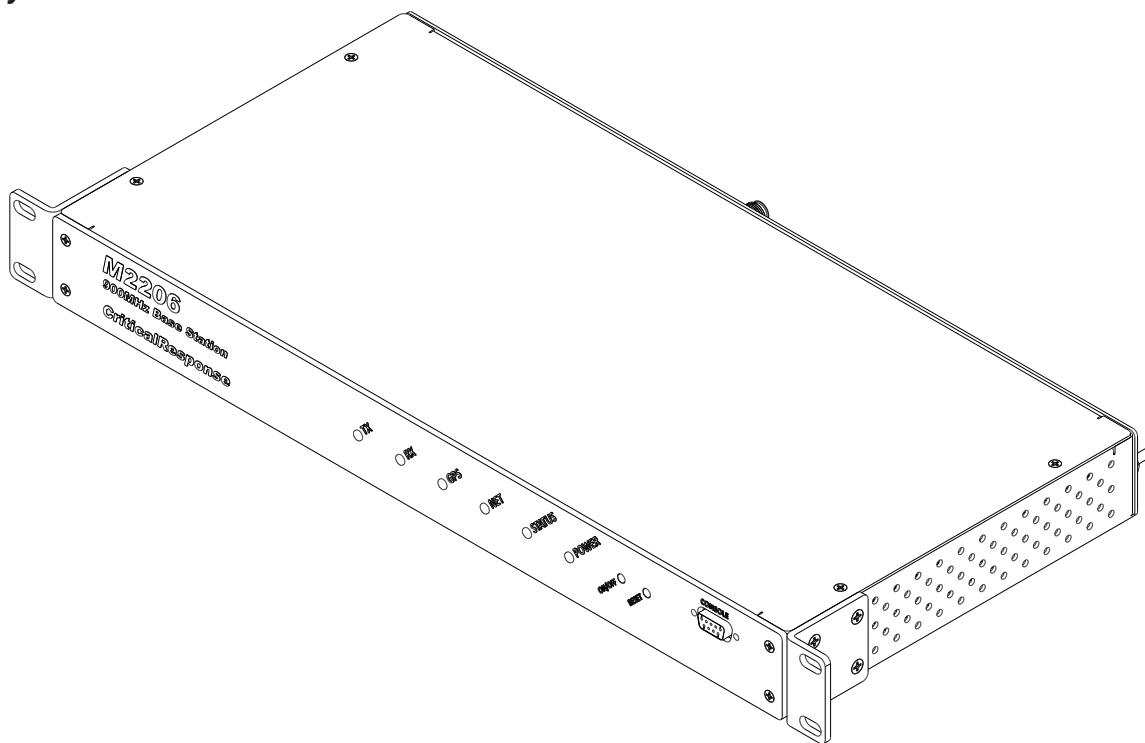


# M2205

## 800MHz Base Transceiver

### Preliminary Product Brief



### Overview

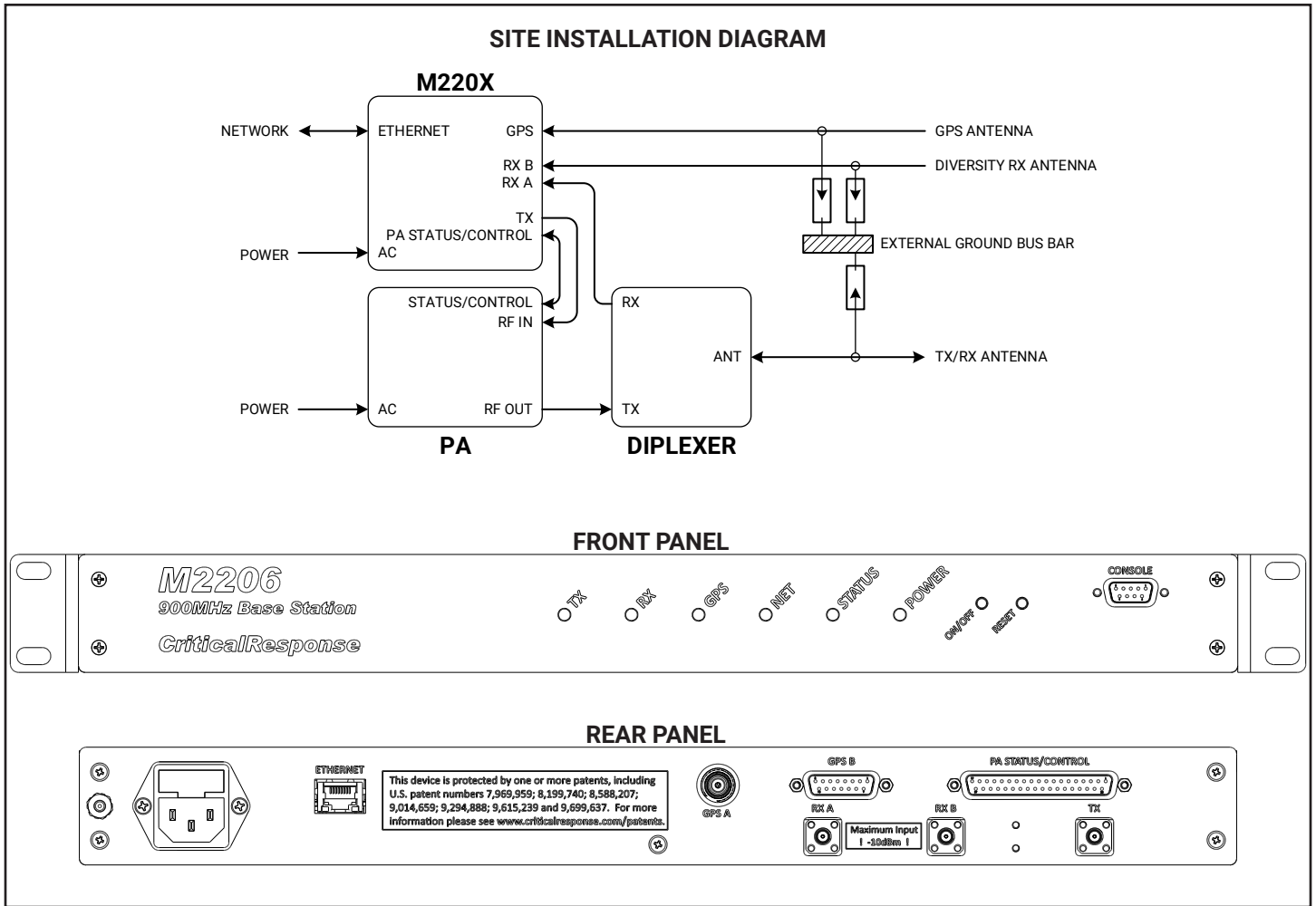
The **M2205 Base Transceiver (BX)** accepts BXI connections from an iocast **Control Stack** and provides one forward channel and one reverse channel of RF coverage. It integrates one single-channel transmitter and one single-channel receiver, as well as a GPS disciplined oscillator, CPU, DSP, and Ethernet interface.

The M2205 can operate stand-alone, as a low-power indoor unit, or it can be coupled with an external power amplifier for long-range applications. Its 1RU package, 8" depth, light weight, and energy efficiency enable it to fit neatly into tabletop, wall-mount, rack-mount, and pole-mount positions.

For mission-critical IoT, the M2205 delivers high value and mission-critical reliability to iocast networks in urban, rural, and industrial environments.

### Benefits

- Single-Channel Receiver with Dual Micro-Diversity
- Single-Channel Transmitter
- Small, Light, and Energy Efficient
- 10-30 Mile Coverage Radius (with External PA)
- Operates With or Without an External PA
- Real-time Monitoring of Forward and Reflected Power
- Real-time Monitoring of Receive Noise Floor



### Transmitter

Frequency Range: 851 to 860MHz  
 Emissions: 7K60FXD  
 Transmission Mask: Parts 22, 24(D), 90, and 101  
 Power: Variable, +19dBm to +24dBm (at port)  
 RF Output Port: 50Ω SMA female  
 PA Status/Control Port: DB37 Female

### Diversity Receiver

Frequency: 806 to 815MHz  
 Selectivity 40dBc @ ±12.5KHz, Typical  
 Sensitivity: -126dBm  
 RF Input Port: 2x 50Ω SMA female

### Oscillator

Accuracy: 10ppb  
 GPS Port A: 50Ω TNC Female  
 GPS Port B: DB15 Female

### CPU

CPU: Intel E3930  
 DSP: Artix-7  
 Ethernet: RJ45  
 Console: DB9 Female

### IP Interface

Host: BXI v3  
 Management: SNMP v3, SSH

### Physical

Dimensions: 19" × 1.75" × 8"  
 Weight: 6lbs  
 Mounting: 1U 19" EIA rack space

### Electrical

Voltage: 90 to 264VAC  
 Frequency: 50Hz or 60Hz  
 Power Used: 35 to 50W  
 Connector: IEC320-C14  
 Ground: #8 threaded stud

### Environmental

Operating Temperature: -30°C to +50°C  
 Storage Temperature: -40°C to +85°C  
 Humidity: 5% to 95% non-condensing  
 Altitude: 10,000 feet maximum

**CriticalResponse**