TECHNICAL DATA SHEET   Model TMA-RMTCVR-02

ABOUT

The Tempest900 Remote Transceiver (RT) allows the Tempest900 BaseStation antenna to be located up to 1500 ft. (450 m) from the BaseStation without any loss of RF signal. The RT is connected to the BaseStation via a standard CAT 5/6 cable using RJ-45 connectors. Power is provided over the CAT 5/6 cable so that no local power is required for the RT to operate normally. The RT is constructed of aluminum alloy. It comes with a universal mounting plate that can be used to mount the transceiver to poles, walls, or other desired areas. When ordering, reference Part Number **TMP-RT09.**

FEATURES & BENEFITS

- For use with the Tempest900 BaseStation
- Allows remote location of antenna from the base with no RF signal loss
- Cable runs of up to 1500 ft. (450 m)
- Operates on standard CAT 5/6 cable
- Power is provided over the cable from BaseStation
- Durable aluminum alloy enclosure
- Weather-resistant for outdoor use

- Rx, Tx, Sync, Config, and Power LED indicators
- RP-TNC antenna connectors
- Includes one omni-directional 2 dBi antenna
- Can remote antenna from the Transceiver with low loss coaxial cable
- Only available in US and Canada

OPERATION

One Remote Transceiver can be connected to a single Tempest BaseStation (2- or 4-channel) to provide RF coverage where it is needed. A direct connection is required, and once connected, the Base Radio is disabled. (The transceiver will not operate properly if connected to a Local Area Network (LAN) or routed through a network device such as a router or switch.) The transceiver has one RP-TNC antenna connector on top of the enclosure that can attach the standard 2 dBi omni-directional antenna, or employ an optional directional antenna via low loss coaxial cable.

LED INDICATORS

The Remote Transceiver is equipped with five LED indicators so that the user can ensure proper operation of the transceiver.

- Power LED illuminates whenever the BaseStation is providing adequate power to the transceiver over the CAT 5/6 cable.
- Sync and Config LEDs indicate that the transceiver has been properly initialized and is communicating with the BaseStation.
- Receive (Rx) and Transmit (Tx) LEDs indicate proper data transfer to and from the BaseStation and wireless BeltStation.

DURABILITY

The Remote Transceiver is weather resistant and is intended for use outdoors. It is recommended, however, that in extreme weather conditions appropriate measures are taken to ensure that no water enters into the enclosure.

SYSTEM SPECIFICATIONS

RF Frequency	902 to 928 MHz
RF Scheme	FHSS with TDMA
Effective Radiated Power	250mW using 2dBi antenna
Receiver Sensitivity	-100 dBm for 10^{-5} BER
Radio Certification	FCC Part 15, Canadian RSS-210, license free
Transmission Range	1,000 ft. (304.8 m) under ideal conditions. 500 ft. to 900 ft. (152.4 m to 274.3 m) typical
Audio Dynamic Range	>94 dB
Audio Frequency Response	300Hz–3.8KHz with proprietary audio voice shaping
System Latency	Less than 60 ms direct

TRANSCEIVER SPECIFICATIONS

Maximum Cable Length, Base to Transceiver	1,500 ft. (457.2 m), powered from the BaseStation
Connection to BaseStation	CAT-5 standard wiring
BaseStations Supported per Transceiver	1
Number of Antenna Ports per Transceiver	1
Antenna Connector Type	RP-TNC
Supplied Antenna	Whip antenna
Dimensions with Antennas (inches)	H 12 in. × W 3.7 in. × D 1.7 in. (304.8 mm × 94 mm × 43.2 mm)
Weight	11 oz (312 g)
Operating Environment	-20° to 50° C (-4° to 122° F); 10% to 90% Humidity

*Notice About Specifications
While CoachComm makes every attempt to maintain the accuracy of the information contained in this datasheet, this information is subject to change without notice. Please check our website for the latest system specifications and certifications.