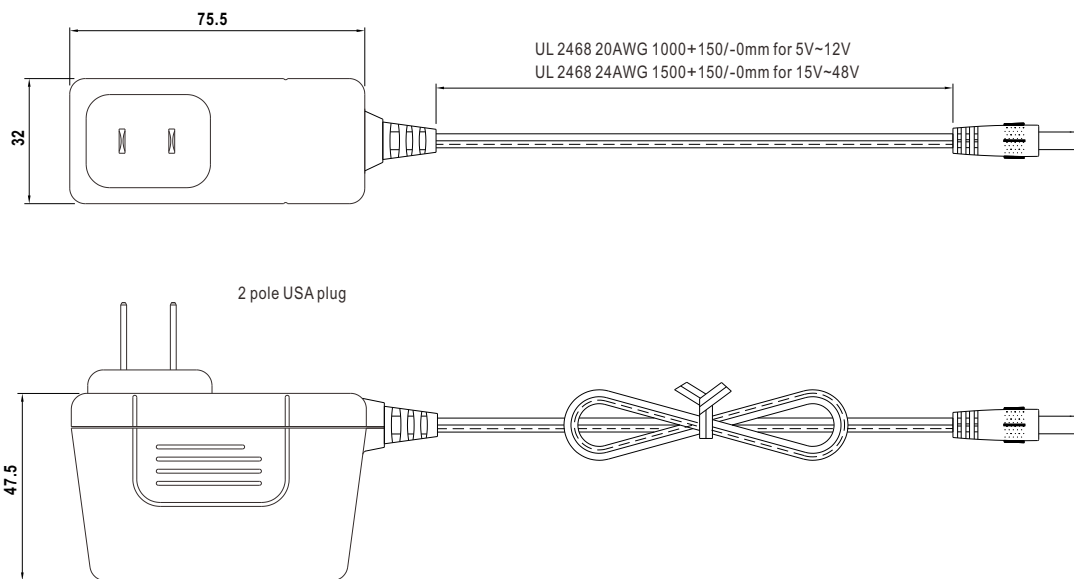


Static Characteristics



Mechanical Specification

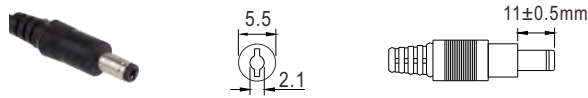


Unit:mm



DC output plug

Standard plug: P1J

Unit:mm

P1J	Pin Assignment
	
	Outside  Inside

DC plug changeable through:


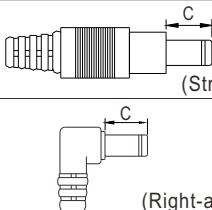

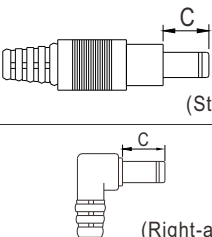

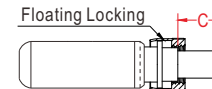


- Customization of the standard part with an optional DC plug according to the table (MOQ applicable)
- Quick adapter accessory (sold separately without MOQ)



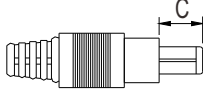

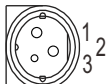
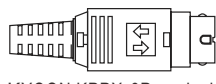

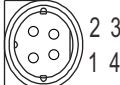
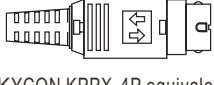


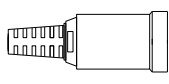
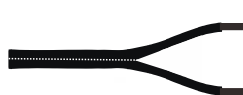
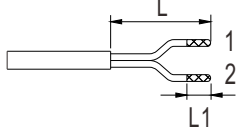
Please refer to below table and online selection guide : https://www.meanwell.com/upload/pdf/DC_plug.pdf

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) (Right-angled)	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	
		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) (Right-angled)	P2I	5.5	2.1	9.5	
		P2J	5.5	2.1	11.0	
		P2L	5.5	2.5	9.5	
		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	
Min. Pin Style		Type No.	A OD	B ID	C L	Available (Current rating: 5A max.)
	 EIAJ equivalent	P3A	2.35	0.7	11.0	
		P3B	4.0	1.7	11.0	
		P3C	4.75	1.7	11.0	

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		Available (Current rating: 7.5A max.)		
		PIN No.	Output			
   KYCON KPPX-3P equivalent	R6B	1	+Vo			
		2	-Vo			
		3	+Vo			
Min. DIN 4 Pin with Lock (male)	Type No.	Pin Assignment		Available (Current rating: 7.5A max.)		
		PIN No.	Output			
   KYCON KPPX-4P equivalent	R7B	1	+Vo			
		2	-Vo			
		3	-Vo			
		4	+Vo			
Min. DIN 4 Pin with Lock (female)	Type No.	Pin Assignment		None		
		PIN No.	Output			
   KYCON KPJX-CM-4S equivalent	R7BF	1	+Vo			
		2	-Vo			
		3	-Vo			
		4	+Vo			
Stripped and tinned leads	Type No.	Pin Assignment		None		
		PIN No.	Output			
  Length of Land L1 by request (MW's standard length, L: <u>25</u> mm, L1: <u>10</u> mm)	by customer	1 (Ribbed)	+Vo			
		2 (Letter)	-Vo			

■ Installation Manual

Please refer to : <http://www.meanwell.com/manual.html>