

PS-WPS-MP Series

100 Watt Modular Wall/Pole Mount Power Supply with
Modular Pluggable (MP) PoE/Surge Suppressor Card



- Adjustable output voltage
- Modular design (patent pending)
- Indoor and outdoor versions
- Digital LED voltage display
- Backup DC power input

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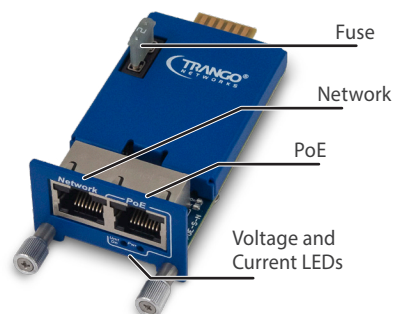
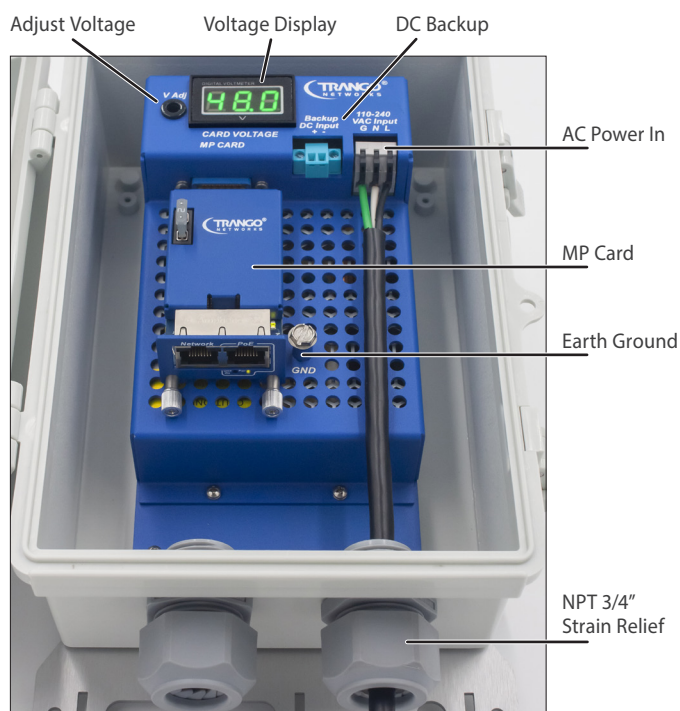
Overview

Trango Networks PS-WPS-MP is the first product in a series of patent pending power supply products that utilize a field replaceable Modular Pluggable (MP) card to simplify sparing and support various power applications.

Each card has a field replaceable fuse, lightning surge suppression, current/voltage detection LEDs and primary AC and DC backup power inputs. Trango offers Power over Ethernet (PoE) cards with standard and proprietary wiring to support both Trango and 3rd party products, as well terminal block outputs to support direct power applications.

The main chassis supports worldwide 90-264 VAC input using a latching terminal block for easy field wiring. An internal AC-DC regulated supply provides the main power to the card. A backup terminal block is included for DC backup in the event of main AC failure. The MP Card will utilize the higher of the internal or backup voltages to power the load.

The output voltage of the internal supply is adjustable with the Digital LED display showing the working voltage.

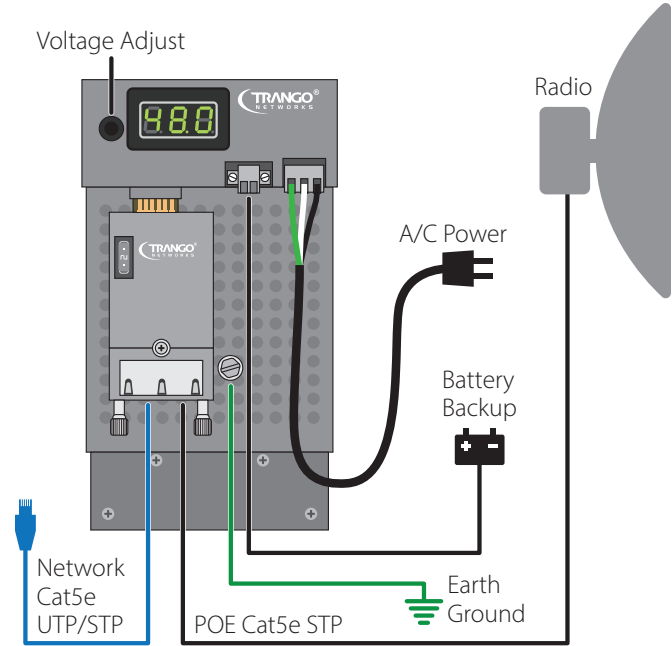


Features - Chassis

- 100 Watt internal regulated AC-DC power supply
- Adjustable output voltage
- Backup DC input with hitless power switchover
- Real time LED display of voltage supplied to load
- Field replaceable Modular Power card
- Strain relief for AC cable
- Earth grounding point
- Available in outdoor NEMA 4X pole/wall mount and indoor wall mount configurations
- 2-year warranty

Features - MP Card

- Wide voltage output range
- Transformer based PoE Injection (PoE Models) with earth grounded shielded RJ45
- LED indicators for current draw and voltage
- Field replaceable fuse for short circuit conditions
- Gas Tube Lightning suppression on each twisted pair
- Low Ethernet line capacitance supports long cable lengths
- Gigabit PoE operation with pinouts for Trango and 3rd party equipment
- Hot pluggable replacement of the module



Models - Chassis

PS-WPS-MP-48:

100 Watt 48VDC Adj. Modular Wall Mount Power Supply with MP Card Slot.

PS-WPS-MP-48-N4X:

100 Watt 48VDC Adj. NEMA 4X Rated Modular Pole/Wall Mount Power Supply with MP Card Slot.

PS-WPS-MP-24:

100 Watt 24VDC Adj. Modular Wall Mount Power Supply with MP Card Slot.

PS-WPS-MP-24-N4X:

100 Watt 24VDC Adj. NEMA 4X Rated Modular Pole/ Wall Mount Power Supply with MP Card Slot.

Models - Modular Power Cards

MP-POE-S-N:

100 Watt MP -48 to -56 VDC Gigabit PoE/Surge Suppressor Card with 2A Fuse.

Compatible with: Apex Orion. Apex Lynx, Apex Plus, and StrataLink24. Positive Chassis Ground. All signal pairs protected by individual gas tubes.

MP-POE-S-P:

100 Watt 24 to 56 VDC Gigabit PoE/Surge Suppressor Card with 2A Fuse.

Compatible with: Trango PXG2 AIR Microwave System and 3rd party products using standard +48V PoE Wiring. Isolated Chassis GND. Pins 1,2,4,5 positive rail, Pins 3,6,7,8 negative rail. All signal pairs protected by individual gas tubes.

MP-TB-S:

24-56 VDC Pluggable Terminal Block with isolated output and gas tube surge suppression.

Specifications

Mechanical	
Construction	All models: Powdercoated Aluminum -N4X model: ABS Enclosure with 2x NPT 3/4 Cable Entries
Finish	Indoor Models: Blue powdercoat -N4X: Light Grey
Size	Indoor Models: -N4X: 9.25L x 7.25W x 4.25H in
Weight	Indoor Models: -N4X: 2.5 lbs with mounting bracket
Mounting	Indoor models: 4 through holes diameter 0.2 inch for wall mounting -N4X: Mounting plate for U-bolts or wall mount.
Grounding Lug	#10-32 Stainless Steel Bolt
Environmental	
Operating Temperature Range	-40 deg C to +65 deg C - Functional -30 deg C to +55 deg C - Spec Compliant
Storage Temperature	-40 deg C to +75 deg C
Cold Start Temp	-20 deg C
Humidity	Indoor models: 90% Non Condensing -N4X: 100% Condensing if sealed properly
Emissions	
FCC Conducted Emissions	FCC 15.107 (a) Class "B"
FCC Radiated Emissions	FCC 15.109 (a) Class "A"
Regulatory Compliance	
Surge Immunity (PoE Card)	Base Unit Gas Tube only protection: UL Rating: UL497B #E179610 With PoE to Trango radio: IEC 61000-4-2 (ESD) ±15kV (air), ±8kV (contact) IEC 61000-4-4 (EFT) 40A (5/50ns) IEC 61000-4-5 (Lightning) 24A (1.2/50µs)
EMC (Power Supply)	EN 301 489-1 V1.8 (2008-04) EN 301 489-4 V1.4.1 (2009-02)
Safety (Power Supply)	IEC/EN 60950-1, UL 60950-1
Electrical Immunity (Power Supply)	IEC 61000-4-2, ±8 kV (air), ±4 kV (contact), Class A IEC 61000-4-3, 3 V/m, Class A IEC 61000-4-4, Ac power port: 1 kV; signal & telecommunication ports: 0.5 kV, Class B IEC 61000-4-5, input L to input N: 1 kV; input L to FG: 2 kV; input N to FG: 2 kV, Class C IEC 61000-4-6, frequency range: 0.15~80 MHz; field strength: 3 Vms, Class A IEC 61000-4-8, 1 A/m, Class A
Voltage Dips and Interruptions	IEC 61000-4-11: voltage dips >95% reduction, 0.5 period, Class A voltage dips 30% reduction, 25 period, Class B voltage dips >95% reduction, 250 period, Class C
MTBF (Power Supply)	200,000 hrs (per MIL-HDBK-217F, 25°C)
Power	
Input Voltage Range (Main AC)	90-264 VAC
Input Voltage Range (Backup)	48 VDC+/- 10% or 24 VDC+/- 10% depending on model
Output Voltage	PS-WPS-MP-48-x: 48VDC nominal, adjustable +/- 10% PS-WPS-MP-24-x: 24VDC, nominal, adjustable +/- 10%
Output Current Max	2.1 Amps, 48 V models 4.5 Amps, 24 V models
Reverse Polarity Protection	Yes for both Direct Power and PoE
Load Sharing	If Internal power supply and backup power are within .3V of each other, otherwise the Supply with higher absolute voltage will source current.
User Interfaces/Indicators	
Ethernet Ports(MP-POE-x)	P1: RJ45 Shielded 10/100/1000BaseT to Network P2: RJ45 Shielded 10/100/1000BaseT with PoE Voltage applied
Backup Power Connection	Pluggable 3.81mm Terminal Block 2 Position with screw terminal
Main Power Connector	Latching wire connector for 14 AWG wire (Ground, Neutral, Line) Product supplied with 8 foot NEMA5-15P Cable
Digital LED Display	3 Digit Green LED display shows Output voltage being used by card +/-1 volt accuracy. Measures Internal Supply Voltage with Backup power disconnected. Measures Backup Voltage with AC power disconnected. Off if no card connected.
LED Indicators	Green (PoE Card top and side): Power present at PoE Port when lit Blue (PoE Card top and side): PoE Device is consuming > 50 mA current to turn on, <25 mA to turn off (hysteresis)
Voltage Adjustment	Flat/Philips head screwdriver adjustable
Fuse	User Replaceable 2 Amp 58V fuse mini-blade style

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