

# Industrial DIN Rail Power Supplies

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## Industrial Power Supplies

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### Compact DIN Rail Power Supply

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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**

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### Output

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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

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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- )

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### Input

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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	
<b>Protection</b>					
Over Voltage		–	–	limited to approx. 60 V DC	
<b>Environmental Specifications</b>					
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)
<b>Product Weight and Dimensions</b>					
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
<b>Packaging</b>					
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
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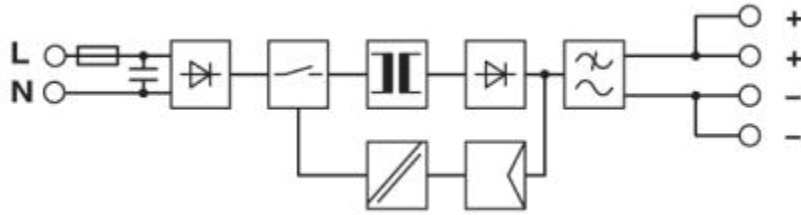
### Standards and Certifications

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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					

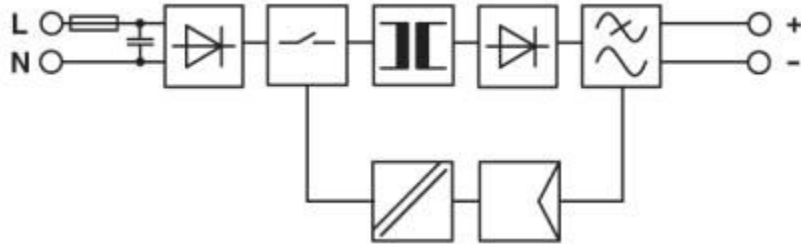
**UNO-PS/1AC/24DC/60W Power Supply Block Diagram**

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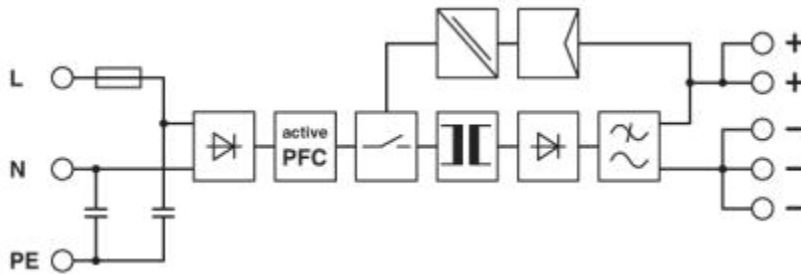
**UNO-PS/1AC/24DC/150W Power Supply Block Diagram**

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

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

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