



**WILSON**  
CONNECTIVITY



ASSEMBLED  
IN UTAH

CONTACT US +1-866-294-1660  
[support@wilsonconnectivity.com](mailto:support@wilsonconnectivity.com)

SCAN TO  
LEARN MORE



PUBLIC SAFETY SOLUTIONS BY WILSON CONNECTIVITY

# Connected and ready for any challenge.

Critical communication solutions  
for in-building connectivity.



**WILSON**  
CONNECTIVITY

# 700/800 MHz BDA for Public Safety

- 700/800MHz Class A/B
- Max downlink power: 5W (37dBm DL per band)
- 32 digital filters per band
- Isolation protection and oscillation detection
- Dry-contact alarm relay for FACP
- Remote annunciator (local LED annunciator included)
- WEB-based GUI
- SNMP V2C and V3
- Integrated battery charger
- Integrated modem for connectivity
- Passively cooled—no fans



| Frequency Range and Service Type |           |                |        |      |              |        |      |
|----------------------------------|-----------|----------------|--------|------|--------------|--------|------|
| Service Band                     | Frequency | Downlink [MHz] |        |      | Uplink [MHz] |        |      |
|                                  |           | Low            | Center | High | Low          | Center | High |
| First Net                        | 700MHz    | 758            | 763    | 768  | 788          | 793    | 798  |
| P25                              | 700MHz    | 769            | 772    | 776  | 799          | 802    | 806  |
| P25                              | 800MHz    | 851            | 860    | 869  | 806          | 815    | 824  |

| Digital Filter Specifications |                |  |
|-------------------------------|----------------|--|
| Service Band                  | Specifications |  |
| Number of Channel Filter      | Class A        | 32 Channels per Band                                 |
|                               | Class B        | 4 Channels per Band                                  |
| Channel Bandwidth             | Class A        | 12.5kHz, 25kHz, 50kHz, 70kHz, 100kHz, 150kHz         |
|                               | Class B        | 0.25MHz, 0.5MHz, 1MHz, 2MHz, 3MHz, 6MHz, 7MHz, 10MHz |

| Operating Output Power |              |              |
|------------------------|--------------|--------------|
| Service Band           | Downlink     | Uplink       |
| 700MHz                 | +37dBm±1.5dB | +27dBm±1.5dB |
| 800MHz                 | +37dBm±1.5dB | +27dBm±1.5dB |

| Mechanical Specifications |  |
|---------------------------|--|
| Parameter                 | Specifications                         |
| Size(W*H*D)               | 14.9 x 19.5 x 7 in (378 x 495 x 178mm) |
| Weight                    | ≤ 66 lbs (≤ 30kg)                      |
| Mounting                  | Wall-mount or Rack Mount               |
| Certifications            | UL50E / UL2524 / NEMA4X / FCC Part 90  |
| DONOR / SERVICE PORT      | 4.3-10 Female                          |
| Tx / Rx PORT              | 4.3-10 Female                          |
| MODEM PORT                | SMA Female                             |
| Ethernet Connector        | RJ-45                                  |
| Operating Temperature     | -30°C ~ +50°C                          |
| Operating Humidity        | 5% ~ 90% (RH Non-condensing)           |

| 700MHz and 800MHz Common Specifications |                           |             |
|---|---------------------------|-------------|
| Parameter                               | Downlink                  | Uplink      |
| User Settable Gain Range                | 60dB ~ 90dB               | 50dB ~ 80dB |
| Gain Adjustment Range                   | 30dB/1dB steps            |             |
| Gain Adjust Accuracy                    | ±1dB                      |             |
| Rated AC Power Input                    | 110 ~ 240VAC, 50/60Hz     |             |
| Rated DC Battery Input                  | 24VDC (12VDC Battery * 2) |             |
| Power Consumption                       | < 250W                    |             |

(Preliminary)

# Fiber Distribution for Public Safety

- Covers all Public Safety Frequencies
  - VHF
  - UHF
  - 700/800MHz P25
  - Band 14
- UL2524 rated solution
- Compatible with any standard 19" equipment rack
- Comprised of several components:
  - Hub Unit Enclosure
  - Battery Unit Enclosure
  - Remote & IP66 Enclosure
- Hubs mount vertically in enclosure
- Redundant fans for temperature control
- Entry points for coax, power, alarming, etc.
- Integrated alarm annunciator
- 2 hour, 12-hour, 24 hour battery back-up options

| Enclosure Specifications |   |
|--------------------------|---|
| Dimensions               | 19.52 x 34.72 x 25.00 in (496 x 882 x 640.6 mm) |
| Certifications           | UL50E / UL2524 / NEMA4X / FCC Part 90           |

| Components          |            |
|---------------------|------------|
| Hub Enclosure       | 790001     |
| Primary Hub         | 305-0001   |
| Secondary Hub(s)    | 305-1004   |
| Power Inverter      | 780002     |
| Power Plant         | 780001     |
| Battery Enclosure   | 791001     |
| Optical Remote Unit | 305-1007-R |

(Preliminary)



# Full System Setup

- Coax —————
- Power —————
- Fiber —————

