



User's Manual



Video



BS EN/EN62368-1 IEC62368-1



Features

- Ultra slim and compact size
- Universal AC input / Full range
- 2 pole EURO plug, Class II power unit
- No load power consumption < 0.15W
- **Energy efficiency Level VI**
- Comply with EU ErP and meet CoC version 5
- Protections: Short circuit / Overload / Over voltage
- Fully enclosed plastic case
- Pass LPS
- 7.5V / 9V / 18V models available (by request)
- 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

GTIN CODE

MW Search: <https://www.meanwell.com/serviceGTIN.aspx>

Description

SGAS60E is a 60W compact size wall-mounted style single-output green adaptor series, which is compact and convenient for carry. SGAS60E is a class II power unit (no FG) equipped with the standard 2-Pin European 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 90% and the extremely low no-load power consumption below 0.15W, SGAS60E is compliant with EU ErP and 5~48V meet CoC version 5. 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

SGAS 60 E 05 - P1J

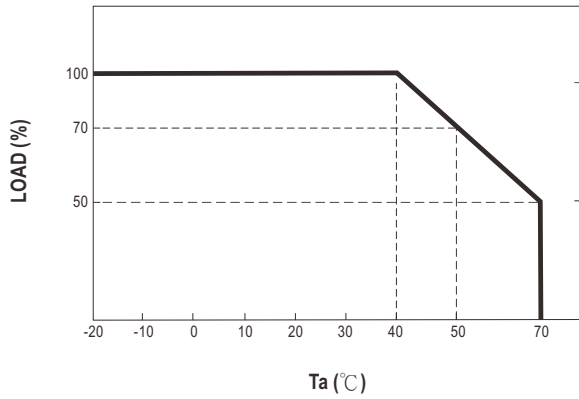
DC plug type { P1J: Plug for standard model, 2.1 ψ \times 5.5 ψ \times 11mm, C+ tuning fork type
Other options available by customer requested (see Page 4~5)

Output voltage
European 2 pin AC plug
Rated wattage
Series name

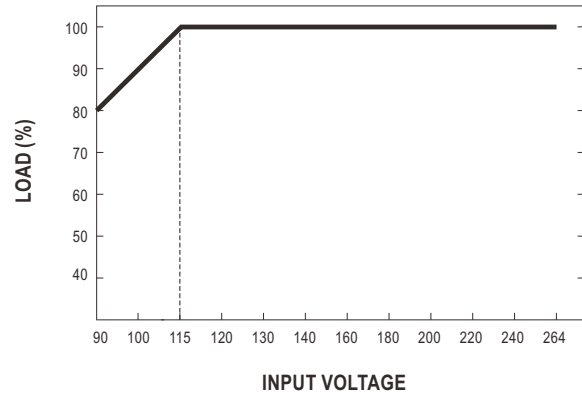
**SPECIFICATION**

ORDER NO.		SGAS60E05-P1J	SGAS60E12-P1J	SGAS60E15-P1J	SGAS60E24-P1J	SGAS60E48-P1J	
OUTPUT	SAFETY MODEL NO.	SGAS60E05	SGAS60E12	SGAS60E15	SGAS60E24	SGAS60E48	
	DC VOLTAGE Note.2	5V	12V	15V	24V	48V	
	RATED CURRENT	6A	5A	4A	2.5A	1.25A	
	CURRENT RANGE	0 ~ 6A	0 ~ 5A	0 ~ 4A	0 ~ 2.5A	0 ~ 1.25A	
	RATED POWER (max.)	30W	60W	60W	60W	60W	
	RIPPLE & NOISE (max.) Note.3	80mVp-p	80mVp-p	80mVp-p	100mVp-p	120mVp-p	
	VOLTAGE TOLERANCE Note.4	± 5.0%	± 3.0%	± 3.0%	± 2.0%	± 2.0%	
	LINE REGULATION Note.5	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	
INPUT	LOAD REGULATION Note.6	± 5.0%	± 3.0%	± 3.0%	± 2.0%	± 2.0%	
	SETUP, RISE, HOLD UP TIME	2500ms, 50ms, 10ms/230VAC 2500ms, 50ms, 10ms/115VAC at full load					
	VOLTAGE RANGE Note.7	90 ~ 264VAC 127 ~ 370VDC					
	FREQUENCY RANGE	47 ~ 63Hz					
	EFFICIENCY (Typ.)	85%	88%	88%	89%	90%	
	AC CURRENT	1.5A / 115VAC 0.75A / 230VAC					
PROTECTION	INRUSH CURRENT (max.)	Cold start 40A / 115VAC 80A / 230VAC					
	LEAKAGE CURRENT(max.)	0.25mA / 240VAC					
	OVERLOAD	110 ~ 200% 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					
	WORKING TEMP.	-20 ~ +70℃ (Refer to "Derating Curve")					
	WORKING HUMIDITY	20% ~ 90% RH non-condensing					
ENVIRONMENT	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 STANDARDS	TUV BS EN/EN62368-1 approved					
SAFETY & EMC (Note. 8)	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)			Class B	
		Radiated emission	BS EN/EN55032(CISPR32)			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/L-N	
		Conducted susceptibility	BS EN/EN61000-4-6			Level 2, 3V	
Magnetic field immunity		BS EN/EN61000-4-8			Level 1, 1A/m		
Voltage dips , interruption		BS EN/EN61000-4-11			>95% dip 0. 5 periods, 30% dip 25 periods, >95% interruptions 250 periods		
OTHERS	LIFE	3 years : 100% load 40℃, 12hours / day					
	MTBF	400Khrs min. MIL-HDBK-217F(25℃)					
	DIMENSION	75.5*32*47.5mm (L*W*H)					
	PACKING	208g ; 60pcs / 13.5kg / 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 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 0.1uf & 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 0% to 100% rated load 7.Derating may be needed under low input voltage. Please check the derating curve for more details. 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." (as available on http://www.meanwell.com) ※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx						

Derating Curve

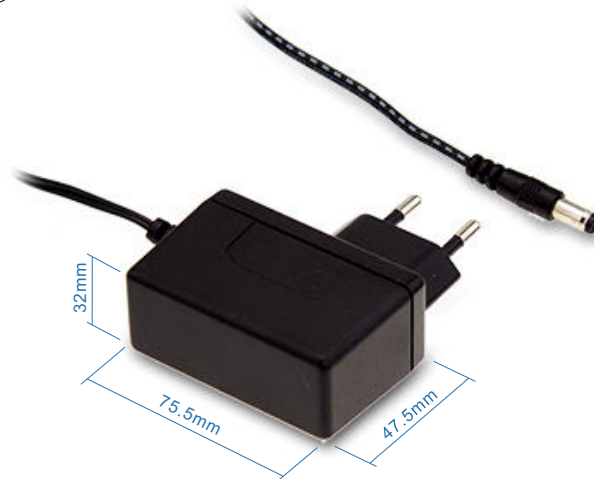
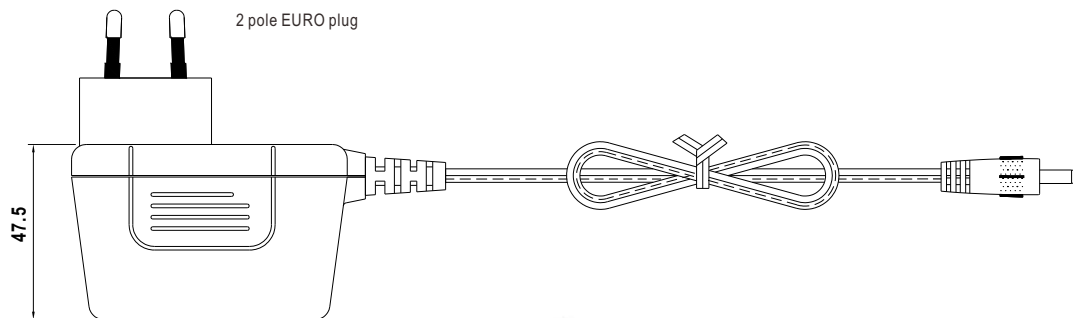
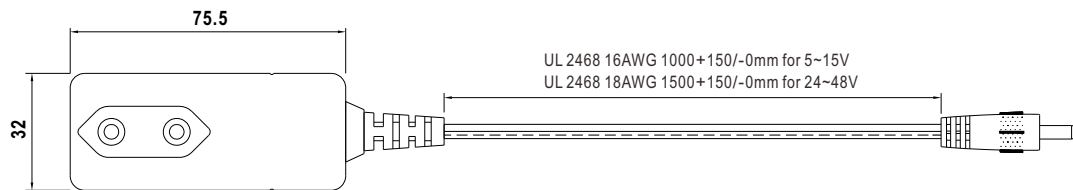


Static Characteristics



Mechanical Specification

Unit:mm



DC output plug

Standard plug: P1J

Unit:mm

P1J	Pin Assignment
	Outside Inside

DC plug changeable through:



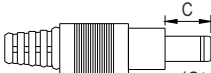
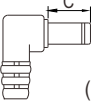



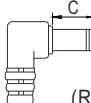


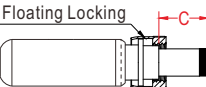


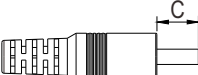
- Customization of the standard part with an optional DC plug according to the table (MOQ applicable)
- Quick adapter accessory (sold separately without MOQ)



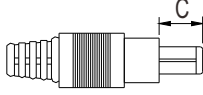

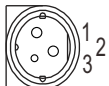
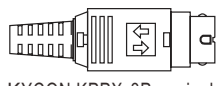


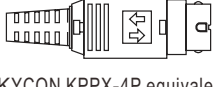


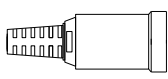
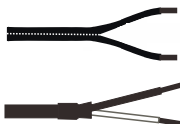
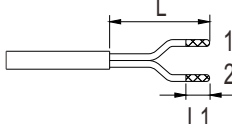
Please refer to below table and online selection guide : https://www.meanwell.com/upload/pdf/DC_plug.pdf

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: 25 mm, L1: 10 mm)	by customer	1 (Ribbed or White)	+Vo			
		2 (Letter or Black)	-Vo			

■ Installation Manual

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