

## Wireless Radio Telemetry Handheld Display Single Input

### Features



- Portable handheld display indicator for displaying data from one sensor
- Ability to wirelessly 'power off' the Acquisition Module Two button tactile keypad
- Worldwide licence exempt 2.4 GHz radio
- 120 metre (400 feet) range maximum
- Environmentally sealed to IP65



### Introduction

The T24-HS Handheld Display provides one to one data display from any one of Mantracourt's acquisition modules (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 120 metres (400 feet).

The handheld display 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.

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

### Specifications

#### General Radio

	Min	Typical	Max	Units
Licence		Licence Exempt		
Modulation method		MS (QPSK)		
Radio type		Transceiver (2 way)		
Data rate		250		K bits/sec
Radio Frequency	2.4000		2.4835	GHz
Power		1		mw
Range RAD24i (Integrated antenna)			120 (400)	Metres (feet) *
Range RAD24e (External antenna)			200 (650)	Metres (feet) *
Channels (DSSS)		16		

- Maximum range achieved in open field site with T24-SA at a height of 3 metres above ground and T24-HA held at chest height pointing towards the T24-SA

#### T24-HS - Handheld Display

Electrical	Min	Typical	Max	Units
Power Supply voltage	2.4	3.0	3.6	V dc

Power Supply	Min	Typical	Max	Units
Active		35	40	mA
Low power mode		120	160	uA
Estimated Battery life using 2Ahr batteries:				
Standby mode (Powered off)		1.5		Years
Continuous operation		40		Hours

Use a pair of alkaline AA batteries. Due to the higher voltage requirements of this device NiMH and NiCad batteries are not recommended.

Environmental	Min	Typical	Max	Units
IP rating		IP65		
Operating temperature range	-10		+50	C
Storage temperature	-40		+85	C
Humidity	0		95	%RH

### Module Transmits & Receives giving:

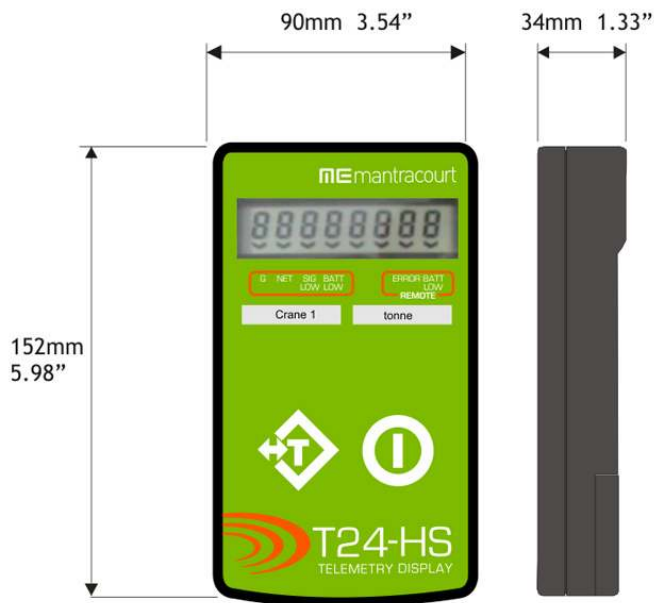
1. Full error detection and correction
2. Ability to switch to low power modes
3. Calibration & configuration via radio telemetry
4. Ability to be switched from sleep to operating mode via radio
5. Calibration stored within the module
6. Remote battery check

### Product Order Codes

T24-ACM	Wireless Radio Telemetry Acquisition Enclosure
T24-ACMi	Wireless Radio Telemetry Acquisition Enclosure
T24-ANTA	Wireless Radio Telemetry Antenna
T24-ANTB	Wireless Radio Telemetry Antenna
T24-ANTC	Wireless Radio Telemetry Antenna
T24-AO1	Wireless Radio Telemetry Desktop Analogue Output Module
T24-AO1i	Wireless Radio Telemetry Industrial Analogue Output Module
T24-BC1	Battery Charger for T24 Acquisition Modules
T24-BSi	Wireless Radio Telemetry Industrial Base Station
T24-BSu	Wireless Radio Telemetry Base Station USB
T24-DPV	Wireless Radio Telemetry T24 Data Provider Viewer and Logger
T24-HA	Wireless Radio Telemetry Handheld Display Multiple Inputs
T24-HR	Wireless Radio Telemetry Handheld Display Unlimited Inputs
T24-HS	Wireless Radio Telemetry Handheld Display Single Inputs
T24-IA	Wireless Radio Telemetry Current (4-20mA) Acquisition Module
T24-PR1	Wireless Radio Telemetry Printer
T24-RM1	Wireless Radio Telemetry Data to Relay output
T24-SA	Wireless Radio Telemetry Strain Gauge /Load Cell Acquisition Module
T24-SAf	Wireless Radio Telemetry 2KHz Strain Gauge Acquisition Module
T24-SO	Wireless Radio Telemetry Printer and Display Driver
T24-TK	Wireless Radio Telemetry Toolkit Software
T24-VA	Wireless Radio Telemetry Voltage (0-10V) Acquisition Module

For more up to date information visit our website [www.mantracourt.co.uk/products/wireless-telemetry](http://www.mantracourt.co.uk/products/wireless-telemetry)

### Mechanical Dimensions



### Approvals

**CE**, Complies with EMC directive. 2004/108/EC  
The Radio Equipment and Telecommunications Terminal Equipment (R&TTE) Directive, 1999/5/EC.



Industry Canada  
Industrie Canada



Designed,  
Manufactured  
& Supported in the  
UK

In the interests of continued product development, Mantracourt Electronics Limited reserves the right to alter product specifications without prior notice.