

Public Safety BDA

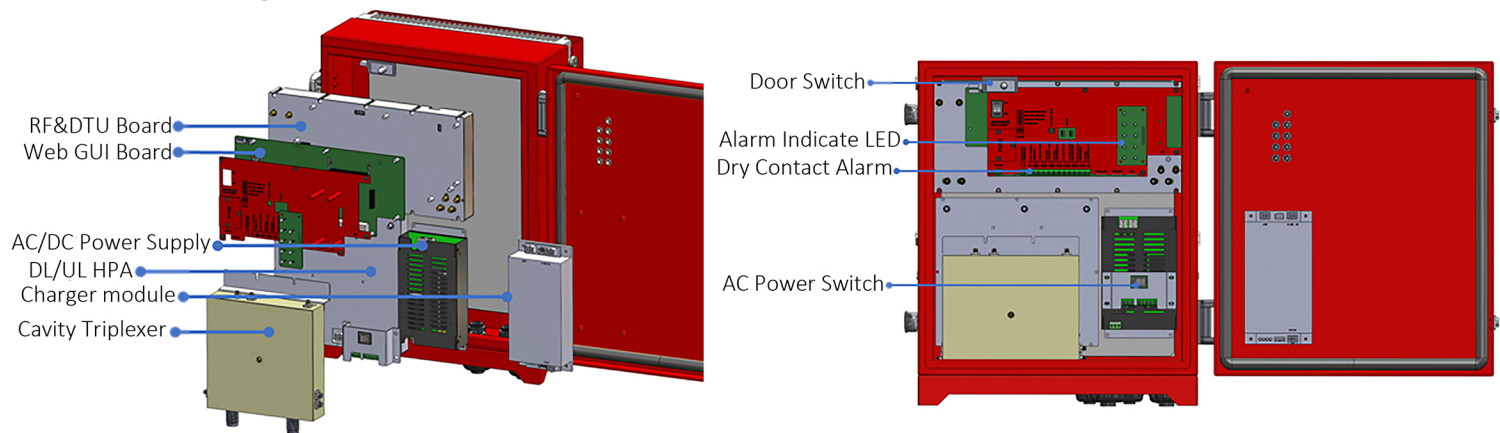
700/800 DUAL BAND 2.5W / IT-109B017

Features

- Supports Public Safety 700 & 800MHz Dual Band
- FirstNet™ Band 14 available
- 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



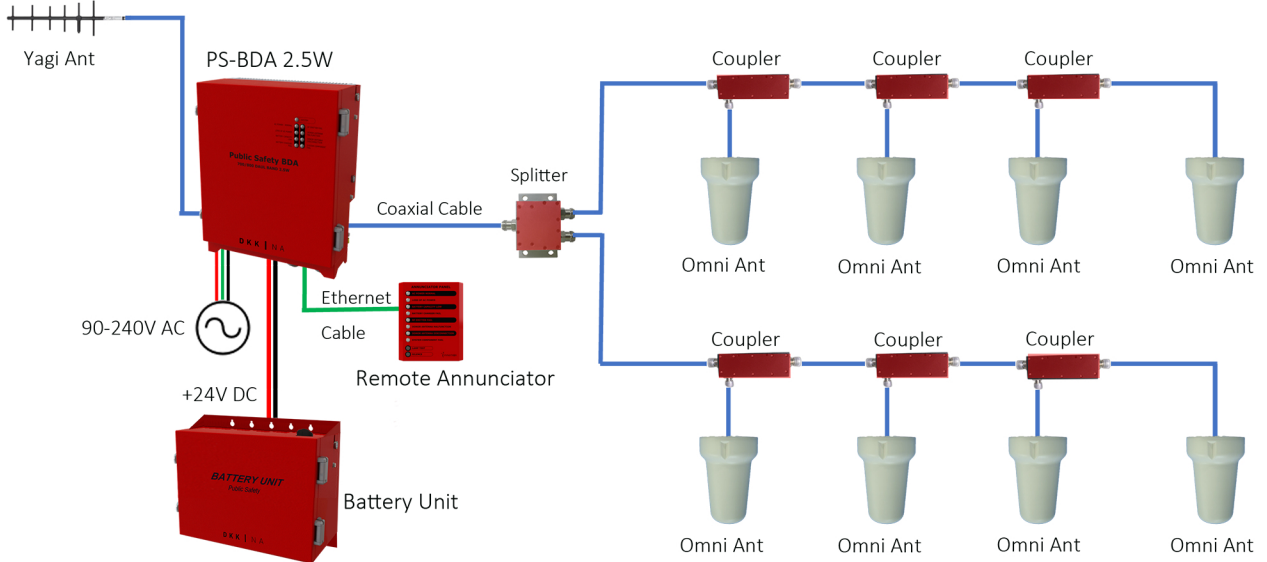
Internal Configuration



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		2.5W / 700&800 / Dual Band	
Parameter		Downlink	Uplink
Frequency Range	700 Band	758~775 MHz	788~805 MHz
	800 Band	851~869 MHz	806~824 MHz
Output Power	700M	34dBm	27dBm
	800M	34dBm	27dBm
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/100kHz/150kHzBW (Class A) 4CH@0.25MHz/0.5MHz/1MHz/2MHz/3MHz/7MHz/10MHz 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 ≤16.5us @100kHz ≤16.5us @150kHz	
	Class B	≤16.5us @0.25MHz ≤9.5us @0.5MHz ≤9.5us @1MHz ≤7.8us @1MHz ≤7.8us @3MHz ≤7.8us 7MHz ≤7.8us 10MHz	
Power		110VAC, 50/60Hz	
Power Consumption		< 140W	
VSWR		< 1.5:1	
Operating Temperature		-30 ~ +50°C	
Dimensions (WxHxD)		14.9 x 16.5 x 7.0 in (378 x 420 x 178 mm)	
Volume		28.26L	
Enclosure Class		IP65 / NEMA 4X	