

## **Features**

Universal Input 90~264VDAC

Desktop power supply

Approved to CE, FC, CB, TUV-GS, cULus, UKCA & RoHS

EN/EN62368-1 Safety Approved

**EMC Class B Certified** 

Single Output 9V DC

OVP, OLP, SCP



## 56YS50-xy-RS Series

36W External AC/DC Desktop Power Supply



The 56YS50-xy-RS Series is a consistent and high-performing 36W External AC/DC Desktop Power Supply. Designed for use in applications such as embedded electronics and control equipment. This series is supplied with a C14 intel input connection and supports input voltages of 90~264V AC 50~60Hz.

Model Number Information					
56YS50	xy				
Series Name	Output Voltage	AC Plug type C6/C14			
Models					
Model Number	DC Voltage (V)	Rated Current (A)	Rated Power (W)	Efficiency (%)	Ripple & Noise(max) (mVp-p)
56YS50-0904000-F	RS 9	4	36	88	100



Input Specifications			
Rated Voltage Range	100-240VAC		
Voltage Range	90-264VAC		
Frequency Range	50/60Hz		
AC Current	1.5A/115VAC 0.8A/230VAC		
Efficiency	88%		
Inrush Current	Cold Start 60A/200us at 230VAC 50Hz Cold Start 40A/200us at 115VAC 50Hz		
Leakage Current	<0.75mA/230VAC		
No load power consumption	<0.21W		

Output Specifications			
DC Voltage	9V		
Rated Current	4A		
Rated Power	36W		
Ripple & Noise(max.)	100mVp-p		
Voltage Tolerance	+5%		
Line Regulation	+3%		
Load Regulation	+5%		
Setup,Rise,Hold up Time	0.8s,30ms,80ms/230VAC(at full load) 2.0s,30ms,15ms/115VAC(at full load)		

Protection			
Over Load	105~150%		
	Hiccup mode, recovers automatically after fault condition is removed.		
Short Circuit	Hiccup mode, recovers automatically after fault condition is removed.		
Over Voltage	105~150%		
	Hiccup mode, recovers automatically after fault condition is removed.		

Environmental Characteristics			
Working Temp	-30 ~ +70°C(Please refer to "Derating Curve"section)		
Working Humidity	20 ~ 95%RH Non-condensing		
Storage Temp., Humidity	-40 ~ +85°C,10 ~ 95%RH Non-condensing		
Temp. Coefficient	0.03%/(0 ~ 40°C)		
MTBF	354.9Khrs min. MIL-HDBK-217F(25°C)		



Safety & EMC					
Safety Standards	BS EN IEC 62368-1				
Withstand Voltage	I/P-O/P: 3KVAC/1min				
Isolation Resistance	I/P-O/P:100M Ohms / 500VDC / 25°C/ 70% RH				
	Parameter	Standard	Test Level		
	Conducted	EN55032(CISPR32)	CLASS B		
	Radiated	EN55032(CISPR32)	CLASS B		
EMC Emission	Harmonic Current	BS EN61000-3-2	CLASS B		
	Voltage flicker	BS EN61000-3-3	CLASS B		
	Parameter	Standard	Test Level		
	ESD	BS EN61000-4-2	Level 3, 8KV air, criteria A		
	Radiated Susceptibility	BS EN61000-4-3	Level 3, criteria A		
	EFT/Burest	BS EN61000-4-4	Level 3, criteria A		
	Surge	BS EN61000-4-5	Level 4, 2KV/L-N, criteria A		
EMC Immunity	Conducted	BS EN61000-4-6	Level 3, criteria A		
LINIC IIIIIIIIIIIIII	Magnetic Field	BS EN61000-4-8	Level 4, criteria A		
	Voltage Dips and interruptions	BS EN61000-4-11	> 95% dip 0.5 periods, 30% dip 25 periods,		
			>95% interruptions 250 periods>		

### Notes:

- 1. All parameters without special description are measured under the conditions of input 230VAC, rated load, ambient temperature 25 ° C, and ambient humidity less than 75%.
- 2. Ripple & noise are measured from peak to peak with a bandwidth limit of 20MHz(0.1uf and 47uf /50V parallel capacitor under DC output full load, AC nominal input 25 °C ambient temperature).
- 3. Tolerance: includes set up tolerance, line and load regulation.
- 4. Derating may be needed under low input voltages. Please check the derating curve for more details.
- 5. The power supply is considered a component which will be installed into the final equipment. The final equipment must be confirmed to meet EMC directives. For guidance on performing these EMC tests, please refer to "EMI testing of component power supplies."
- $6. \ \ \, \text{The ambient temperature derating of } 3.5^{\circ}\text{C}/1000\text{m} \text{ is needed for operating altitude greater than } 2000\text{m} (6500\text{ft}).$

Dimensions & Weigh	t		
	Measurements	Weight	
56YS50-0904000-RS	116.5 x 54.2 x 34.6 mm	310g/pcs	
Packaging			
Carton Size	34 x 31 x 37 cm		
Master Carton Quantities	50pcs/carton		



#### **Derating Curves** 1. Derating Curve 2. Static Characteristics 110 120 Percentage of Max Load(%) Percentage of Max Load(%) 100 90 100 80 70 80 60 60 50 40 40 30 20 20 10 0-30 0 -60 70 95 100 120 140 160 180 200 220 240 264 Ambient Temperature (°C) Input Voltage (VAC) 60Hz

# DC Output Plug (Option) Standard Model: D1J

