

## Tempest2400 2-Channel BeltStation Technical Data Sheet

### ABOUT

The Tempest2400 2-channel wireless BeltStation operates in conjunction with the Tempest2400 BaseStations. Each Talk button has individual LED indicators. The Talk button can be latching or momentary. The Call button sends a 2-wire compatible call signal to any wireless BeltStation and any hardwired intercom device on the intercom channel. BeltStations are provided with a rechargeable Lithium-Polymer battery capable of nine hours of operation or can be powered by three Standard AA Alkaline batteries. Each BeltStation has its own back-lit display and menu functions, which allow settings to be changed locally at the BeltStation. When ordering, reference Part Number **TMP-R224** (or **TMP-R224-EU** for European sales).

### FEATURES & BENEFITS



- 2-channel, full-duplex BeltStation
- 2.4GHz, license free operation
- Dual Talk/Listen operation
- Backlit LCD screen shows battery life, RF signal strength, and more
- Stage Announce Output with relay closure
- 5 individually assignable relay closures at BaseStation
- Lithium-Polymer Rechargeable battery (or 3 Alkaline AA batteries)
- Weather-resistant enclosure
- Roaming Features:
  - » Seamless Roaming of BeltStation between BaseStations
  - » Supports Normal, Shared, and Split modes
  - » Scalable architecture allows for seamless linked roaming zones
  - » Seamless handoffs between roaming zones are automatic
- RoHS compliant

### TECHNOLOGY

Each BeltStation user may simultaneously Talk/Listen on A and B or toggle between A and B in "Single Listen" mode. Volume is set by rotating the CH A or CH B rotary control. There are two Talk buttons on each BeltStation, one for each channel. The Talk button enables the microphone signal for the assigned intercom.

### AUDIO

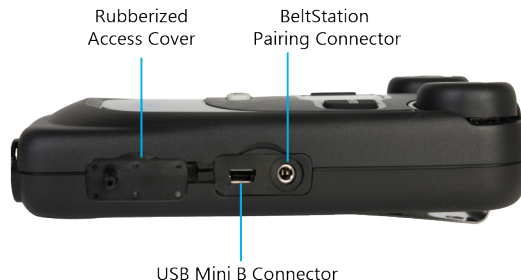
Each full-duplex BeltStation establishes a unique audio path (point-to-point) with the associated 2- or 4-channel BaseStation delivering an individualized mix minus signal to other BeltStations in the system. Therefore, each BeltStation can monitor a unique mix of intercom channels and other audio sources.

### DURABILITY

The 2-channel BeltStations are made of a weather-resistant ABS co-polymer blend with a high performance polyurethane over-mold.

### SEAMLESS ROAMING

Tempest2400 Seamless Roaming is the ability for Tempest2400 BeltStations to move freely from one BaseStation to another without any intervention from the end user. This allows the implementation of a Tempest wireless intercom system that can cover large areas with multiple zones or areas in a facility that would not be adequately supported by a single antenna installation. A BeltStation can roam between as many as 16 different BaseStations (coverage areas or zones).



### 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 <sup>-5</sup> 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   |

### BELTSTATION SPECIFICATIONS\*

|  |  |
|--|--|
| Intercom Audio Channels                      | 2  |
| Simultaneous Listen Paths                    | True Dual Listen   |
| Headset Connector                            | 4-pin male XLR   |
| Microphone Type                              | Dynamic or Electret, auto-selected                             |
| LCD Display                                  | 102 × 80 pixels  |
| Antenna                                      | Internal +2 dBi patch  |
| USB BeltStation Power Supply                 | Input 100–240 V, 0.3 A, 50–60 Hz; Output 5 V, 1.25 A           |
| Battery Life, Rechargeable                   | Up to 9 hours  |
| Battery Charge Time, Lithium Polymer Battery | Under 3 hours  |
| Optional Power                               | 3 Standard AA alkaline cells                                   |
| Battery Life, Alkaline Batteries             | Approximately 4 Hours  |
| Dimensions                                   | H 6.1 in. × W 4.0 in. × D 1.75 in. (156 mm × 102 mm × 44.5 mm) |
| Weight (with Lithium-Polymer Battery)        | 14.3 oz (405 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.

\*\*TMR22524INEU models meet the same specifications and comply with ETSI standards (300.328 v1.8.1). Non-EU models are non-compliant with ETSI standards.



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