



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

1F., No.40, Juren Ln., Sec. 2, Sanmin Rd., Banciao Dist., New Taipei City 22069, Taiwan (R.O.C.)

Phone : 886-2-2957 5580 Fax : 886-2-2957 7473

12W Travel Power Supply > GE12I



Features

- Interchangeable AC plugs (plug kit sold sperately)
- Universal AC input / Full range
- No load power consumption < 0.075W
- **Energy efficiency Level VI**
- Comply with EISA 2007/DoE, EU ErP
- Class II power (without earth pin)
- Protections: Short circuit / Overload / Over voltage
- Pass LPS
- Fully enclosed plastic case
- LED indicator for power on
- Various DC plug quick adapter accessory available
- 2 years warranty

Applications

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

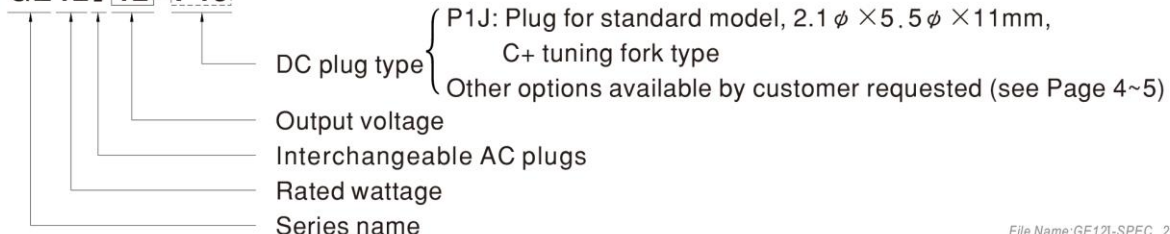
Description

GE12I is a highly reliable, 12W wall-mounted style single-output green adaptor series, which is compact and convenient for carry. This product is equipped with an interchangeable AC plug (4 types, including European type, USA type, U.K. type and Australian type) that makes it very suitable for businessmen to use in the major countries around the globe. GE12I is a class II power unit (without FG), accepting the input range from 90VAC to 264VAC that it can satisfy the demands for various types of electrical devices.

With the working efficiency up to 85.5% and the extremely low no-load power consumption below 0.075W, GE12I is compliant with the latest USA energy regulation EISA 2007/DoE(Level VI) and EU ErP. 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 hazard.

Model Encoding

GE12I 12 -P1J





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TYPE					
	Australian type	U.K type	European type	US type	Mix four type
ORDER NO.	AC plug-AU	AC plug-UK	AC plug-EU	AC plug-US	AC plug-MIX

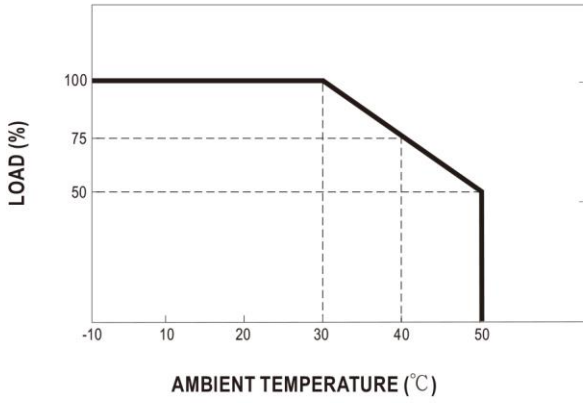
**SPECIFICATION**

POWER SUPPLY MAIN BODY ORDER NO.	GE12I05-P1J	GE12I07-P1J	GE12I09-P1J	GE12I12-P1J	GE12I15-P1J	GE12I18-P1J	GE12I24-P1J	
OUTPUT	<b>SAFETY MODEL NO.</b>	GE12I05	GE12I07	GE12I09	GE12I12	GE12I15	GE12I18	GE12I24
	<b>DC VOLTAGE</b> Note.2	5V	7.5V	9V	12V	15V	18V	24V
	<b>RATED CURRENT</b>	2.0A	1.33A	1.33A	1.0A	0.8A	0.83A	0.625A
	<b>CURRENT RANGE</b>	0 ~ 2.0A	0 ~ 1.33A	0 ~ 1.33A	0 ~ 1.0A	0 ~ 0.8A	0 ~ 0.83A	0 ~ 0.625A
	<b>RATED POWER</b>	10W	10W	12W	12W	12W	15W	15W
	<b>RIPPLE &amp; NOISE (max.)</b> Note.3	50mVp-p	75mVp-p	100mVp-p	120mVp-p	150mVp-p	180mVp-p	240mVp-p
	<b>VOLTAGE TOLERANCE</b> Note.4	±5.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±3.0%
	<b>LINE REGULATION</b> Note.5	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
<b>LOAD REGULATION</b> Note.6	±5.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±3.0%	
<b>SETUP, RISE, HOLD UP TIME</b>	4000ms, 100ms, 30ms / 230VAC 4000ms, 100ms, 10ms / 115VAC at full load							
INPUT	<b>VOLTAGE RANGE</b> Note.7	90 ~ 264VAC 135 ~ 370VDC						
	<b>FREQUENCY RANGE</b>	47 ~ 63Hz						
	<b>EFFICIENCY (Typ.)</b>	80%	82%	84%	84%	85%	85%	85.5%
	<b>AC CURRENT</b>	0.4A / 100VAC 0.25A / 230VAC						
	<b>INRUSH CURRENT (max.)</b>	COLD START 40A / 100VAC 80A / 230VAC						
<b>LEAKAGE CURRENT (max.)</b>	0.25mA / 240VAC							
PROTECTION	<b>OVERLOAD</b>	110% ~ 200% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed						
	<b>OVER VOLTAGE</b>	115% ~ 135% rated output voltage Protection type : Clamp by zener diode						
ENVIRONMENT	<b>WORKING TEMP.</b>	-10 ~ +50°C (Refer to "Derating Curve")						
	<b>WORKING HUMIDITY</b>	20% ~ 90% RH non-condensing						
	<b>STORAGE TEMP., HUMIDITY</b>	-20 ~ +85°C, 10 ~ 95% RH						
	<b>TEMP. COEFFICIENT</b>	±0.03% / °C (0 ~ 30°C)						
	<b>VIBRATION</b>	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes						
SAFETY & EMC (Note. 8)	<b>SAFETY STANDARDS</b>	UL62368-1, CSA C22.2 NO. 62368-1, TUV EN62368-1, AS/NZS 60950.1, CCC GB4943, EAC TP TC 004 approved						
	<b>WITHSTAND VOLTAGE</b>	I/P-O/P:4242VDC						
	<b>ISOLATION RESISTANCE</b>	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH						
	<b>EMC EMISSION</b>	<b>Parameter</b>	<b>Standard</b>				<b>Test Level / Note</b>	
		Conducted emission	EN55032(CISPR32)				Class B	
	Radiated emission	EN55032(CISPR32)				Class B		
	<b>EMC IMMUNITY</b>	<b>Parameter</b>	<b>Standard</b>				<b>Test Level/Note</b>	
		ESD	EN61000-4-2				Level 3, 8KV air; Level 2, 4KV contact	
		RF field susceptibility	EN61000-4-3				Level 2, 3V/m	
		EFT bursts	EN61000-4-4				Level 2, 1KV	
Surge susceptibility		EN61000-4-5				Level 3, 1KV/L-N		
Conducted susceptibility		EN61000-4-6				Level 2, 3V		
Magnetic field immunity		EN61000-4-8				Level 1, 1A/m		
Voltage dips , interruption	EN61000-4-11				>95% dip 0. 5 periods, 30% dip 25 periods, >95% interruptions 250 periods			
OTHERS	<b>LIFE</b>	2 years : 100% load 30°C, 8 hours / day						
	<b>MTBF</b>	100Khrs min. MIL-HDBK-217F (25°C)						
	<b>DIMENSION</b>	70.7*40*38.8mm (L*W*H)						
	<b>PACKING</b>	97g ; 50pcs / 6.3kg / CARTON						
DC OUTPUT CONNECTOR	<b>PLUG</b>	See page 4-5 ; Other type available by customer requested						
	<b>CABLE</b>	See page 4-5 ; Other type available by customer requested						
NOTE	1.All parameters are specified at 230VAC input, rated load, 25°C 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.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." 9.Main body unit and AC inlet plug should be ordered separately ; it needs to be used along with any of the AC inlet plug.							

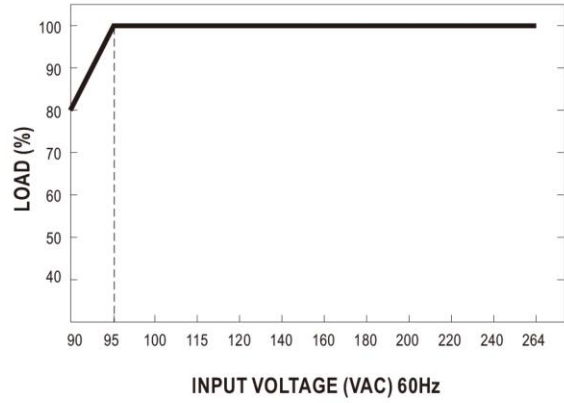


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**Derating Curve**

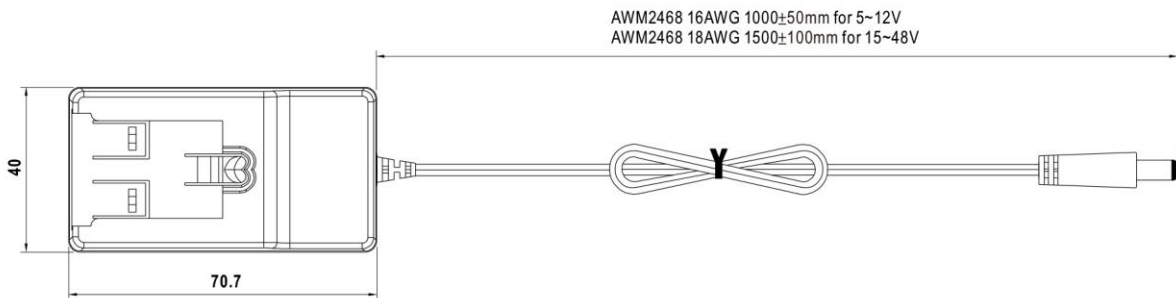
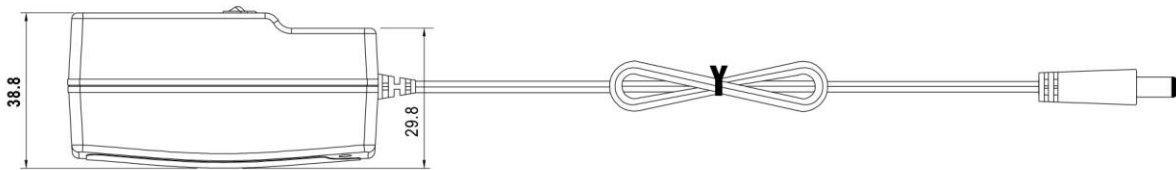


**Static Characteristics**



**Mechanical Specification**

Unit:mm



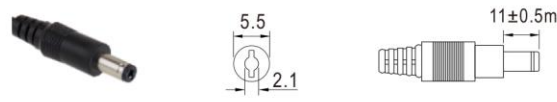



**12W Travel Power Supply > GE12I**

■ DC output plug

◎ Standard plug: P1J

Unit:mm

P1J	Pin Assignment
	 Outside ⊖ ⊕ Inside


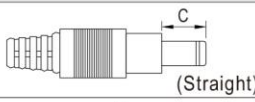
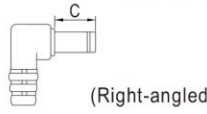

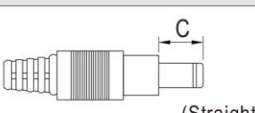
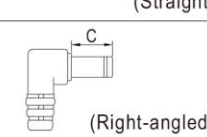

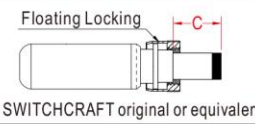

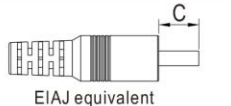
◎ DC plug changeable through:

(1) Customization of the standard part with an optional DC plug according to the table (MOQ applicable)

Example quick adapter accessory:

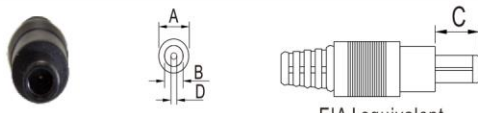
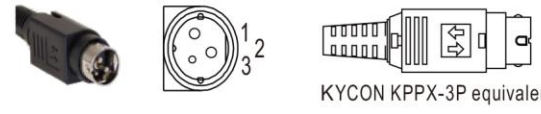


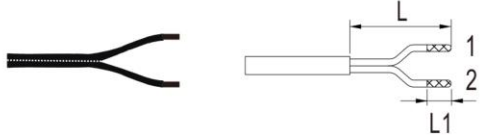


◎ Optional DC plug: (Available in customized cable or quick adapter)

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.)
		P1L	5.5	2.5	9.5	
		P1M	5.5	2.5	11.0	
	 (Right-angled)	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	B	C	
			OD	ID	L	
	 (Straight)	P2I	5.5	2.1	9.5	None
		P2J	5.5	2.1	11.0	
		P2L	5.5	2.5	9.5	
		P2M	5.5	2.5	11.0	
	 (Right-angled)	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	B	C	
			OD	ID	L	
	 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	
Min. Pin Style		Type No.	A	B	C	
			OD	ID	L	
	 EIAJ equivalent	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	



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Center Pin Style	Type No.	A	B	C	D	Quick Adapter Accessory
		OD	ID	L	Center Pin	
 <p>EIAJ equivalent</p>	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				
 <p>KYCON KPPX-3P equivalent</p>	R6B	PIN No.	Output			
		1	+Vo			
		2	-Vo			
 <p>KYCON KPPX-4P equivalent</p>	R7B	Pin Assignment				
		PIN No.	Output			
		1	+Vo			
2		-Vo				
 <p>KYCON KPPX-4P equivalent</p>	R7B	3	-Vo			
		4	+Vo			
		Pin Assignment				
		PIN No.	Output			
Stripped and tinned leads	Type No.	Pin Assignment				
		PIN No.	Output			
 <p>Length of Land L1 by request (MW's standard length, L: <u>25</u> mm, L1: <u>10</u> mm)</p>	by customer	1 (Ribbed)	+Vo			
		2 (Letter)	-Vo			
				None		