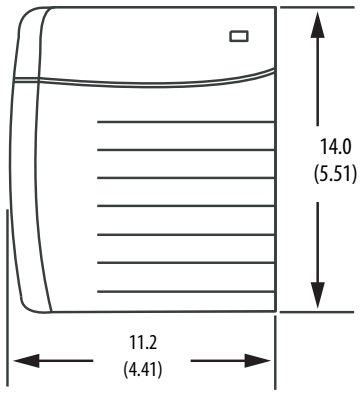
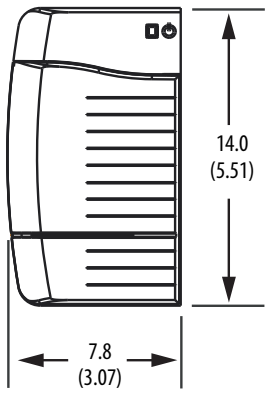
Standard AC Power Supplies

Mounting Dimensions

1756-PA72, 1756-PA72K, 1756-PA75, 1756-PA72K



1756-PA50, 1756-PA50K



Dimensions are in cm (in.).

Technical Specifications - Standard AC Power Supplies

Attribute	1756-PA50, 1756-PA50K	1756-PA72/C, 1756-PA72K/C	1756-PA75/B, 1756-PA75K/B
Input voltage range[1]	85…265V AC		
Input voltage, nom	120V/240V AC		
Input frequency range	47…63 Hz		
Input power, max	81 W/91VA @ 50 °C (122 °F) 68 W/77VA @ 60 °C (140 °F)	100VA/100 W	
Output power, max	60 W @ 0…+50 °C (+32…+122 °F)[3] 50 W @ 0…+60 °C (+32…+140 °F)[4]	75 W @ 0…+60 °C (+32…+140 °F)[6]	
Inrush current, max	20 A		
Hold up time[2]	4 cycles @85...265V AC, 50/60 Hz, 60 W 5 cycles @85...265V AC, 50/60 Hz, 50 W	5 cycles @ 85V AC, 50/60 Hz 6 cycles @ 120V AC, 50/60 Hz 6 cycles @ 200V AC, 50/60 Hz 6 cycles @ 240V AC, 50/60 Hz	2 cycles @ 85V AC, 60 Hz 6 cycles @ 120V AC, 60 Hz 20 cycles @ 220V AC, 60 Hz
Current capacity @ 1.2V DC	1.5 A		
Current capacity @ 3.3V DC	2 A	4 A	
Current capacity @ 5.1V DC	8 A @ 50 °C (122 °F) 6 A @ 60 °C (140 °F)	10 A	13 A
Current capacity @ 24V DC	2.5 A @ 50 °C (122 °F) 2.0 A @ 60 °C (140 °F)	2.8 A	
Isolation voltage	250V (continuous), Reinforced Insulation Type, Power Input to Backplane Type tested @ 3150V DC for 60 s	250V (continuous), Reinforced Insulation Type, Power Input to Backplane Type tested at 3500V DC for 60 s	
Weight, approx	0.77 kg (1.7 lb)	0.95 kg (2.10 lb)	
Dimensions (HxWxD), approx	14.0 x 7.8 x 14.5 cm (5.51 x 3.07 x 5.71 in.)	14.0 x 11.2 x 14.5 cm (5.51 x 4.41 x 5.71 in.)	
Module location	Left side of 1756 chassis		
Chassis	1756-A4, 1756-A7, 1756-A10, 1756-A13, 1756-A17		
Chassis compatibility	Series A Series B Series C		Series B Series C
Wire size	2.5 mm^2 (14 AWG) solid or stranded copper wire rated at 90 °C (194 °F), or greater, 1.2 mm (3/64 in.) insulation max		

Technical Specifications - Standard AC Power Supplies

Attribute	1756-PA50, 1756-PA50K	1756-PA72/C, 1756-PA72K/C	1756-PA75/B, 1756-PA75K/B
Wire category	1 - on power ports[5]		
Conductor screw torque	0.565 N•m (5 lb•in)		
North American temperature code	T4		
Enclosure type rating	None (open-style)		

(1) UL certification for 120/240V AC, 50/60 Hz nominal. Rockwell Automation specified 85…265V AC, 47…63 Hz.
(2) The hold up time is the time between input voltage removal and DC power failure.
(3) The combination of all output power (5.1V backplane, 24V backplane, 3.3V backplane, and 1.2V backplane) cannot exceed 60 W @ 50 °C (122 °F) maximum temperature.
(4) The combination of all output power (5.1V backplane, 24V backplane, 3.3V backplane, and 1.2V backplane) cannot exceed 50 W @ 60 °C (140 °F) maximum temperature.
(5) Use this conductor category information to plan conductor routing as described in the system level installation manual. See the Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1.
(6) The combination of all output power (5.1V backplane, 24V backplane, 3.3V backplane, and 1.2V backplane) cannot exceed 75 W.

Environmental Specifications - Standard AC Power Supplies

Attribute	1756-PA50, 1756-PA50K	1756-PA72/C, 1756-PA72K/C, 1756-PA75/B, 1756-PA75K/B
Temperature, operating IEC 60068-2-1 (Test Ad, Operating Cold), IEC 60068-2-2 (Test Bd, Operating Dry Heat), IEC 60068-2-14 (Test Nb, Operating Thermal Shock)	0 °C < Ta < +60 °C (+32 °F < Ta < +140 °F)	
Temperature, surrounding air, max	60 °C (140 °F)	
Temperature, non-operating IEC 60068-2-1 (Test Ab, Unpackaged Nonoperating Cold), IEC 60068-2-2 (Test Bb, Unpackaged Nonoperating Dry Heat), IEC 60068-2-14 (Test Na, Unpackaged Nonoperating Thermal Shock)	-40…+85 °C (-40…+185 °F)	
Relative humidity IEC 60068-2-30 (Test Db, Unpackaged Damp Heat)	5…95% noncondensing	
Vibration IEC 60068-2-6 (Test Fc, Operating)	2 g @ 10…500 Hz	
Shock, operating IEC 60068-2-27 (Test Ea, Unpackaged Shock)	30 g	
Shock, nonoperating IEC 60068-2-27 (Test Ea, Unpackaged Shock)	50 g[1]	
Emissions	IEC 61000-6-4	
ESD immunity IEC 61000-4-2	6 kV contact discharges 8 kV air discharges	
Radiated RF immunity IEC 61000-4-3	10V/m with 1 kHz sine-wave 80% AM from 80…2000 MHz 10V/m with 200 Hz 50% Pulse 100% AM @ 900 MHz 10V/m with 200 Hz 50% Pulse 100% AM @ 1890 MHz 3V/m with 1 kHz sine-wave 80% AM from 2000…2700 MHz	
EFT/B immunity IEC 61000-4-4	±4 kV at 5 kHz on power ports	
Surge transient immunity IEC 61000-4-5	±1 kV line-line (DM) and ±2 kV line-earth (CM) on power ports	
Conducted RF immunity IEC 61000-4-6	10V rms with 1 kHz sine-wave 80% AM from 150 kHz…80 MHz	
Voltage variation IEC 61000-4-11	30% dips for 1 period at 0° and 180° on AC supply ports 60% dips for 5 and 50 periods on AC supply ports ±10% fluctuations for 15 min on AC supply ports >95% interruptions for 250 periods on AC supply ports	
Damped oscillatory wave immunity IEC 61000-4-18	±2.5 kV line-line (DM) and ±2.5 kV line-earth (CM) on power ports	–

(1) Series C chassis have a maximum nonoperating shock value of 30 g. If you select a Series C chassis for use with your power supply, you are limited to a maximum nonoperating shock value of 30 g.