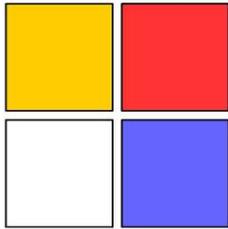


SAFE-COM**WIRELESS**

Safe-Com DASassure™
Public Safety Distributed Antenna System
SAFE-1030 Bidirectional Amplifier
VHF, UHF, 700, 800 & 900 MHz

- Class A and/or Class B BDA
- Supports All Five Public Safety and Federal Bands + FirstNet
- 1 Watt RF Output, compatible with all analog and digital signals
- Field Upgradeable – add new channels and new bands
- Small Size : 12 x 15 or 19 x 18 inch, NEMA 4
- Very Low Power Consumption
- Lowest Spurious due to advanced filtering design
- Unique front-end design, exceptional filtering
- FCC Certified, UL Listed, US designed and manufactured



Safe-Com's *DASAssure™* is a patent-pending passive Distributed Antenna System utilizing a new architecture that provides a modular, upgradeable, redundant and power efficient Public Safety in-building coverage solution. This innovative approach utilizes dedicated parallel channel processing assuring the lowest spurious and highest signal performance for clear mission-critical coverage enhancement. The modular hot-swap card system permits single channel expansion on any frequency thanks to its micro-power™ amp architecture. The design is the most compact BDA available – fitting up to 5 bands into a ~11x15x7inch NEMA 4 unit. All this with the industry's lowest power consumption of 50 watts* avg. at quiescent operation. This also makes the battery backup system the smallest available with 12 or 24 hours packed into < 0.5 ft³. Safe-Com's high-quality manufacturing system and superior applications support assures your success and the public's safety.

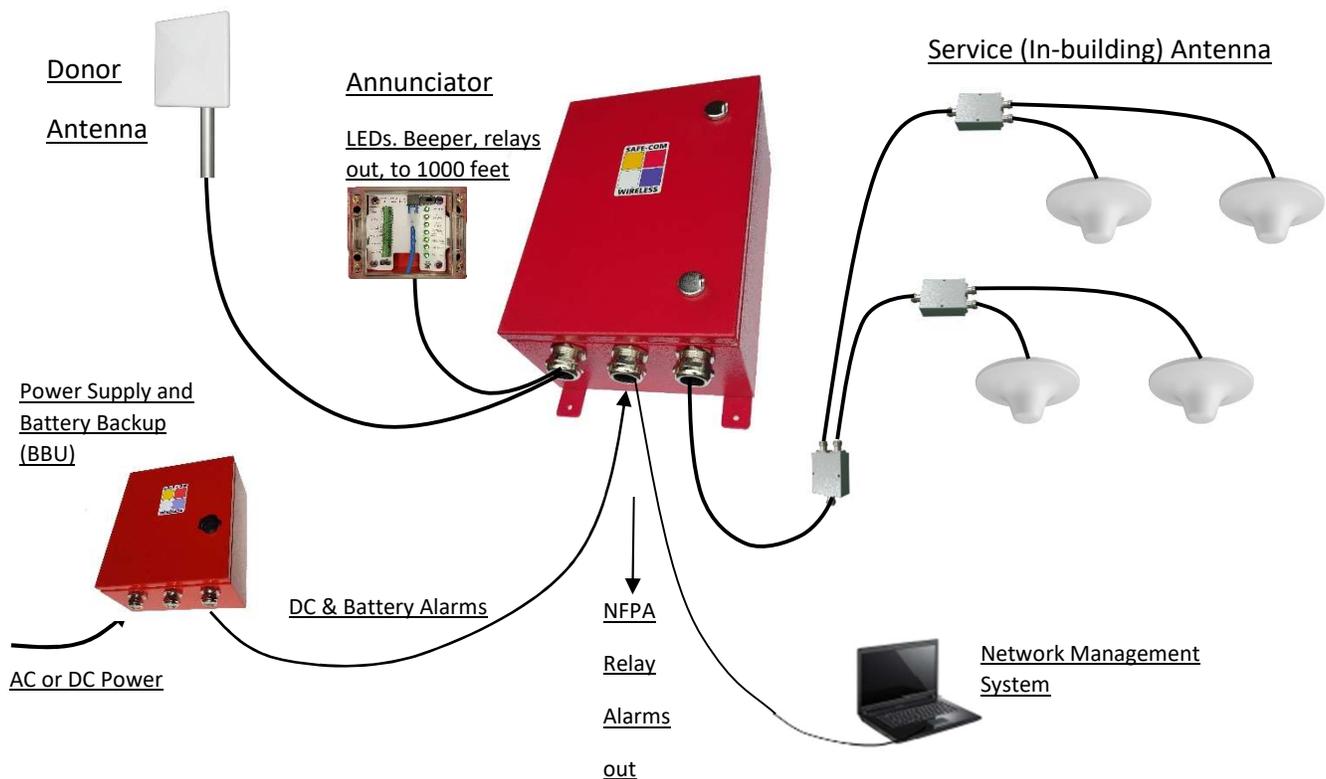
Parameter	Value
Output Power per Band	
- 700/800 MHz:	30dBm +/- 2dB
- UHF:	28dBm +/- 2dB
- VHF:	27dBm +/- 2dB
RF Input, max, no damage	0 dBm
Noise Figure, typ.	5 - 8 dB
Gain, typ. (consult applications)	50 - 80 dB
Spurious	FCC Compliant
Gain Control	30 dB
Operating Temperature	0 to +50°C
Power (DC via Battery Backup)	25 to 65W typ.*
NEMA4: Size Type 1	11 x 15 x 7 inches, ~25lbs
NEMA4: Size Type 2	18 x 19 x 7 inches, ~40lbs

RF output power, noise figure and power consumption depends on configuration. UL listing certification available. Consult the sales department.

NFPA Alarm Outputs: Relay outputs

1. System Component Failure – Summary Alarm
2. Active emitter fail / Power amp
3. Donor Antenna Fail
4. Battery Charge Fail
5. AC Power loss
6. Low Battery Capacity

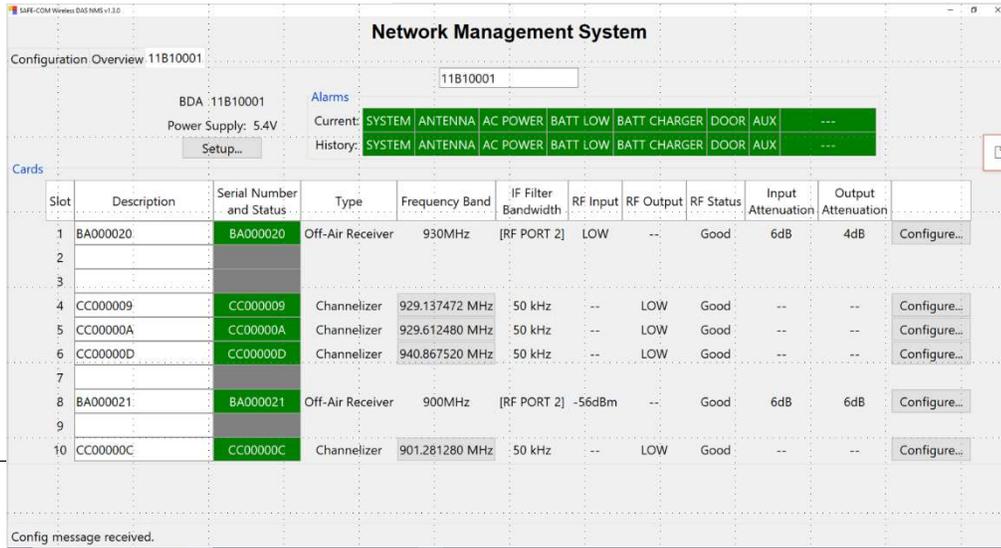
System Diagram - BDA



The Safe-Com Wireless Public Safety Bidirectional Amplifier (BDA) features:

- Plug-in Modular card system: Each low-cost card performs narrow-band signal processing on a single frequency. This allows wide flexibility in configuring the system with mixed frequency bands, for example 3 VHF, 8 UHF and five 800 MHz frequencies in one Class A channelized unit.
- Excellent wall plug efficiency: Due to the modular architecture, frequencies that are not keyed up can have their cards shut down to preserve power. This reduces heat within the NEMA enclosure, relaxes demand on battery backup reducing costs, and improves reliability for a longer life and fewer failures.
- Advanced Super-heterodyne front end: Significantly improves near-far performance compared to legacy technology, eases close-in TX and RX frequency management, and therefore interlaced frequencies are handled with ease – as close as <200kHz. Consult with Applications Engineering with your challenging frequency spectrum.

Network Management System



DASSassure™ NMS
 A full featured Network Management Systems assures you have control of your radio network. Shown here is the control panel of the NMS displaying the individual channel control.

You have full insight and remote control of each band, each channel and full independent uplink and downlink controls. Critical monitor values related to each fielded unit is displayed clearly and distinctly. (Graphic details subject to change).

High reliability and ultimate flexibility is assured by design. The ground breaking architecture of the Safe-Com DAS solution guarantees it.
 No major single point of failures as can be found in other current designs. Public safety requires reliability and Safe-Com delivers.

BDA Layout – Type 2 enclosure

Modular architecture offers full flexibility for frequency and band configuration.

Efficient power usage. All channel frequency modules not used are un-powered. Reduces load on battery backup and improves reliability.

Alarm /Power Panel Connections: DC power in- 3 position screw terminal; USB local NMS connection; Battery/ power Alarm input, Ethernet (option); NFPA Alarm outputs; Bidirectional RF ports (Example shown: UHF, 700/800 Donor Ports and two dual service Antenna Ports).

