Industrial DIN Rail Power Supplies

Industrial Power Supplies

Compact DIN Rail Power Supply

Available in 24 and 48vDC models, Perle Industrial-grade Power Supplies are reliable sources of power designed stand up to harsh industrial environments.

- Adheres to a variety of industry-recognized standards to ensure the highest level of durability and adaptability under harsh environmental conditions
- Compact size with standard DIN-Rail attachment
- Universal input range
- Short circuit, overload and over voltage protection
- LED indicator for power

Perle **Industrial-grade Power Supplies** are designed to stand up to **extreme temperatures, surges, vibrations,** and **shocks** found in **industrial automation, government, military, oil and gas, mining** and **outdoor applications**.

UNO 24v and TRIO 48vDC power supplies are hardened to provide superior reliability in extended operating temperatures from **-25 to 70C.**

Why UNO and TRIO Power Supplies are the preferred choice:

- Maximum energy efficiency, thanks to over 90% efficiency and extremely low idling losses
- Maximum operational reliability thanks to high MTBF (mean time between failures) and high dielectric strength
- More space in the control cabinet with up to 20% higher power density
- Flexible mounting by simply snapping onto the DIN rail
- Rugged design with metal housing

These power supplies are ideal for providing reliable power to:

- Perle Industrial Ethernet Switches
- Perle Industrial Temperature Media Converters
- Perle PoE+ Media Converters
- Perle Rugged Terminal Servers

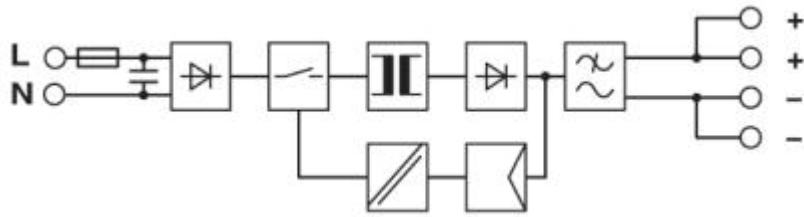|	MINI-SYS- PS-100- 240AC / 24D C / 1.5	UNO-PS/1AC/ 24DC/60W	UNO-PS/1AC/ 24DC/150W	TRIO-PS/1AC/ 48DC/5	TRIO-PS/1AC/ 48DC/10
Output					
Nominal DC Voltage	24 V			48 V	
Max Current	1.5 A	2.5 A	6.25 A	5 A	10 A
Rated Power	36 watts	60 watts	150 watts	240 watts	480 watts
Ripple and Noise	<40 mVpp	< 30 mVpp	< 40 mVpp	< 50 mVpp	
Adjustable Voltage Range		-	24 - 28 V	30 to 56 V DC	
Load De-rating	60°C to 70°C (140 to 158°F) (2.5%/K)	55°C to 70°C (131 to 158°F) (2.5%/K)		54°C to 70°C (129 to 158°F) (2.5%/K)	55°C to 70°C (131 to 158°F) (2.5%/K)
Output Connectors	6 Pluggable screw connection (2 x V+ / V- and 2 controls)	4-pin terminal block (V+,V-,V+,V-)			
Input					
Input Voltage Range	85 V AC ... 264 V AC				
Frequency Range	45 Hz ... 65 H			46 – 65Hz	47 Hz - 65 Hz
Efficiency (Typical)	>84%	>90%	>94%	>89%	>91%
AC Current (Typical)	0.75A/120v AC 0.45A/240v AC	1 A/120v AC 0.6 A/230v AC	1.4 A/120v AC 0.8 A/230 vA	2.5 A/120v AC 1.3 A/231v AC	4.6 A/120v AC 2.4 A/230v AC
Inrush Current (Typical)	<15A	<30A (typical)	<50A (typical)	<15A	<15A

Input Connectors	3 Pluggable screw connection	2-pin terminal block		3-pin terminal block	

Protection

Over Voltage		–	–	limited to approx. 60 V DC	

Environmental Specifications

Operating Temperature Ranges	-25 °C to 70 °C (-13 to 158°F)				
Storage Temperature Range	-40 to 85°C (-40 to 185°F)				
Operating Humidity Range	≤ 95 % (at 25 °C, non-condensing)			94 % (at 25 °C, non-condensing)	95 % (at 25 °C, non-condensing)
Din Rail Mountable	Mounts to standard 35 mm DIN rail in accordance with DIN EN 60175				
T-BUS Connector	Yes	No			
MTBF	> 2789000 h (40 °C) (IEC 61709, SN 29500)	> 785000 h (40 °C) (IEC 61709, SN 29500)	> 868000 h (40°C) (IEC 61709, SN 29500)	> 500 000 h (IEC 61709, SN 29500)	> 500 000 h (IEC 61709, SN 29500)

Product Weight and Dimensions

Weight	0.25 kg 0.55 lbs	.24 kg .53 lbs	0.5 kg 1.1 lbs	1.4 kg 3.1 lbs	1.9 kg 4.2 lbs
Dimensions	35 x 99 x 95 mm 1.38 x 3.9 x 3.74 inches	35 x 90 x 84mm, 1.38 x 3.54 x 3.3 inches	37 x 130 x 125mm	60 x 130 x 152.5mm, 2.4 x 5.1 x 6 inches	115 x 130 x 152.5mm

Packaging

Shipping Weight	0.35 kg 0.77 lbs	.34 kg .75 lbs	0.6 kg 1.3 lbs	1.71 kg 3.77 lbs	2.09 kg 4.6 lbs

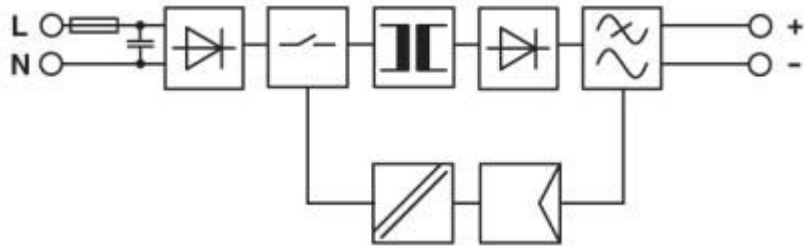| Shipping Dimensions	260 x 170 x 70 mm 10.2 x 6.7 x 2.7 inches	260 x 170 x 70 mm 10.2 x 6.7 x 2.7 inches	200 x 300 x 70 mm 7.9 x 11.8 x 2.8 inches	230 x 200 x 100 mm 9 x 7.9 x 3.9 inches	200 x 230 x 150 mm 7.9 x 9.0 x 5.9 inches

Standards and Certifications

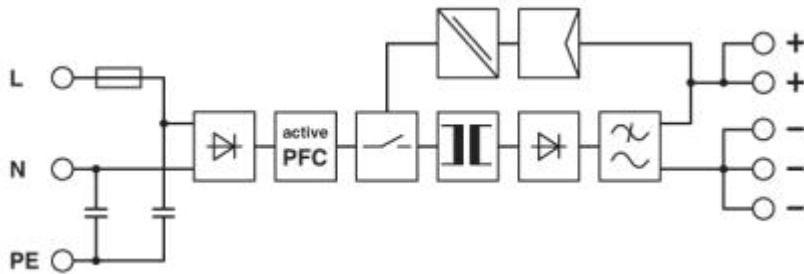| Safety	EN 60950-1/VDE 0805 (SELV)	IEC 60950-1/VDE 0805 (SELV)			
Emissions	EN55011, EN55022 (CISPR22)				
	Class B EN61000-3-2	EN61204-3 , Class B EN61000-3-2,-3			
Mechanical Stability	Vibration: IEC 60068-2-6				
EMC and Immunity	Conformance with EMC Directive 2014/30/EU EN 61000-6-2:2005 EN61000-4-2, 3, 4, 5, 6, 11	Conformance with EMC Directive 2014/30/EU EN 61000-6-2:2005			
Industrial Safety	UL508 (Safety standard for Industrial Control Equipment)				
		UL ANSI/ISA-12.12.01 Class I, Division 2, Groups A, B, C, D T4A (Hazardous Location)	UL ANSI/ISA-12.12.01 Class I, Division 2, Groups A, B, C, D T4 (Hazardous Location)	-	-
Rail applications	EN 50121-4	–	–	EN 50121-4	
Environmental	Reach and RoHS Compliant				
Other	ECCN: EAR99				
	HSTUS Number: 8504.40.30				
	1 year warranty				

UNO-PS/1AC/24DC/60W Power Supply Block Diagram

UNO-PS/1AC/24DC/150W Power Supply Block Diagram

TRIO-PS/1AC/48DC Power Supply Block Diagram

MINI-SYS-PS-100-240AC/24DC/1.5 Power Supply Block Diagram