

Westell® | PS51080E 1/2W & PS71090E 2W UL2524 & NFPA Public Safety Signal Booster



General Information

Westell's PS51080E and PS71090E BDAs are enhanced versions of the industry favorite PS Series with several new features including built-in battery charger, all required NFPA 2019 alarms, built-in annunciator panel, improved cable feed-through options, uplink squelch, and are listed under UL2524, standard for public safety BDA systems.

The integrated BBU greatly simplifies installation and reduces installed costs. Order BBC-03 separately to house batteries.

The PS Enhanced Series BDAs are NFPA 72/1221 complaint with red NEMA4 enclosure, independent control per band, up to 90dB of gain and 2 watts RF output.

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
- 27 dBm, (1/2W) & 33 dBm (2W) Power Output DL/UL
- 80 dB or 90 dB Gain
- UL Listings: 2524, 60950-1, 50E Type4
- Built-in battery charging and alarm circuitry
- Redundant power supplies, operates on 110VAC or 24VDC
- Built-in Annunciator
- Uplink Squelch
- FirstNet Ready
- Low Power Consumption
- 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) (2 Watt Unit Only)
- 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
- Terminal block to support EOL resistors
- NEMA4 3/4" conduit glands for AC, Battery & Alarms
- Intelligent Oscillation Management and Self-healing
- Shutdown in the Event of Non-Correctable Conditions
- VSWR Antenna Monitoring
- Supports both digital and analog modulation including P25 phase 1 & 2
- Supports SNMP



PS71090E Public Safety Signal Booster shown

Alarms

- BDA Amplifier Failure
- Oscillation
- Battery Charger Fail
- AC Power Failure
- Donor Antenna Failure
- Low Battery

Ordering Information

CS14-720-820	PS51080E 700/800 PS BDA, 80 dB gain, 1/2W
CS14-722-822	PS71090E 700/800 PS BDA, 90 dB gain, 2W
CS19-BBC-003	NEMA3R battery cabinet for PS Series Class B BDAs
CS19-BAT-24-100AH	100AH Battery kit for 24 hour backup of NEW PS Series BDA
CS19-BAT-24-45AH	45AH Battery kit for 12 hour backup of NEW PS Series BDA

Certification References

UL 2524	In-building 2-Way Emergency Radio Communication Enhancement Systems
UL 60950-1	Information Technology Equipment - Safety
UL 50E Type 4	Enclosures for Electrical Equipment, Environmental Considerations
FCC ID	NVRPS71090E-PS78



Westell® | PS51080E 1/2W & PS71090E 2W UL2524 & NFPA Public Safety Signal Booster



Electrical Specifications

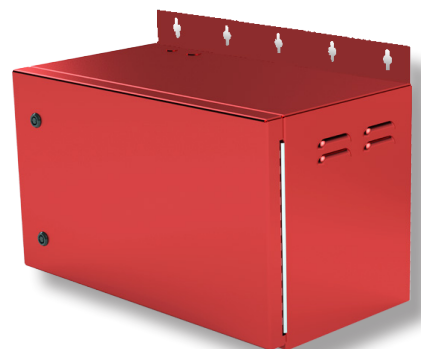
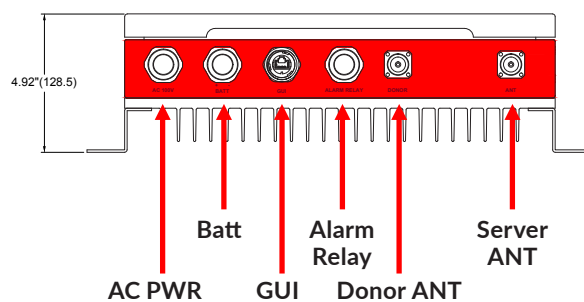
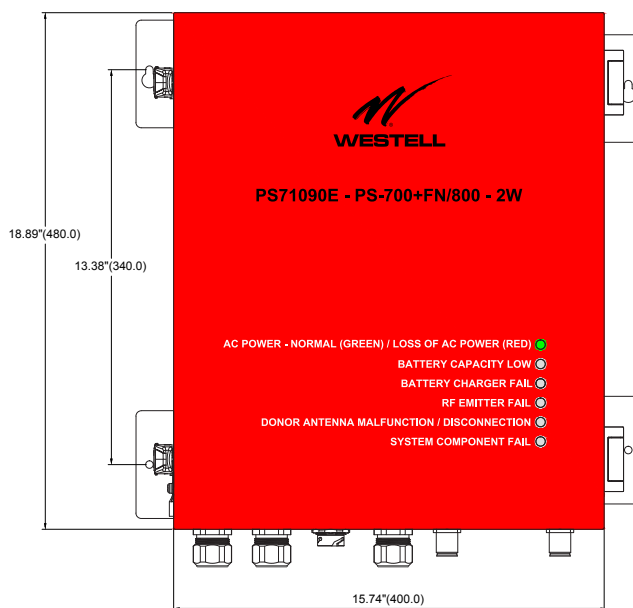
Main Power Input	110 VAC (88-264VAC)
AC Power Consumption (Max)	1/2W = 220 Watts, 2W = 253 Watts
Battery Charger Output	27.8VDC
DC Input Range	24 - 30VDC
DC Power Consumption	1/2W = 60 Watts, 2W = 72 Watts
PS51080E Output Power	+27 dBm 1/2W
PS71090E Output Power	+33 dBm 2W
Gain	PS51080E = 80 dB, PS71090E = 90 dB
Noise Figure @ Max Gain	<5 dB Typ.
AGC Dynamic Range	25 dB
Gain Adjustment Range	30 dB ±1 dB
VSWR	<2:1
Propagation Delay	4us Max

Mechanical Specifications

Dimensions (H x W x D)	18.89 x 15.74 x 4.92 in
Approximate Weight (lbs)	42.5
Mounting	Wall Mount
Weatherproofing	IP65/NEMA Type 4
Cable Feedthroughs	Cordgrips and 3/4" flex conduit fittings included
Connectors	
Antenna Ports	4.3-10 (F)
User Interface: GUI & NMS	RJ-45
Alarm Relay	Internal Terminal Strip
AC&DC Power	Internal Screw Terminals
Operating Temperature	-30° to 50° C

BBC-003 & Battery Specifications

BBC-003 Dimensions (W x H x D)	26" x 15.6" x 14"
Weight	35 lbs
Mounting	Wall Mount
BAT-24-100AH Dimensions	20" x 9.3" x 8.4"
BAT-24-100AH Weight	153.8 lbs
BAT-24-45AH Dimensions	11" x 7.8" x 8"
BAT-24-45AH Weight	66 lbs



BBC-003 Battery Back-up Enclosure shown

