ABOUT

The Tempest2400 Remote Transceiver (RT) allows the Tempest2400 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-RT24** (or **TMP-RT24-EU** for European sales).

FEATURES & BENEFITS

- For use with the Tempest2400 BaseStation
- Allows remote location of antennas from the base with no RF signal loss
- Cable runs of up to 1500 ft. (457 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 (2)
- Includes two omni-directional 2 dBi antennas
- Can remote antennas from the Transceiver with low loss coaxial cable
- RoHS compliant

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 two RP-TNC antenna connectors on top of the enclosure that can attach the standard 2 dBi omni-directional antennas, or employ 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	2400 to 2480 MHz
RF Scheme	FHSS with TDMA
Effective Radiated Power	100mW using 2dBi antenna
Receiver Sensitivity	-93 dBm for 10^{-5} BER
Radio Certification	FCC Part 15.247, ETS 300 328 v1.8.1 rules (apply to model numbers ending in "EU" only**), 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 50 ms direct
RoHS Compliant	Yes

TRANSCEIVER SPECIFICATIONS*

Maximum Distance, 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	2
Antenna Connector Type	RP-TNC
Supplied Antenna	Whip antenna (2)
Dimensions with Antennas (inches)	H 12 in. × W 3.7 in. × D 1.7 in. (30.5 cm × 9.4 cm × 4.3 cm)
Weight	11 oz (312 g)
Operating Environment	-20° to 50° C (-4° to 122° F); 10% to 90% Humidity

*Notice About Specifications
While Pliant 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.

**TMA-RMTCVR-EU models meet the same specifications and comply with ETSI standards (300.328 v1.8.1). Non-EU models are non-compliant with ETSI standards.