Westell® | CS14-720-820 1/2W BDA UL2524 & NFPA Public Safety BDA

General Information

Westell's CS14-720-820 (formerly the PS51080E 1/2W) BDA is an enhanced version 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 an NRTL listing to ANSI/UL 2524, the latest standard for ERCES systems.

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

The CS14-720-820 BDA is NFPA 72/1221 compliant with red NEMA Type 4 enclosure, independent control per band, up to 80dB of gain and 1/2W RF output.

Frequency Range

- Uplink 788-805 / 806-809 / 806-816 MHz
- Downlink 758-775 / 851-854 / 851-861 MHz

Product Highlights

- Supports dual-dand 700/800 MHz
- NFPA 72/1221 compliant Class B amplifier
- 27 dBm power output DL/UL
- 80 dB gain
- NRTL listings: ANSI/UL 2524, UL 62368-1, UL 508A
- 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)
- Independent power and gain control per band
- Sharp SAW filtering reduces interference from adjacent RF signals
- Easy to install and maintain
- Dry contacts for fire panel connection
- Terminal block to support EOL resistors
- NEMA Type 4 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



CS14-720-820
Public Safety BDA

Alarms

- BDA amplifier failure
- Oscillation
- Battery charger fail
- AC power failure
- Donor antenna failure
- Low battery

Ordering Information

CS14-720-820	1/2W eBDA, dual band 700/800 MHz, 80 dB gain (formerly the PS51080E 1/2W)
CS19-BBC-003	NEMA/UL50E Type 3R battery cabinet for PS / CS14-720-820 Class B BDA
CS19-PYL12V100FT	12V, 100AH sealed lead acid battery (2 required for 24+ hours of backup time)
CS19-PYL12V45FS	12V, 45AH sealed lead acid battery (2 required for 12+ hours of backup time)

Certification References

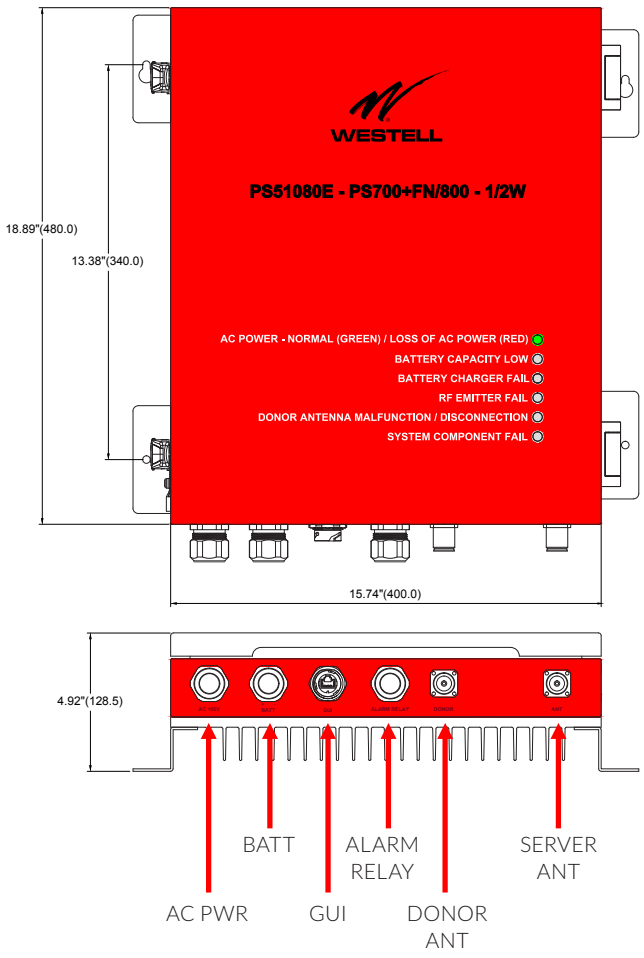
ANSI/UL 2524	In-building 2-way emergency radio communication enhancement systems (ERCES)
UL 62368-1	Audio/video, information and communication technology equipment - Part 1: Safety requirements
UL 508A	Industrial control panels
FCC ID	NVRPS71090E-PS78

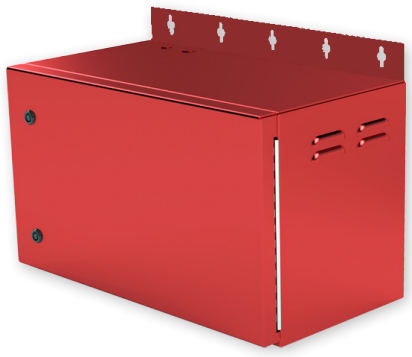
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UL2524 & NFPA Public Safety BDA

Electrical Specifications

Main power input	110 VAC (88-264VAC)
AC power consumption (max.)	1/2W = 140 Watts
Battery charger output	27.8VDC
DC input range	24 - 30VDC
DC power consumption	1/2W = 45 Watts
Output power	+27 dBm, composite
Gain	80 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
CS19-PYL12V100FT dimensions	20" x 9.3" x 4.2"
CS19-PYL12V100FT weight	77 lbs
CS19-PYL12V45FS dimensions	11" x 7.8" x 4"
CS19-PYL12V45FS weight	33 lbs





BBC-003 battery back-up enclosure shown

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