24W AC-DC Interchangeable Industrial Adaptor

GE24I series

User's Manual

Video

UL62368-1 BS EN/EN62368-1 AS/ZNS60950-1 GB4943.1 TPTC004

ECO Household Automate Industrial Security Network Telecom

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
  (Plug kit sold sperately, please refer to : https://www.meanwell.com/upload/pdf/DC_plug.pdf)
- 2 years warranty

Applications

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

GTIN CODE

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

Description

GE24I is a highly reliable, 24W 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. GE24I 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 89% and the extremely low no-load power consumption below 0.075W, GE24I 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

GE24I 12 -P1J

- DC plug type
  - P1J: Plug for standard model, 2.1φ×5.5φ×11mm, C+ tuning fork type
  - Other options available by customer requested (see Page 4~5)
- Output voltage
- Interchangeable AC plugs
- Rated wattage
- Series name

Interchangeable AC plug specifically for GE12/18/24/30/40I

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

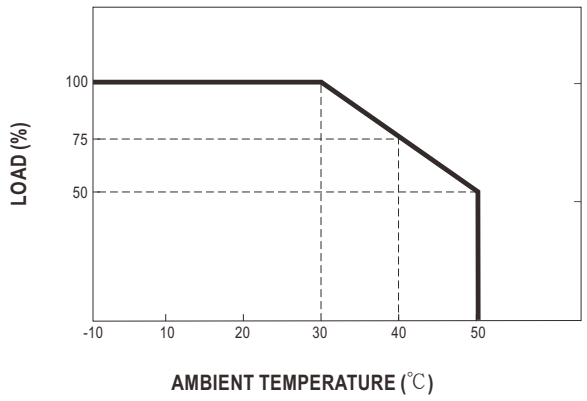
SPECIFICATION

POWER SUPPLY MAIN BODY ORDER NO.		GE24I05-P1J	GE24I07-P1J	GE24I09-P1J	GE24I12-P1J	GE24I15-P1J	GE24I18-P1J	GE24I24-P1J	GE24I48-P1J
OUTPUT	SAFETY MODEL NO.	GE24I05	GE24I07	GE24I09	GE24I12	GE24I15	GE24I18	GE24I24	GE24I48
	DC VOLTAGE Note.2	5V	7.5V	9V	12V	15V	18V	24V	48V
	RATED CURRENT	3.0A	2.0A	2.22A	2.0A	1.6A	1.33A	1.0A	0.5A
	CURRENT RANGE	0 ~ 3.0A	0 ~ 2.0A	0 ~ 2.22A	0 ~ 2.0A	0 ~ 1.6A	0 ~ 1.33A	0 ~ 1.0A	0 ~ 0.5A
	RATED POWER (max.)	15W	15W	20W	24W	24W	24W	24W	24W
	RIPPLE & NOISE (max.) Note.3	50mVp-p	75mVp-p	100mVp-p	120mVp-p	150mVp-p	180mVp-p	240mVp-p	300mVp-p
	VOLTAGE TOLERANCE Note.4	±5.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±3.0%	±3.0%
	LINE REGULATION Note.5	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LOAD REGULATION Note.6	±5.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±3.0%	±3.0%
	SETUP, RISE, HOLD UP TIME	4000ms, 100ms, 30ms / 230VAC 4000ms, 100ms, 10ms / 115VAC at full load							
INPUT	VOLTAGE RANGE Note.7	90 ~ 264VAC 135 ~ 370VDC							
	FREQUENCY RANGE	47 ~ 63Hz							
	EFFICIENCY (Typ.)	81%	83%	85.5%	86%	86%	87%	87.5%	89%
	AC CURRENT	0.7A / 100VAC 0.4A / 230VAC							
	INRUSH CURRENT (max.)	COLD START 40A / 100VAC 80A / 230VAC							
	LEAKAGE CURRENT (max.)	0.25mA / 240VAC							
PROTECTION	OVERLOAD	110% ~ 200% rated output power							
		Protection type : Hiccup mode, recovers automatically after fault condition is removed							
	OVER VOLTAGE	115% ~ 135% rated output voltage							
		Protection type : Clamp by zener diode							
ENVIRONMENT	WORKING TEMP.	-10 ~ +50℃ (Refer to "Derating Curve")							
	WORKING HUMIDITY	20% ~ 90% RH non-condensing							
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH							
	TEMP. COEFFICIENT	±0.03% / ℃ (0 ~ 30℃)							
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes							
SAFETY & EMC (Note. 8)	SAFETY STANDARDS	UL62368-1, CSA C22.2 NO. 62368-1, TUV BS EN/EN62368-1, AS/NZS 60950.1, CCC GB4943, 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	BS EN/EN55032(CISPR32)	Class B					
		Radiated emission	BS EN/EN55032(CISPR32)	Class B					
	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	2 years : 100% load 30℃, 8 hours / day							
	MTBF	100Khrs min. MIL-HDBK-217F (25℃)							
	DIMENSION	81*43*40.5mm (L*W*H)							
	PACKING	134g ; 50pcs / 8.4kg / CARTON							
DC OUTPUT CONNECTOR	PLUG	See page 4~5 ; Other type available by customer requested							
	CABLE	See page 4~5 ; Other type available by customer requested							

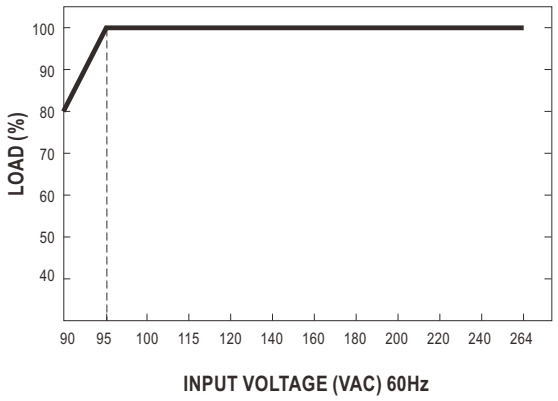
NOTE

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 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.” (as available on http://www.meanwell.com)
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.
※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx

■ Derating Curve

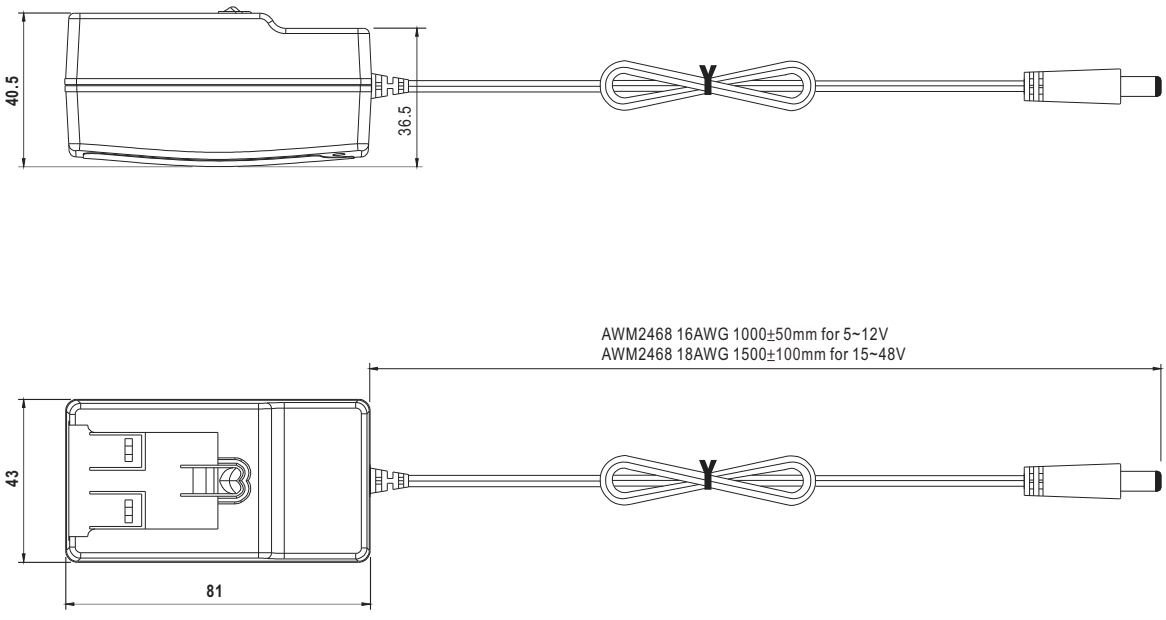


■ Static Characteristics



■ Mechanical Specification

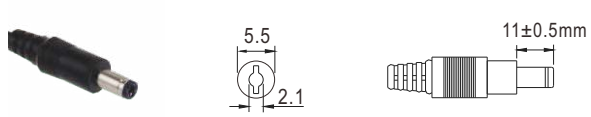
Unit:mm



■ DC output plug

◎ Standard plug: P1J

Unit:mm

P1J	Pin Assignment
	 Outside Inside

◎ DC plug changeable through:

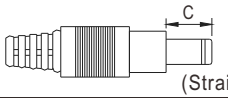
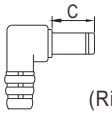
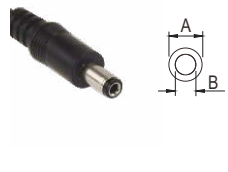
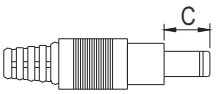
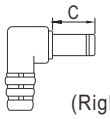
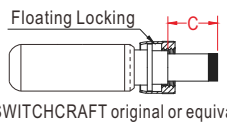
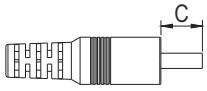
(1) Customization of the standard part with an optional DC plug according to the table (MOQ applicable)

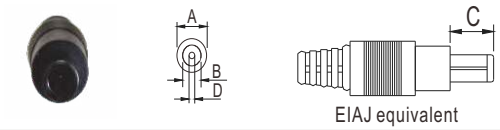
(2) Quick adapter accessory (sold separately without MOQ)

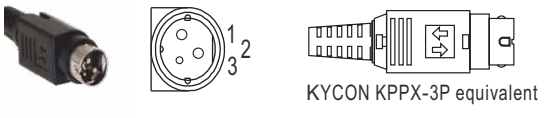
Please refer to below table and online selection guide : https://www.meanwell.com/upload/pdf/DC_plug.pdf

Example quick adapter accessory:

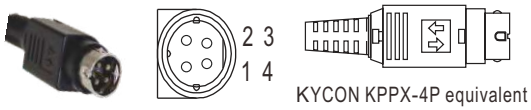
◎ Optional DC plug: (Available in customized cable or quick adapter)

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**	
  (Straight)  (Right-angled)	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	
	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**	
 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 / OD**	**B / ID**	**C / 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	

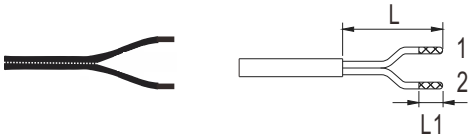
Center Pin Style	Type No.	A OD	B ID	C L	D Center Pin	Quick Adapter Accessory
 EIAJ equivalent	P4A	5.5	3.4	11.0	1.0	Available (Current rating: 7.5A max.)
	P4B	6.5	4.4	11.0	1.4	
	P4C	7.4	5.1	11.0	0.6	

Min. DIN 3 Pin with Lock (male)	Type No.	Pin Assignment	
		PIN No.	Output
 KYCON KPPX-3P equivalent	R6B	1	+Vo
		2	-Vo
		3	+Vo

Available (Current rating: 7.5A max.)

Min. DIN 4 Pin with Lock (male)	Type No.	Pin Assignment	
		PIN No.	Output
 KYCON KPPX-4P equivalent	R7B	1	+Vo
		2	-Vo
		3	-Vo
		4	+Vo

Available (Current rating: 7.5A max.)

Stripped and tinned leads	Type No.	Pin Assignment	
		PIN No.	Output
 Length of Land L1 by request (MW's standard length, L: 25 mm, L1: 10 mm)	by customer	1 (Ribbed)	+Vo
		2 (Letter)	-Vo

None

■ Installation Manual

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