

YS125-Class I SERIES

160W



Features

- Energy efficiency level VI
- Class I Power Supply
- 3 Years Warranty
- Universal AC input/Full range
- No load power consumption < 0.21W
- Protections: Short Circuit /Over Load / Over Voltage
- -30~+70°C wide range working temperature

Applications

- Oral irrigator
- Hemodialysis machine
- Medical computer monitors
- Sleep apnea devices
- Medical imaging scanners
- Physiological monitors



RoHS



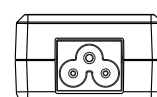
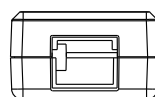
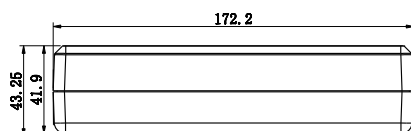
Model Description

YS125 - XXXYYYYY M - [] - M7B

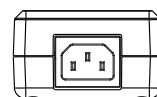
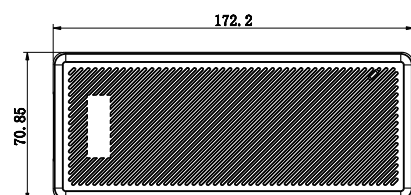
- DC Plug Type { M7B: standard model, KYCON KPPX-4P equivalent
Other options available by customer requested (see Page3-5)
- AC Plug Type: C6/C14
- Medical Type
- Output Current
- Output Voltage
- Series Name

Dimensions and installation

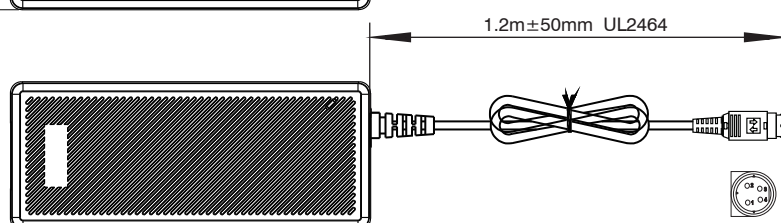
(Unit: mm , tolerance: ±1mm)



C6



C14



Standard Cable	1.2m UL2464 (Option: UL2468, UL1185)
12 ~ 15V	16AWG
19 ~ 24V	18AWG
48V	20AWG

File last modification time: 2025-3-24

Specification

Model	Order P/N	YS125-12011500M -C6-M7B		YS125-15010660M -C6-M7B		YS125-19008420M -C6-M7B		YS125-24006660M -C6-M7B		YS125-48003330M -C6-M7B	
	Safety Model No.	YS125-12011500M		YS125-15010660M		YS125-19008420M		YS125-24006660M		YS125-48003330M	
Output	DC Voltage	12V		15V		19V		24V		48V	
	Rated Current	11.5A		10.66A		8.42A		6.66A		3.33A	
	Rated Power	138W		160W		160W		160W		160W	
	Ripple & Noise(max.)	100mVp-p		150mVp-p		200mVp-p		300mVp-p		400mVp-p	
	Voltage Tolerance	±5%		±5%		±5%		±5%		±5%	
	Line Regulation	±3%		±3%		±3%		±3%		±3%	
	Load Regulation	±5%		±5%		±5%		±5%		±5%	
	Setup,Rise,Hold up Time	1.0s,15ms,35ms/230VAC(at full load)					1.0s,15ms,25ms/115VAC(at full load)				
Input	Rated Voltage Range	100-240VAC									
	Voltage Range	90-264VAC									
	Frequency Range	50/60Hz									
	AC Current	2.0A/115VAC					1.1A/230VAC				
	Inrush Current	Cold Start 60A/200us at 230VAC 50Hz					Cold Start 40A/200us at 115VAC 50Hz				
	Leakage Current	<0.1mA/230VAC									
	Efficiency	89%		89.5%		89%		90.5%		91.5%	
	No Load Power Consumption	<0.21W									
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.	-30 ~ +70 ℃ (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	ANSI/AAMI ES60601-1, EN60601-1									
	Withstand Voltage	I/P-O/P: 4KVAC/1min I/P-FG: 2KVAC/1min O/P-FG: 0.5KVAC/1min									
	Isolation Resistance	I/P-O/P:100M Ohms / 500VDC / 25 ℃ / 70% RH									
EMC	EMC Emission	Parameter		Standard				Test Level			
		Conducted		EN55032(CISPR32)				CLASS B			
		Radiated		EN55032(CISPR32)				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	550g/pcs; 42.5 x 22 x 20 cm; 20pcs/carton									
	Dimension (LxWxH)	172.2 x 70.85 x 43.25 mm									
	Plug and Cable	See page 3~5; Other type available by customer requested									
	MTBF	295.8Khrs 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.										

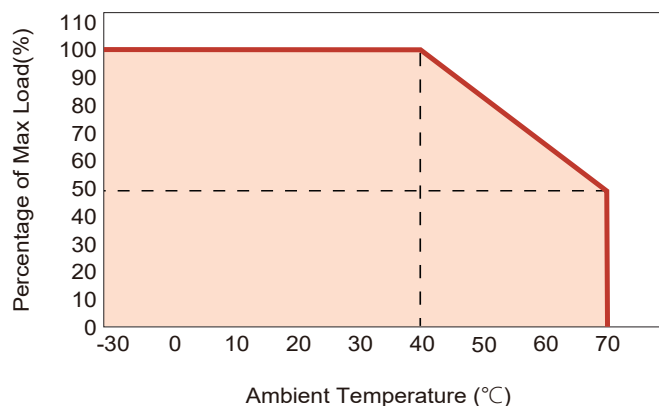
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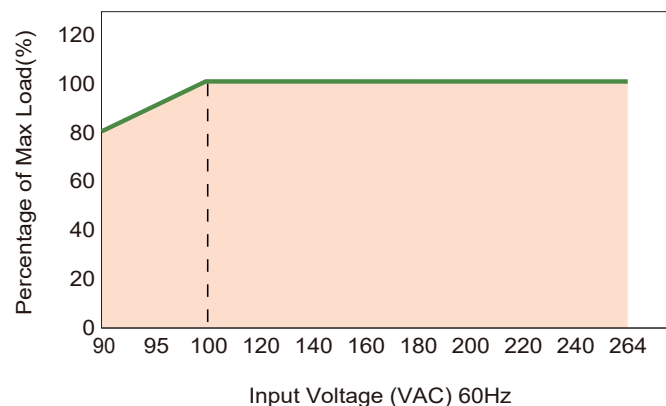
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Feature Curves

1. Derating Curve



2. Static Characteristics



DC Output Plug (Option)

Standard Model : M7B

M7B		Pin Assignment	
		Pin No.	Output
		1	+Vo
		2	-Vo
		3	-Vo
		4	+Vo

Optional DC plug:

(Unit: mm , tolerance: $\pm 0.5\text{mm}$)

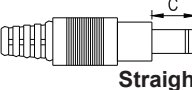
Tuning Fork Style			
Type No.	A	B	C
	OD	ID	L
D1I	5.5	2.1	9.5
D1J	5.5	2.1	11.0
D1L	5.5	2.5	9.5
D1M	5.5	2.5	11.0

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

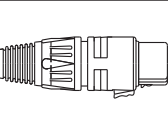
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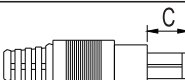
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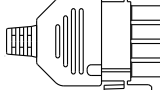
DC Output Plug (Option)

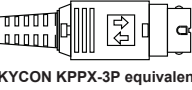
Barrel Style			
	A	B	C
Type No.	OD	ID	L
D2I	5.5	2.1	9.5
D2J	5.5	2.1	11.0
D2L	5.5	2.5	9.5
D2M	5.5	2.5	11.0

Barrel Style			
	A	B	C
Type No.	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

Neutrik XLR NC4FX equivalent			
Type No.	Pin Assignment		
	PIN No.	Output	
MIC4	1	+Vo	
	2	+Vo	
	3	-Vo	
	4	-Vo	

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

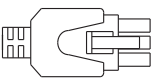
AMP 1-480702-0 (6.35mm) equivalent			
Type No.	Pin Assignment		
	PIN No.	Output	
M4P	1	+Vo	
	2	+Vo	
	3	-Vo	
	4	-Vo	

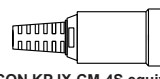
MIN.Din 3Pin with Lock(male)			
	Pin Assignment		
Type No.	PIN No.	Output	
M6B	1	+Vo	
	2	-Vo	
	3	+Vo	

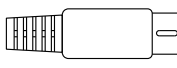
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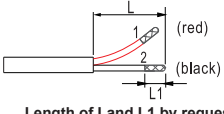
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DC Output Plug (Option)

MOLEX 39-01-2060 (4.2mm) equivalent   		
Type No.	Pin Assignment	
	PIN No.	Output
M6P	1	+Vo
	2	+Vo
	3	+Vo
	4	-Vo
	5	-Vo
	6	-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

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

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