

19"/2 PWR1121



All in one

The power distribution unit PWR1120 Series offers AC input, 9 DC outputs, and includes a high-performance UPS. In effect, the series combines three power products in one: AC/DC conversion, power distribution, and UPS. The unit is designed in the 19"/2 form factor and is optimized to provide power for complete 19"/2 systems. The unit comes with SNMP functionality as standard, which enables remote monitoring of ports, battery status, temperature, etc. This makes the PWR1120 Series an ideal power solution for mobile systems in demanding environments - even when the electricity goes out.

Small form factor

The MilDef 19"/2 form factor is optimized for reduced size, weight, and power (SWaP) to meet industry and military requirements without sacrificing reliability, ruggedness or performance.

Flexible mounting

The 19"/2 standard enables flexible mounting options for a wide array of integration scenarios. The unit can be mounted in a standard 19" rack, half racks, or directly to a surface and in any angle.

Military-relevant rugged design

MilDef products are designed to operate in extreme environmental conditions and challenging electromagnetic operational scenarios. Operationally proven, MilDef products are actively employed in military operations in over 60 countries.

Guaranteed performance

MilDef products are designed for the long lifecycles of military programs and come with a lifetime support program to ensure your equipment maintains peak performance for many missions to come.

We also guarantee the availability of spare parts for an additional 5 years after product end-of-life.

Features

- SNMP v3 compliant
- 110 VAC to 230 VAC
- EU Plug
- Passively cooled

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Connector Interfaces

POWER OUT 1 - POWER OUT 9 (front)	9 connectors which each has: <ul style="list-style-type: none"> • 1x POWER OUT
SERVICE (back)	<ul style="list-style-type: none"> • 1x RS232 Service
SERVICE-E (front)	<ul style="list-style-type: none"> • 1x ETH 100BASE-TX

Other Interfaces

1x Cable gland (back)
5x Battery capacity indicator (front)
5x Battery load indicator (front)
9x Power output indicator (front)
1x LOAD Button (front)
1x Mute Button (front)
1x System Button (front)

Technical Specification

Audible warning signal	Audible warning signal that may be muted Short beep every 10 seconds Two short beeps Constant audible signal Constant audible signal
Blanking	Double-pressing the System button
Remote management	SNMP v3 compliant
UPS function	Automatically switch to battery power when no AC/DC power is present
Power capacity	420 W 490 W peak 10.8 Ah (depending on load and temperature)
Power consumption	15 W (Idle) 30 W (Charging, no load) 530 W (Charging, full load)
Power input	110 VAC to 230 VAC
Power input cable	EU Plug
Power output	Normal mode: Output Voltage: 28 VDC. Max 20 A Battery mode: Output Voltage: 20-32 VDC. Max 20 A short term, 15 A continuously Battery power is not supported in cold start below -30 °C
Chassis material	Aluminum
Coating and color	Dupont AE0305-6603120 (RAL6031)
Cooling	Passively cooled
Dimensions	220 x 88 x 400 mm (8.7 x 3.5 x 15.8 in) (WxHxD)

Earth point	M6 12 mm
Rack mounting depth	400 mm (17.4 in)
Surface treatment chassis	Chromit-Al
Weight	9.5 kg
MTBF	Greater than 25,000 h
CE	Compliant

Environmental Specification

Functional shock - Operating	MIL-STD-810G, Method 516.6, Procedure I - Functional Shock. Table 516.6-II, Terminal peak sawtooth pulse, Ground equipment 40 g 11 ms
High temperature - Operating	MIL-STD-810G, Method 501.5, Procedure II - Operation 55 °C (131 °F)
High temperature - Storage	MIL-STD-810G, Method 501.5, Procedure I - Storage 71 °C (160 °F)
Humidity	MIL-STD-810G, Method 507.5, Procedure II - Aggravated 95 ± 4 % RH Ten 24 h cycles
IP Class (Solid Particle Protection)	IP Class 6X
IP Class (Water)	IP Class X5
Low air pressure - Rapid decompression	MIL-STD-810G, Method 500.5, Procedure III - Rapid decompression 75.2 kPa, corresponding to 2,438 m (8,000 ft) 17 kPa, corresponding to 12,192 m (40,000 ft)
Low air pressure - Storage/Air Transport	MIL-STD-810G, method 500.5, Procedure I - Storage/Air Transport. 17 kPa, corresponding to 12,192 m (40,000 ft)
Low air pressure - Operating	MIL-STD-810G, method 500.5, Procedure II - Operation/Air Carriage 4,572 m (15,000 ft)
Low temperature - Operating	MIL-STD-810G, method 502.5, Procedure II - Operation -40 °C (-40 °F)
Low temperature - Storage	MIL-STD-810G, method 502.5, Procedure I - Storage -40 °C (-40 °F)
Noise level	Maximum noise level of 40 dB SPL A-weighting at 1 m (3.3 ft) distance
Salt fog	MIL-STD-810G Method: 509.5 5 % ± 1 % (by weight) Two cycles, 24 h wet + 24 h dry / cycle

Temperature shock - Operating	MIL-STD 810G, method 503.5 procedures I - C, - Multi-cycle shocks from constant extreme temperature 55 °C (131 °F) -40 °C (-40 °F)
Transit drop, in shipping package	MIL-STD-810G, method 516.6, Procedure IV - Transit Drop. Table 516.6-VI, Transit drop test, < 45.4 kg (100 lbs), < 91 cm (36 inch), Manpacked or man-portable
Vibration - Helicopter	MIL-STD-810G. Method 514.6, Procedure I - General vibration, Category 14 - Rotary wing aircraft - helicopter
Vibration - Loose Cargo	MIL-STD-810G. Method 514.6, Procedure II - Loose cargo transportation, Category 5 - Truck/trailer - loose cargo
Vibration - Tracked Vehicles	MIL-STD-810G. Method: 514.6 , Procedure 1 - General Vibration, Category 20 - Ground vehicles - ground mobile, tracked vehicles
Vibration - Wheeled Vehicle	MIL-STD-810G. Method: 514.6 , Procedure 1 - General Vibration, Category 20 - Ground vehicles - ground mobile, wheeled vehicles

EMC Specification	
EMI conducted CE102	MIL-STD-461F, Method CE102 BASIC CURVE 220 100 kHz to 10 MHz (Partial compliance)
EMI radiated RE102	MIL-STD-461F Navy Mobile & Army 2 MHz - 18 GHz
EMS conducted CS101	MIL-STD-461F, Method CS101, conducted susceptibility, power leads. CURVE #1 30 Hz to 150 kHz
EMS conducted CS114	MIL-STD-461F Army, Ground 10 kHz - 200 MHz
EMS conducted CS115	MIL-STD-461F Conducted susceptibility, bulk cable injection, impulse excitation
EMS conducted CS116	MIL-STD-461F 10 kHz - 100 MHz
EMS radiated RS103	MIL-STD-461F Army 2 MHz - 1 GHz
ESD	EN61000-4-2:2009 Level 3 EN55024:1998 Performance criteria B + A1:2001 + A2:2003