Model PS71090

2W NFPA Public Safety Signal Booster

General Information

The PS71090 is an in-building repeater that will meet both the existing public safety communications regulations and future mandates for emergency and disaster preparedness communications.

The Model PS71090 is NFPA-code compliant with NEMA Type 4 enclosure, independent control of the 700 and 800 MHz bands.

Frequency Range

• Uplink 788-805 / 806-809 / 806-816 / 806-824 MHz

• Downlink 758-775 / 851-854 / 851-861 / 851-869 MHz

Product Highlights

• Supports Dual-Band 700/800 MHz

• NFPA 72/1221 Compliant Class B Amplifier

• 33 dBm (2W) Power Output DL/UL

• 90 dB Gain

• UL Listed

• FirstNet Ready

• Low Power Consumption

• 700 and 800 MHz bands independently controlled

• Passband options - *Can be turned on/off independently*

  • UL 788-805 / DL 758-775 MHz (17 MHz)

  • UL 806-809 / DL 851-854 MHz (3 MHz)

  • UL 806-816 / DL 851-861 MHz (10 MHz)

  • UL 806-824 / DL 851-869 MHz (18 MHz)

• Independent Power and Gain Control per Band

• Sharp SAW filtering reduces interference from competing signals

• Easy to Install and Maintain

• Dry Contacts for Fire panel connection

• Supports digital and analog modulation including P25 phase 1 & 2

PS71090 NFPA Public Safety Signal Booster

Oscillation Detection and Automatic Gain Control (AGC)

• Built-in Oscillation Control and Self-healing

• Shutdown in the Event of Non-Correctable Conditions

Supported LED Status

• Power

• Isolation

• Oscillation (OSC)

• Alarm

Ordering Information

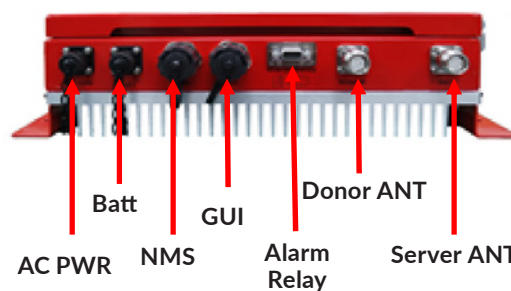| CS14-702-802	Class B, 700/800 Public Safety, 90 dB gain

PS71090: 2W NFPA Public Safety Signal Booster

Electrical Specifications

Main Power Input	110 VAC
Battery Power Input	24 VDC to 30 VDC
AC Power Consumption	<112 W Max
DC Power Consumption	72 W Max
Output Power (UL/DL)	+33 dBm (2W)
Gain	90 dB
Noise Figure @ Max Gain	<5 dB Typ.
AGC Dynamic Range	25 dB
Gain Adjustment Range	30 dB ±1 dB
VSWR	<2:1

Mechanical Specifications

Dimensions (H x W x D)	17.7 x 14.1 x 4.7 in
Approximate Weight	37 lbs.
Mounting	Wall-mount
Weatherproofing	IP65/NEMA Type 4
Connectors	
Antenna Ports	4.3-10 (F)
User Interface: GUI & NMS	RJ-45
Alarm Relay	9P D-SUB, Female
Operating Temperature	-30° to 50° C

Batt   **GUI**   **Donor ANT**

AC PWR   **NMS**   **Alarm Relay**   **Server ANT**

Dry Contact Alarms

Alarm One	AC/DC Power / System
Alarm Two	Active RF Emitting Device Malfunction
Alarm Three	Donor / Server Antenna Malfunction

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