

# Public Safety BDA

700/800 DUAL BAND 0.5W / IT-109B016

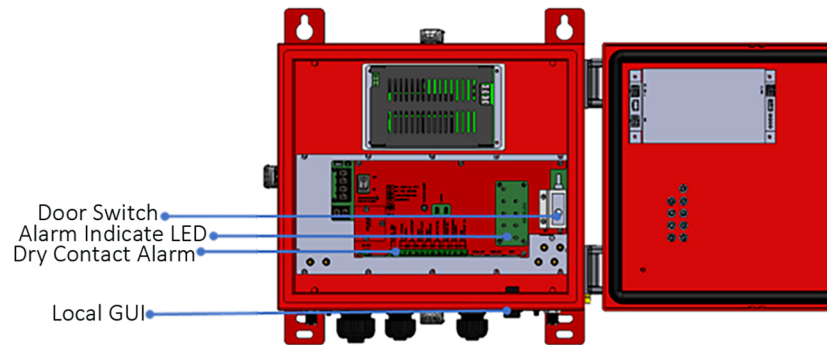
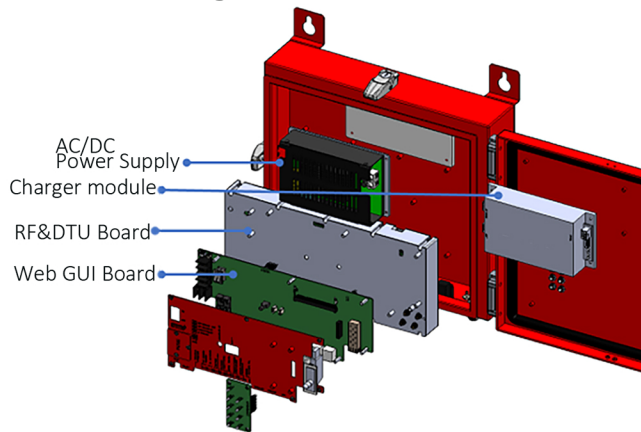
DKK | N A

## Features

- Supports Public Safety 700 & 800MHz Dual Band
- FirstNet™ Band 14 Not available
- Support Filter Integration Class A + Class B
- Fully Digital, FPGA-based
- Automatic Gain Control per Band; Per Channel and per Time Slot on Channel Selective Mode
- Oscillation Detection with Alarm and Auto-shutdown
- Antenna Isolation Measurement Feature
- Antenna Isolation Alarm
- Weatherproof Enclosure, NEMA4
- NFPA Compliant with Dry Contact Alarms
- Uplink and Downlink Squelch, per Channel and per Time Slot on Channel Selective Mode
- User Adjustable Gain Control, UL and DL Independent, per Band, per Channel and per Time Slot on Channel Selective Mode



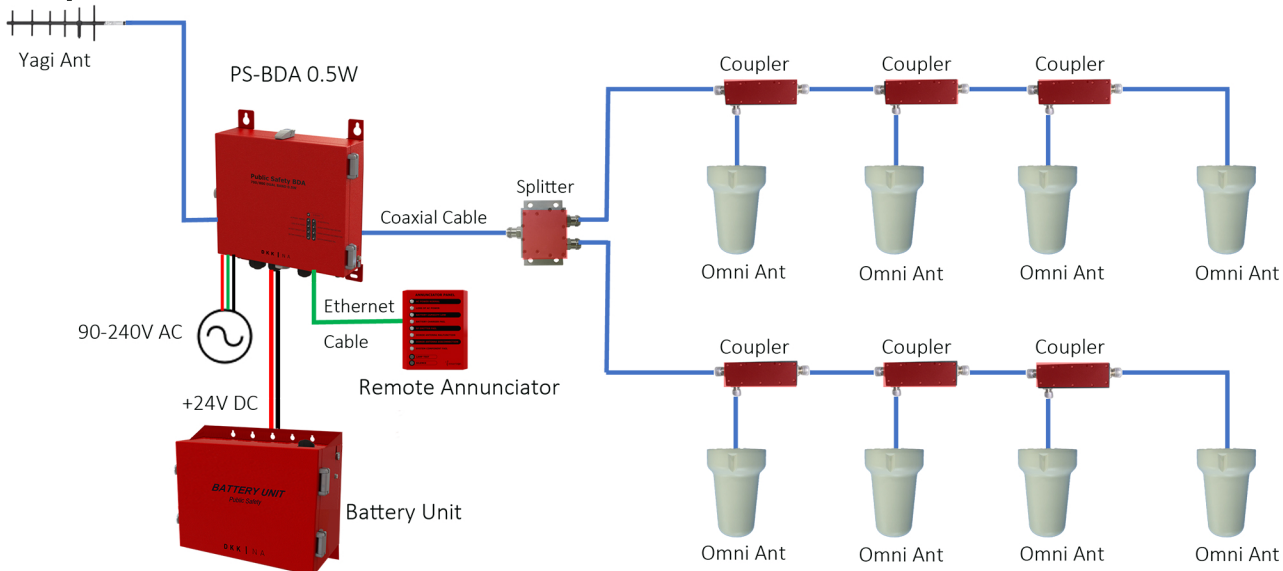
## Internal Configuration



## Function & Alarm

Items	Parameters	Support	Remarks
Function	Isolation Measurement	OK	DL&UL Path both
	Squelch	OK	-90 ~ -60dBm
	SNMP	OK	Ver 2.0 (Ver 3.0 Support)
	Web GUI	OK	Explorer, Chrome, Firefox
Drycontact Alarm	Normal AC Power*	OK	AC Normal Set / AC Fail Soft Clear
	Loss of Normal AC Power*	OK	AC Fail Soft Set / AC Fail Soft Set
	Battery Charger Failure*	OK	Battery Fail Soft Fail / Battery Fail Soft Fail / Battery Not Charge Soft Fail
	Loss of Battery Capacity (70% Depleted)*	OK	Low Battery Soft Fail
	Donor Antenna Disconnection*	OK	UL Return Power Hard Fail
	Active RF Emitting Device Malfunction*	OK	RF Power Soft Fail / DL Return Power Hard Fail / DL/UL Over Power Hard Fail / DL/UL Over Power Hard Fail
	System Component Malfunction, other than Passive RF Component, which affects System Performance*	OK	DL/UL Over Power Hard Fail / Over Temperature Hard Fail / DSP Hard Fail / Out-band Overload Hard Fail
Donor Antenna Malfunction**	OK	UL Return Power Hard Fail or No DL Signal Detected	

# Typical Layout



# Product Specification

Product Type		0.5W / 700&800 / Dual Band	
Parameter		Downlink	Uplink
Frequency Range	700 Band	768~776 MHz	798~806 MHz
	800 Band	851~869 MHz	806~824 MHz
Output Power	700M	27dBm	24dBm
	800M	27dBm	24dBm
System Gain		90dB	80dB
Passband Ripple		≤3dB	≤3dB
Max Input Power without Damage		+0dBm	+10dBm
Max Input Power without Overdrive		-10dBm	-10dBm
Gain Control Range/Step		30dB / 1dB	30dB / 1dB
ALC Range		60dB (Composite 30dB, Individual Channel 30dB)	
Filter BW		32CH@12.5kHz/25kHz/50kHz/75kHz(Class A) 32CH@0.15M/0.25MHz BW (Class B)	
Filter Roll-off		60dBc	
Squelch (UL)		-	-90~-60dBm
Noise Figure @Max.gain		<6dB	
System Group Delay	Class A	61.5us @12.5kHz ≤37.5us @25kHz ≤26.5us @50kHz ≤16.5us @75kHz	
	Class B	≤16.5us @0.25MHz ≤9.5us @0.25MHz	
Power		110VAC, 50/60Hz	
Power Consumption		< 75W	
VSWR		< 1.5:1	
Operating Temperature		-30 ~ +50°C	
Dimensions (WxHxD)		15.0 x 13.0 x 4.3 in (380 x 330 x 109 mm)	
Volume		13,67L	
Enclosure Class		IP65 / NEMA 4X	