























#### Features

- · Ultra slim
- · Universal AC input / Full range
- · 2 pole EURO plug, Class 

  power unit
- No load power consumption < 0.075W for 5~7.5V</li> <0.15W for 9 ~48V
- Energy efficiency Level VI (except 5V for Level V)
- Comply with EU ErP and 9~48V meet CoC version 5
- · Protections: Short circuit / Overload / Over voltage
- Fully enclosed plastic case
- · Pass LPS
- · LED indicator for power on
- · 3 years warranty

### Applications

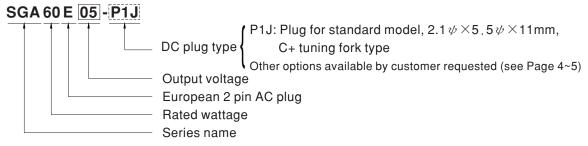
- Consumer electronic devices
- Telecommunication devices
- Office facilities
- · Industrial equipments

### Description

SGA60E is a 60W ultra slim wall-mounted style single-output green adaptor series, which is compact and convenient for carry. SGA60E 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 91% and the extremely low no-load power consumption below 0.075W for 5~7.5V, below 0.15W for 9 ~48V, SGA60E is compliant with EU ErP and 9~48V 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



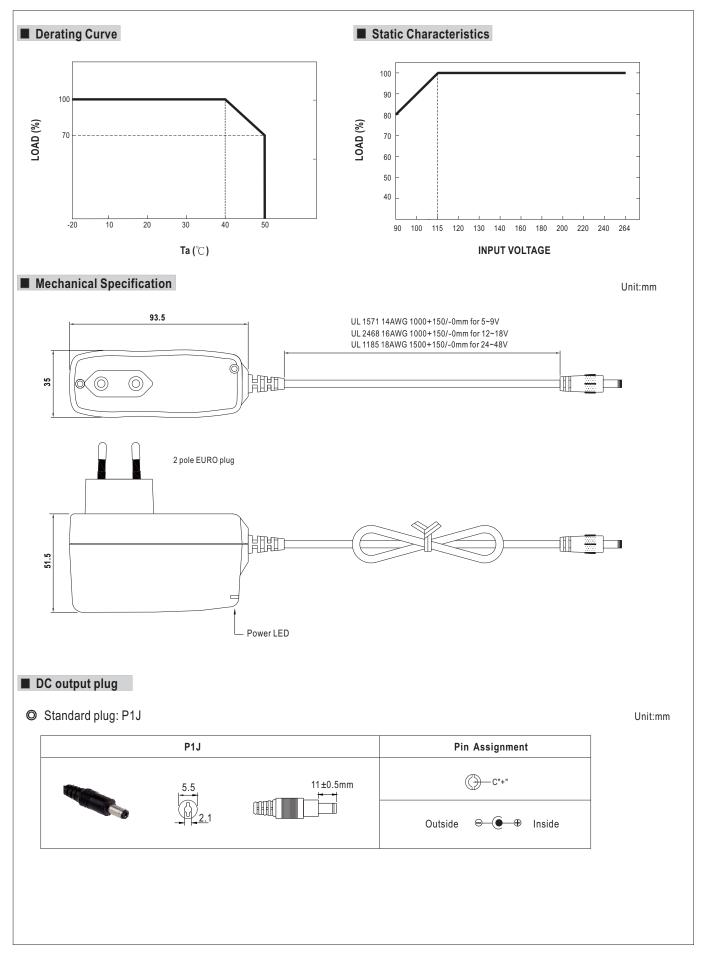


### **SPECIFICATION**

ORDER NO.		SGA60E05-P1J	SGA60E07-P1J	SGA60E09-P1J	SGA60E12-P1J	SGA60E15-P1J	SGA60E18-P1J	SGA60E24-P1J	SGA60E48-P	
	SAFETY MODEL NO.	SGA60E05	SGA60E07	SGA60E09	SGA60E12	SGA60E15	SGA60E18	SGA60E24	SGA60E48	
	DC VOLTAGE Note.2		7.5V	9V	12V	15V	18V	24V	48V	
}	RATED CURRENT	6A	6A	5.5A	5A	4A	3.33A	2.5A	1.25A	
	CURRENT RANGE	0 ~ 6A	0 ~ 6A	0 ~ 5.5A	0 ~ 5A	0 ~ 4A	0 ~ 3.33A	0 ~ 2.5A	0 ~ 1.25A	
	RATED POWER (max.)	30W	45W	49.5W	60W	60W	60W	60W	60W	
ОИТРИТ	, ,								1	
	RIPPLE & NOISE (max.) Note.3		80mVp-p ±5.0%	80mVp-p	80mVp-p	80mVp-p ±3.0%	80mVp-p	100mVp-p	120mVp-p	
	VOLTAGE TOLERANCE Note.4			±5.0%	±3.0%		±2.0%	±2.0%	±2.0%	
		±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	
		±5.0%	±5.0%	±5.0%	±3.0%	±3.0%	±2.0%	±2.0%	±2.0%	
	SETUP, RISE, HOLD UP TIME									
		90 ~ 264VAC 47 ~ 63Hz								
	FREQUENCY RANGE		000/	070/	000/	0.70/	000/	000/	040/	
NPUT	EFFICIENCY (Typ.)	84%	86%	87%	88%	87%	88%	88%	91%	
	AC CURRENT	1.5A / 115VAC 0.75A / 230VAC								
	INRUSH CURRENT (max.)	Cold start 40A / 115VAC 80A / 230VAC								
	LEAKAGE CURRENT(max.)	0.25mA / 240VAC								
	OVERLOAD		ed output power							
PROTECTION	J. 21(20)	Protection type: Hiccup mode, recovers automatically after fault condition is removed								
. NOTEOTION	OVER VOLTAGE	110 ~ 140% rated output voltage								
		Protection type: Clamp by zener diode, output short								
	WORKING TEMP.	-20 ~ +50°C (Refer to "Derating Curve")								
	WORKING HUMIDITY	20% ~ 90% RH non-condensing								
ENVIRONMENT	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 STANDARDS	TUV EN60950-1, EAC TP TC 004 approved								
	WITHSTAND VOLTAGE	I/P-0/P:4242VDC								
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C/ 70% RH								
	EMC EMISSION	Parameter Standard Test Level / Note								
		Conducted emission EN55032(CISPR32) Class B								
		Radiated emission EN55032(CISPR32) Class B			Class B					
SAFETY &		Harmonic curre	Harmonic current EN61000-3-2 Class A							
EMC		Voltage flicker EN61000-3-3								
(Note. 8)		Parameter		Standard			Test Level /Note			
, ,	EMC IMMUNITY	ESD					ontoot			
			414.114.	EN61000-4-			Level 3, 8KV air; Level 2, 4KV contact			
		RF field suscep	ubility	EN61000-4-			Level 2, 3V/m			
		EFT bursts		EN61000-4-			Level 2, 1KV			
		Surge susceptil	oility	EN61000-4-	-5		Level 3, 1KV/L-N			
		Conducted sus	ceptibility	bility EN61000-4-6 Level 2, 3V						
		Magnetic field in	Magnetic field immunity EN61000-4-8 Level 1, 1A/m							
		Voltage dips , ir	terruption	EN61000-4-	-11		>95% dip 0. 5 periods, 30% dip 25 periods >95% interruptions 250 periods			
	LIFE	3 years : 100% load 40°C, 12hours / day							-	
	MTBF	-	MIL-HDBK-217F(							
OTHERS	DIMENSION	93.5*35*51.5m		200)						
	PACKING		,							
	PLUG	250g ; 60pcs / 17kg / CARTON  See page 4~5 ; Other type available by customer requested								
CONNECTOR	CABLE	1 0 ,			<u> </u>					
		See page 4~5; Other type available by customer requested								
NOTE	<ol> <li>1.All parameters are specified at 230VAC input, rated load, 25°C 70% RH ambient.</li> <li>2.DC voltage: The output voltage set at point measure by plug terminal &amp; 50% load.</li> <li>3.Ripple &amp; noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1μf &amp; 47μf capacitor.</li> <li>4.Tolerance: includes set up tolerance, line regulation, load regulation.</li> <li>5.Line regulation is measured from low line to high line at rated load.</li> <li>6.Load regulation is measured from 10% to 100% rated load.</li> <li>7.Derating may be needed under low input voltages. Please check the static characteristics for more details.</li> <li>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</li> </ol>									
	EMC directives. For guidan (as available on http://www.		rform these EM	C tests, please	refer to "EMI tes	ting of compone		es."  File Name:SGA60E-		

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## Optional DC plug:

Tuning Fork Style  Type No.  OD  DD  L  P11  5.5  2.1  9.5  9.5  11.0  P1R  5.5  2.1  9.5  P2R  6.5  2.1  9.5  P2R  6.5  P2R  6.5  P2R  7.7  P2R  7.5  P2R	Tuning For	Type No.	А		В	С	
No.   S.   S.   S.   S.   S.   S.   S.	Tulling For	туре но.	OD		ID	L	
Straight   P1M   5.5   2.5   11.0   P1IR   5.5   2.1   9.5   P1IR   5.5   2.5   9.5   P1IR   9.5		C	P1I	5.5		2.1	9.5
P1IR   5.5   2.1   9.5     P1JR   5.5   2.1   11.0     P1R   5.5   2.5   9.5     P2J   5.5   2.5   9.5     P2JR   5.5   2.5   9.5     P2R   5.5   2.5   9.5     P2R   5.5   2.5   9.5     P2R   5.5   2.5   9.5     P2R   5.5			P1L	5.5		2.5	9.5
Right-angled   PILR   5.5   2.5   9.5	Δ	(Straight)	P1M	5.5		2.5	11.0
Right-angled   PILR   5.5   2.5   9.5			P1IR	5.5		2.1	9.5
Right-angled   P1MR   S.5   2.5   11.0	₩ B	(Binta and all)	P1JR	5.5		2.1	11.0
PIMR   S.5   Z.5   11.0			P1LR	5.5		2.5	9.5
Straight   Straight		(Right-angled)	P1MR	5.5		2.5	11.0
P2    5.5   2.1   9.5	Barrel	Style	Type No	Α		В	С
P2J   5.5   2.1   11.0	Danci	Otylo	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	OD		ID	L
P2L   5.5   2.5   9.5		, C,	P2I	5.5		2.1	9.5
Company   Comp			P2J	5.5		2.1	11.0
P2JR   5.5   2.1   11.0     P2LR   5.5   2.5   9.5     P2MR   5.5   2.5   11.0     P2MR   5.5   3.4   12.06     P2MR   5.5   3.4   12.06     P2MR   5.5   3.4   3.0     P2MR   5.5   3.0     P2MR   6.5   4.4   3.0     P2	Λ.		P2L	5.5		2.5	9.5
P2JR   5.5   2.1   11.0     P2LR   5.5   2.5   9.5     P2MR   5.5   2.5   11.0     P2MR   5.5   3.4   12.06     P2MR   5.5   3.4   12.06     P2MR   5.5   3.4   3.0     P2MR   5.5   3.0     P2MR   6.5   4.4   3.0     P2	TA TA	(Straight)	P2M	5.5		2.5	11.0
P2JR   5.5   2.1   11.0     P2LR   5.5   2.5   9.5     P2MR   5.5   2.5   11.0     P2MR   5.5   3.4   12.06     P2MR   5.5   3.4   12.06     P2MR   5.5   3.4   3.0     P2MR   5.5   3.0     P2MR   6.5   4.4   3.0     P2	B	C C	P2IR	5.5		2.1	9.5
Cock Style   P2MR   5.5   2.5   11.0			P2JR	5.5		2.1	11.0
Cocking   C   P2S(S761K)   S.53   2.03   12.06			P2LR	5.5		2.5	9.5
Cock Style		(Right-angled)	P2MR	5.5		2.5	11.0
P2S(S761K)   5.53   2.03   12.06		A ( )	Type No.	A		В	С
P2K(761K)   5.53   2.54   12.06   P2C(S760K)   5.53   2.03   9.52   P2D(760K)   5.53   2.54   9.52   P2D(760K)	Lock S	Style		OD		ID	L
P2K(761K)   5.53   2.54   12.06   P2C(\$760K)   5.53   2.03   9.52   P2D(760K)   5.53   2.54   9.52   P2D(760K)   7.52   P2D(760K)   7.52	Δ	Lock <u>ing</u> C	P2S(S761K)	5.53		2.03	12.06
Name			P2K(761K)	5.53		2.54	12.06
Name	B		P2C(S760K)	5.53		2.03	9.52
Nin. Pin Style   Type No.   OD   ID   L	SV	VITCHCRAFT original or equivalent	P2D(760K)	5.53		2.54	9.52
P3A   2.35   0.7   11.0	Min Din	Style	Tyne No	A		В	С
P3B   4.0   1.7   11.0	IVIIII. I III v		Type IVO.	OD		ID	L
P3C   4.75   1.7   11.0	A	<u>-C</u> -	P3A	2.35		0.7	11.0
P3C   4.75   1.7   11.0			P3B	4.0		1.7	11.0
Type No.   OD   ID   L   Center Pin	<b>→</b>	EIAJ equivalent	P3C	4.75		1.7	11.0
P4A   5.5   3.4   11.0   1.0	ContarD	in Style	Type No	Α	В	С	D
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           1         +Vo           2         -Vo	Genter P	туре по.	OD	ID	L	Center Pin	
P4C   7.4   5.1   11.0   0.6	H-A-1		P4A	5.5	3.4	11.0	1.0
Min. DIN 3 Pin with Lock (male)  Type No.  Pin Assignment PIN No. Output 1 +Vo 2 -Vo			P4B	6.5	4.4	11.0	1.4
PIN No. Output  1 +Vo  R6B 2 -Vo	- <u> </u> - <u> </u> - <u>B</u>		P4C	7.4	5.1	11.0	0.6
PIN No. Output  1 +Vo  2 -Vo	Min DIN 3 Din with	Type No	Pin Assignment				
R6B 2 -Vo	WIIII. DIN 3 FIII WIU	туретчо.	PIN No. Outp		ut		
R6B 2 -Vo			R6B	1 +V		+Vo	
KYCON KPPX-3P equivalent 3 +Vo	$\begin{pmatrix} \circ \\ \circ \\ \circ \end{pmatrix}$ 1 2			2		-Vo	
	3	KYCON KPPX-3P equivalent		3		+Vo	

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M: DINAB: W.L. L.( L.)	Type No	Pin Assignment		
Min. DIN 4 Pin with Lock (male)	Type No. PIN No.		Output	
nnn la		1	+Vo	
	R7B	2	-Vo	
1 7		3	-Vo	
KYCON KPPX-4P equivalent		4	+Vo	
Min DIN / Din with Look (female)	Type No.	Pin Assignment		
Min. DIN 4 Pin with Lock (female)	Type No.	PIN No.	Output	
	R7BF	1	+Vo	
23 [000000]		2	-Vo	
		3	-Vo	
KYCON KPJX-CM-4S equivalent		4	+Vo	
Ctripped and tipped loads	Tuna Ma	Pin Assignment		
Stripped and tinned leads	Type No.	PIN No.	Output	
1	by customer	1 (Ribbed or White)	+Vo	
L1  Length of Land L1 by request  (MW's standard length, L: <u>25</u> mm, L1: <u>10</u> mm)	by customer	2 (Letter or Black)	-Vo	

### **■** Installation Manual

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