

# APPLIED MEASUREMENTS LTD.

Transducer Specialists...





## T24-HS Handheld Wireless Telemetry Display

### **Key Features:**

- Displays Data from One Sensor
- Works with all T24 Telemetry Products
- Very Easy to Use
- Powered by 2x 'AA' Alkaline Batteries
- Up to 40 Hours Continuous Operation
- IP67 Rated
- 8-Digit LCD Display
- Ability to Wirelessly 'Power Off' the Acquisition
- Auto Shutdown
- Tare Function
- Module 2 Button Tactile Keypad
- Worldwide Licence Exempt 2.4 GHz Radio
- 800 Metres Range Maximum



The T24-HS handheld display is a simple and easy to use 8-digit LED telemetry display providing one to one data display from a single T24 telemetry acquisition module (strain, current, voltage). Input values are transmitted to the handheld via 2.4Ghz radio allowing users to view a digital reading at distances of up to 800 metres.

The handheld display is configured using either a T24-BSu or T24-BSi base station and can power 'off' acquisition modules by a push of a button thereby extending battery life and maintenance costs. If no buttons are pressed on the T24-HS it too will turn off after 5 minutes. It also offers Gross and Tare functionality to allow measurement from a zeroed value when required.

The wide temperature operating range and the robust technology ensures that the module it is not susceptible to harsh physical or electrical environments.

For applications where multiple acquisition modules are being used, the T24-HA advanced handheld telemetry display can work with up to 12 modules or the T24-HR for an unlimited number of modules.

#### **Industries:**

- Civil Engineering
- Lifting & Handling
- Waste Management
- Alternative Energy
- Construction
- Automotive
- Silo & Weighing Industry
- Marine

### **Applications:**

- Wireless Monitoring of Bridge Structures
- Wireless Monitoring of Anchor
- Wireless Bridge Surveying via GPRS
- Wireless Truck Load Weight Monitoring
- Wireless Skip Weighing System
- Wireless Platform Weighing with **Ticket Printing**
- Wireless Monitoring of Building **Foundations**
- Wireless Telemetry Strain Measurement of Wind Turbines

- Remote Load Monitoring of **Construction Shoring Struts**
- Force Measurement in Formula Racing
- Wireless Silo Weighing
- Superyacht Sail-Track Development
- Telemetry Monitoring on High Altitude Roads
- Radio Telemetry Monitoring of **Underwater Turbine**
- Wireless Mooring Rope Monitoring
- Wireless Valve Control
- Torque Measurement Using Wireless Technology





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# **Specification:**

| Radio                            | Min                            | Typical                           | Max                | Units             |
|----------------------------------|--------------------------------|-----------------------------------|--------------------|-------------------|
| Licence                          |                                | Licence Exempt                    |                    |                   |
| Modulation Method                |                                | MS (QPSK)                         |                    |                   |
| Radio Type                       |                                | Transceiver (2 way)               |                    |                   |
| Data Rate                        |                                | 250                               |                    | K bits / second   |
| Radio Frequency                  | 2.4000                         |                                   | 2.4835             | GHz               |
| Power                            |                                | 10                                |                    | mW                |
| Range*                           |                                |                                   | 800                | Metres            |
| Channels (DSSS)                  |                                | 15                                |                    |                   |
| *Tests conducted in an open fiel | d site with the transmitter at | the ten of a 2m pale. The receive | or was mounted 1 i | Em off the ground |

<sup>\*</sup>Tests conducted in an open field site with the transmitter at the top of a 3m pole. The receiver was mounted 1.5m off the ground.

| T24-HS  | Min                  | Typical                          | Max             | Units         |
|---|----------------------|----------------------------------|-----------------|---------------|
| Power Supply                                    |                      |                                  |                 |               |
| Power Supply Voltage                            | 2.5                  | 3.0                              | 3.6             | Vdc           |
| 2 off AA 1.5V primary cells                     |                      |                                  |                 |               |
| Battery Life (based on 2 Ah capacity batteries) |                      |                                  |                 |               |
| Continuous Operation                            |                      | 35                               | 40              | Hours         |
| Standby Mode (powered off)                      |                      | 1.5                              |                 | Years         |
| Active  |                      | 35                               | 40              | mA            |
| Low Power Mode                                  |                      | 120                              | 160             | μΑ            |
| Environmental                                   |                      |                                  |                 |               |
| Operating Temperature Range                     | -10                  | -                                | +50             | °C            |
| Storage Temperature Range (no batteries)        | -40                  | -                                | +85             | °C            |
| Humidity  | 0                    | -                                | 95              | %RH           |
| IP Rating                                       |                      | IP67 / NEMA 4                    |                 |               |
| **Check operating temperature of batteries int  | ended for use, as ba | atteries used may have reduced o | perating temper | rature range. |

## **Dimensions (mm):**





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## **Ordering Codes:**

T24-HS

Wireless Radio Telemetry Handheld Display Single Inputs

#### **Associated Products:**



T24-ACM Wireless Sensor Module Enclosure with External Power



T24-ACMi Mini Sensor Enclosure



T24-ACMm Mini Data Transmitter
Case for Strain, 0-20 mA, 0-10 V



<u>T24-BSi Radio Telemetry Base</u> <u>Station with USB, RS485 or RS232</u>



T24-BSu Wireless Radio Telemetry
USB Base Station