

Crossband Repeater

Combined 220 MHz/900 MHz radio for flexible TUNet deployment



The XR-3100 improves radio broadcast range and penetration to ensure that distant sites or those located in challenging urban and rural environments receive reliable communications.

The XR-3100 can be mounted at any convenient location where VAC power ranging from 100 to 240 is available, such as on the side of a building or at the top of a pole.

Each XR-3100 comes with a standard internal antenna. For an extra boost, the internal antenna may be replaced with an optional external antenna. Two types of external antenna are available: omni-directional whip and directional yagi. External 220 MHz WAN antenna kits include the antenna, cable assembly and lightning protector.



The XR-3100 Crossband Repeater extends WAN coverage into hard-to-reach locations and over challenging terrain. It provides vast, economical radio coverage which enables a utility to prioritize deployment to service points that offer the highest customer service value and operational benefits. The XR-3100 contains both a 220 MHz WAN transceiver and a 900 MHz LAN portal that allows endpoint devices to connect directly to the WAN without going through a meter. Incoming messages from 900 MHz endpoint devices such as Tantalus-enabled meters and load control devices are relayed over the 220 MHz WAN channel without additional hardware. This enables a utility to add capacity and functionality without re-engineering the network.

TANTALUS ADVANTAGES

- Provides long-range, terrain hugging communications in both challenging rural and urban environments
- Enables a utility to surgically deploy endpoints anywhere without substation constraints
- Multiple installation options
- Small size, rugged weather-proof construction
- Secure, lockable enclosure
- Features Tantalus TruPush™ technology for instant, field initiated event notifications such as outage alerts or load shed success; no device polling required
- TUNet WAN options (wireless RF, Fiber, GPRS/ cellular, Ethernet, WiFi, WiMAX) can be combined to meet economic, coverage and redundancy needs

WAN Radio

- Frequency range: 220–222 MHz
- Channels: 200
- Transmit power: 5 watts (+37 dBm)
- Receiver sensitivity:
 - 114 dBm at 12 dB; SINAD guaranteed
- Standard antenna: internal unity gain
- Optional external antennas:
 - 5.2 dBi omnidirectional whip (AE-3010)
 - 9.1 dBi directional yagi (AE-3020)

LAN Radio

- Frequency range: 902–928 MHz; license exempt
- Transmitter power: 0.5 watts (+27 dBm)
- Antenna: internal

Power Input

- Supply: 100 to 240 V at 60 Hz
- Quiescent consumption: 4 watts
- Rechargeable battery backup for outage reporting

Physical

- Dimensions: 11" W x 13.25 H x 5" D
- 28 W x 33 H x 12.5 D cm
- Weight: 6.8 lbs / 3.1 kg

Environmental

- Operating temperature range:
 - 22° to +149° F / -30° to +65° C
- Operating humidity range: 5% to 95% non-condensing

Approvals / Standards

- FCC for CFR Title 47 Part 90 and Part 15b
- ANSI/UL 60950-1-2002
- CSA CAN / CSA C22.2 No. 60950-1-03
- Rain Proof Type 3R enclosure
- CSA/UL certified

