

# **POWER SUPPLY**

## FEATURES

- Rugged Construction
- UL, CSA, CE Certified
- Some Models Provide Built-In Redundancy
- Wide Input Voltage Ranges
- Compact Package
- Wide Operating Temperature Range
- DIN Rail Mountable





#### SPECIFICATIONS General

Terminal Blocks: J2: 1 row of 6 for internal bus power (Mating connector not included<sup>3</sup>) J3: 1 row of 3 for AC input. (Mating plug included) J4: 1 row of 4 for auxiliary loads (Mating plug included) Terminals Screw Torque: 7-9 in-lbs

Bus Output: +5V output can be run in parallel with other bus supplies.

### **SPECIFICATIONS**

Specification	74-PWR-AC1	74-PWR-AC2	74-PWR-AC3
Input Voltage Range:	85-250 Vac	85-250 Vac	85-250 Vac
Input Frequency Range:	47-440 Hz	47-440 Hz	47-440 Hz
Input Current:	1.5A @ 115 Vac	1.0A max. (RMS) @115 Vac	1.0A max. (RMS) @115 Vac
Output Voltage Ranges:	4.8 to 5.2 Vdc,	4.8 to 5.2 Vdc,	4.8 to 5.2 Vdc
	11.7 to 12.9 Vdc, &	11.7 to 12.9 Vdc, &	
	-11.7 to 12.9 Vdc	-11.7 to 12.9 Vdc	
Maximum Output Current <sup>1</sup> :	7.0A @ 0-40°C derate	3.0A @ 0-40°C, derate	5.0A @ 0-40°C, derate
	2.5% per degree 40-70°C	2.5% per degree 40-70°C	2.5% per degree 40-70°C
Minimum Load Current:	0A @	0.3A @ 5 Vdc	0A A
Secondary Output Current <sup>2</sup> :	NA	NA	NA
Efficiency:	70% typical	70% typical at full load	70% typical at full load
Ripple:	<50 mV	<50 mV	<50 mV
Indicator:	1 green power supply OK LED <sup>4</sup>	1 green power supply OK LED <sup>4</sup>	1 green power supply OK LED <sup>4</sup>
Conductor Size:	(1) 14 AWG or (2) 16 AWG	(1) 14 AWG or (2) 16 AWG	(1) 14 AWG or (2) 16 AWG
Protection:	3.15A @ 250 Vac fuse,	2.0A @ 250 Vac fuse,	2.0A @ 250 Vac fuse,
	overload and reverse	overload and reverse	overload and reverse
	polarity protection.	polarity protection.	polarity protection.

POWER SUPPLY UNIT ON OPENLINE® SYSTEM

<sup>1</sup> Output current rating assumes horizontal DIN rail or panel mounting, no cover and no auxiliary air flow. For horizontal mounting with cover, current rating is specified from 0 to 30°C, derate 2.5% per degree 30 to 70°C. For vertical mounting with cover, current rating is derated 15% from 0 to 30°C, derate additional 2.5% per degree from 30 to 60°C.

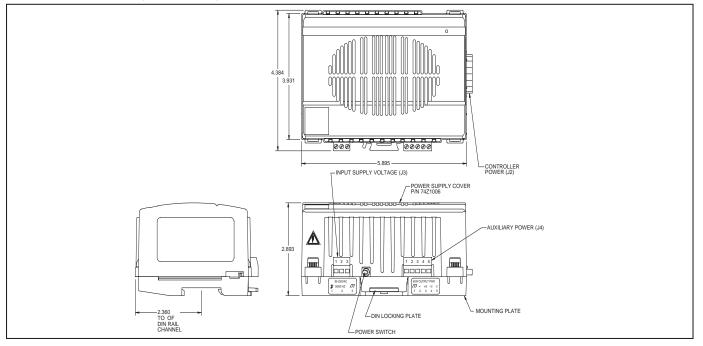
<sup>2</sup> -5V output current is derived from +5V output using a DC-DC converter with 75% efficiency. Therefore, +5V output maximum current is derated by 1.33 x -5V output current.

<sup>3</sup> PC mount mating plug connector Phoenix Contact type MSTB 2.5/6-G-5.08.

<sup>4</sup> Power LED will pulse on and off if min. load requirement for proper regulation is not met.



### **DIMENSIONS** In inches (and millimeters)



## SPECIFICATIONS

	Part Number: Non-Redundant Operations			
Specification	74-PWR-AC4	74-PWR-AC5	74-PWR-DC24	
Input Voltage Range:	85-250 Vac	85-250 Vac	18-36 Vdc	
Input Frequency Range:	47-440 Hz	47-440 Hz		
Input Current:	1.5A max. (RMS) @ 115 Vac	1.0A max. (RMS) @ 115 Vac	DC	
Efficiency:	70% typical at full load	70% typical at full load	2.15A @ full. load	
Output Voltage Ranges:	23.5 to 24.5 Vdc	4.8 to 5.2 Vdc, 11.7 to 12.9 Vdc,	4.8 to 5.3 Vdc, -4.8 to -5.2 Vdc,	
		& -11.7 to 12.9 Vdc	11.4 to 12.9 Vdc, & -11.4 to -12.9 Vdc	
Maximum Output	2.5A @ 0-40°C, derates 2.5%	3.0A @ 0-40°C, derates 2.5%	6.5A @ 0-35°C derates 1.2%	
Current <sup>1</sup> :	per degree 40-70°C	per degree 40-70°C	per degree 35-105°C	
Minimum Output Current <sup>2</sup> :		0.3A @ 5 Vdc	0.7A @ 5 Vdc	
Secondary Output Current:	NA	+12V: 0.1A-0.7A, -12V: 0.0A-0.5A	+12, -12, -5 Vdc: 0.70A	
Ripple:	<50 mV	<50 mV	@ 25°C	
Terminal Blocks:	J2: NA	J2: 1 row of 6 for internal bus power	J2: 1 row of 6 for internal bus power	
		(Mating connector not included <sup>3</sup> )	(Mating connector not included <sup>3</sup> )	
	J3: 1 row of 3 for AC input.	J3: 1 row of 3 for AC input.	J3: 1 row of 3 for AC input.	
	(Mating plug included)	(Mating plug included)	(Mating plug included)	
	J4: 1 row of 4 for auxiliary loads	J4: 1 row of 4 for auxiliary loads	J4: 1 row of 4 for auxiliary loads	
	(Mating plug included)	(Mating plug included)	(Mating plug included)	
Indicator:	1 green power supply OK LED	1 green power supply OK LED <sup>4</sup>	1 green power supply OK LED <sup>₄</sup>	
Conductor Size:	(1) 14 AWG or (2) 16 AWG	(1) 14 AWG or (2) 16 AWG	(1) 14 AWG or (2) 16 AWG	
Terminal Screw Torque:	7-9 inch-pounds	7-9 inch-pounds	7-9 inch-pounds	
Protection:	3.15A @ 250 Vac fuse,	2.0A @ 250 Vac fuse,	2.0A @ 250 Vac fuse,	
	overload and reverse	overload and reverse	overload and reverse	
	polarity protection.	polarity protection.	polarity protection.	
Bus Output:	Output cannot be parallel	Output cannot be parallel	Output cannot be parallel	

<sup>1,2,3,4</sup> See previous page.

**ORDERING INFORMATION** 

## ACCESSORIES

See p. L-54

Part Number	Description	Part Number	Description
74-PWR-AC1	85-250 Vac in, 7A @ 5 Vdc, +12 Vdc, -12 Vdc out	74-PWR-AC5	85-250 Vac in, 2.5A @ 25 Vdc out
74-PWR-AC2	85-250 Vac in, 3A @ 5 Vdc, +12 Vdc, -12 Vdc out		85-250 Vac in, 3A @ 24 Vdc out, auxilliary outputs
74-PWR-AC3	85-250 Vac in, 5A @ 5 Vdc,		18-36 Vdc in, 6.5A @ 5 Vdc out, auxilliary outputs

Available from your local Grayhill Distributor. For prices and discounts, contact a local Sales Office, an authorized Distributor or Grayhill.