

YS12-E SERIES

12W



Features

- Energy efficiency level VI
- Class II Power Supply
- 3 Years Warranty
- Universal AC input/Full range
- No load power consumption < 0.1W
- Protections: Short Circuit /Over Load / Over Voltage
- -20~+60℃ wide range working temperature

Applications

- Blood glucose meter
- Blood pressure meter
- Nebulizer/Inhaler
- Portable medical device



RoHS



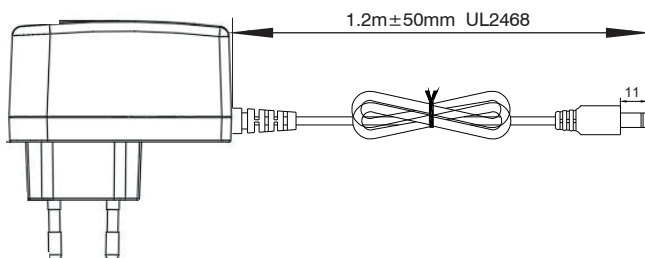
Model Description

YS12 - XXXYYYY E-M-D1J

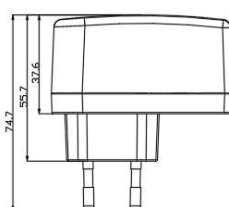
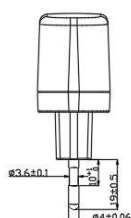
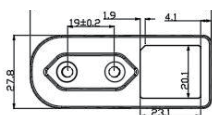
- DC Plug Type { D1J: standard model, $\phi 2.1 \times \phi 5.5 \times 11 \text{mm}$, C+, tuning fork type
- Medical Type { Other options available by customer requested (see Page3-5)
- EU Plug
- Output Current
- Output Voltage
- Series Name

Dimensions and installation

(Unit: mm , tolerance: $\pm 1 \text{mm}$)



Standard Cable	1.2m UL2468 (Option: UL2464, UL1185)
5 ~ 12V	22AWG
15 ~ 36V	24AWG



File last modification time: 2025-2-25

Specification

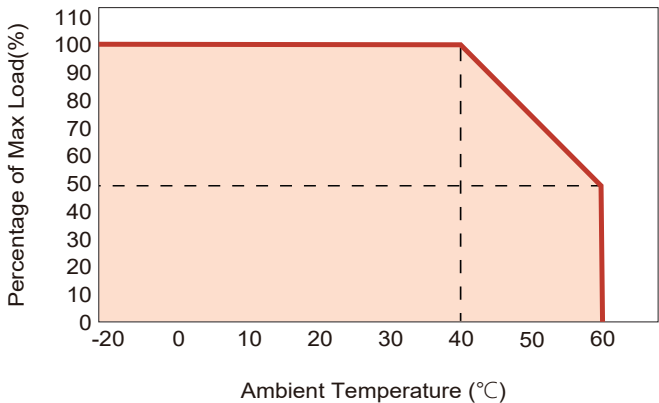
Model	Order P/N	YS12-0502000E -M-D1J	YS12-0901300E -M-D1J	YS12-1201000E -M-D1J	YS12-1500800E -M-D1J	YS12-2400500E -M-D1J	YS12-3600350E -M-D1J
	Safety Model No.	YS12-0502000	YS12-0901300	YS12-1201000	YS12-1500800	YS12-2400500	YS12-3600350
Output	DC Voltage	5V	9V	12V	15V	24V	36V
	Rated Current	2A	1.3A	1A	0.8A	0.5A	0.35A
	Rated Power	10W	11.7W	12W	12W	12W	12W
	Ripple & Noise(max.)	150mVp-p	150mVp-p	150mVp-p	150mVp-p	240mVp-p	300mVp-p
	Voltage Tolerance	±5%	±5%	±5%	±5%	±5%	±5%
	Line Regulation	±3%	±3%	±3%	±3%	±3%	±3%
	Load Regulation	±5%	±5%	±5%	±5%	±5%	±5%
	Setup,Rise,Hold up Time	1.0s,30ms,25ms/230VAC(at full load)			2.0s,30ms,12ms/115VAC(at full load)		
Input	Rated Voltage Range	100-240VAC					
	Voltage Range	90-264VAC					
	Frequency Range	50/60Hz					
	AC Current	0.4A/115VAC		0.2A/230VAC			
	Inrush Current	Cold Start 50A/200us at 230VAC 50Hz			Cold Start 25A/200us at 115VAC 50Hz		
	Leakage Current	<0.1mA/230VAC					
	Efficiency	79%	83%	83%	83.5%	83.5%	84%
	No Load Power Consumption	<0.1W					
Protection	Over Load	105~150% Hiccup mode, recovers automatically after fault condition is removed.					
	Short Circuit	Shut down o/p voltage, re-power on to recover.					
	Over Voltage	120~180% Shut down o/p voltage, re-power on to recover.					
Ambient	Working TEMP.	-20 ~ +60 ℃ (Please refer to “Derating Curve”section)					
	Working Humidity	20 ~ 95%RH Non-condensing					
	Storage TEMP. Humidity	-40 ~ +85 ℃ , 10 ~ 95%RH Non-condensing					
	TEMP. Coefficient	±0.03%/(0 ~ 40 ℃)					
	Vibration	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes					
Safety	Safety Standards	EN60601-1					
	Withstand Voltage	I/P-O/P: 4KVAC/1min					
	Isolation Resistance	I/P-O/P:100M Ohms / 500VDC / 25 ℃ / 70% RH					
EMC	EMC Emission	Parameter	Standard		Test Level		
		Conducted	EN55014		CLASS B		
		Radiated	EN55014		CLASS B		
		Harmonic Current	EN61000-3-2		CLASS B		
		Voltage flicker	EN61000-3-3		CLASS B		
	EMC Immunity	Parameter	Standard		Test Level		
		ESD	EN61000-4-2		Level 3, 8KV air, criteria A		
		Radiated Susceptibility	EN61000-4-3		Level 3, criteria A		
		EFT/Burest	EN61000-4-4		Level 3, criteria A		
		Surge	EN61000-4-5		Level 4, 2KV/L-N, criteria A		
		Conducted	EN61000-4-6		Level 3, criteria A		
		Magnetic Field	EN61000-4-8		Level 4, criteria A		
		Voltage Dips and interruptions	EN61000-4-11		> 95% dip 0.5 periods, 30% dip 25 periods, >95% interruptions 250 periods		
Others	Packing	110g/pcs; 40 x 37.5 x 21.5 cm; 100pcs/carton					
	Dimension (LxWxH)	69.3 x 27.8 x 74.7 mm					
	Plug and Cable	See page 3~5; Other type available by customer requested					
	MTBF	224.6Khrs min. MIL-HDBK-217F(25 ℃)					
Note	1. Tolerance: includes set up tolerance, line regulation and load regulation. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3.Line regulation is measured from low line to high line at rated load. 4.Load regulation is measured from 0% to 100% rated load. 5. All parameters NOT specially mentioned are measured at nominal voltage input, rated load and 25 ℃ of ambient temperature. 6. De-rating may be needed under low input voltages. Please refer to “Static Characteristic” sections for details. 7. The power supply is considered as a component that will be operated in combination with final equipment.Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.						

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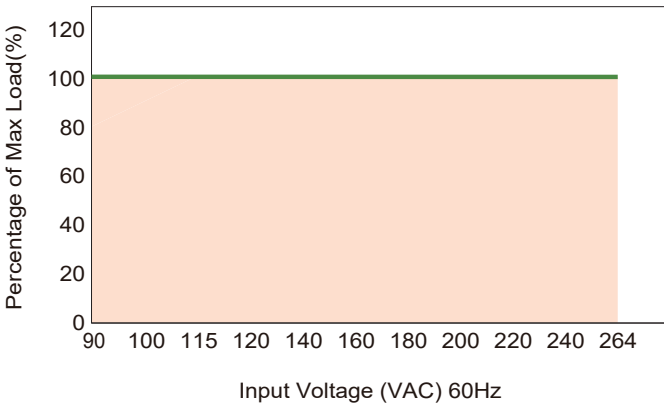
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Feature Curves

1. Derating Curve

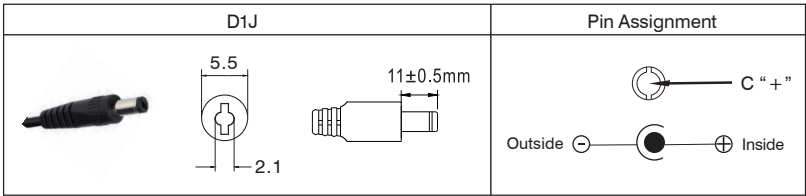


2. Static Characteristics

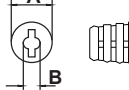
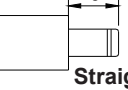


DC Output Plug (Option)

Standard Model : D1J



Optional DC plug:
(Unit: mm , tolerance: ±0.5mm)

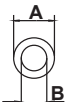
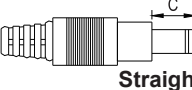
Tuning Fork Style			
Type No.	A	B	C
	OD	ID	L
D1I	5.5	2.1	9.5
D1L	5.5	2.5	9.5
D1M	5.5	2.5	11.0

Tuning Fork Style			
Type No.	A	B	C
	OD	ID	L
D1IR	5.5	2.1	9.5
D1JR	5.5	2.1	11.0
D1LR	5.5	2.5	9.5
D1MR	5.5	2.5	11.0

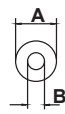
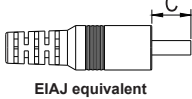
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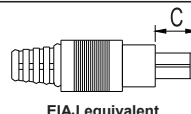
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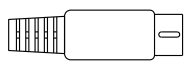
DC Output Plug (Option)

Barrel Style			
			Straight
Type No.	A	B	C
	OD	ID	L
D2I	5.5	2.1	9.5
D2J	5.5	2.1	11.0
D2L	5.5	2.5	9.5
D2M	5.5	2.5	11.0

Barrel Style			
			Right-angled
Type No.	A	B	C
	OD	ID	L
D2IR	5.5	2.1	9.5
D2JR	5.5	2.1	11.0
D2LR	5.5	2.5	9.5
D2MR	5.5	2.5	11.0

Tuning Fork Style			
			EIAJ equivalent
Type No.	A	B	C
	OD	ID	L
D3A	2.35	0.7	11.0
D3B	4.0	1.7	11.0
D3C	4.75	1.7	11.0

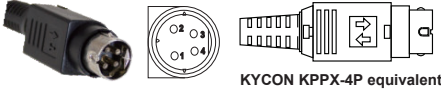
Center Pin Style				
			EIAJ equivalent	
Type No.	A	B	C	D
	OD	ID	L	Center Pin
D4A	5.5	3.4	11.0	1.0
D4B	6.5	4.4	11.0	1.4
D4C	7.4	5.1	11.0	0.6

Barrel Style			
Type No.	Pin Assignment		
	PIN No.	Output	
M1B	1	-Vo	
	2	-Vo	
	3	+Vo	
	4	-Vo	
	5	+Vo	

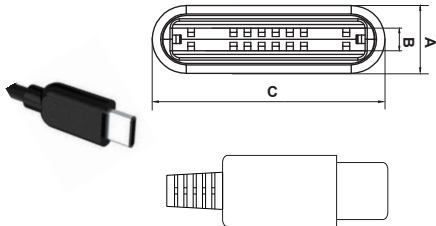
MIN.Din 3Pin with Lock(male)			
			KYCON KPPX-3P equivalent
Type No.	Pin Assignment		
	PIN No.	Output	
M6B	1	+Vo	
	2	-Vo	
	3	+Vo	

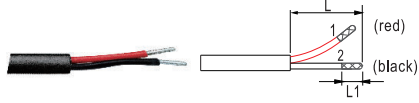
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DC Output Plug (Option)

MIN.Din 4Pin with Lock(male)		
	KYCON KPPX-4P equivalent	
Type No.	Pin Assignment	
	PIN No.	Output
M7B	1	+Vo
	2	-Vo
	3	-Vo
	4	+Vo

MIN.Din 4Pin with Lock(female)		
	KYCON KPJX-CM-4S equivalent	
Type No.	Pin Assignment	
	PIN No.	Output
M7BF	1	+Vo
	2	-Vo
	3	-Vo
	4	+Vo

Type-C			
Type No.	A	B	C
	OD	ID	L
C1	2.4	1.3	8.25

Stripped and tinned leads	 Length of Land L1 by request YJ's standard length, L: 30 mm, L1: 5 mm NOTE: The wire color is for reference only, please refer to the actual product	
Type No.	Pin Assignment	
	PIN No.	Output
by customer	1	+Vo
	2	-Vo