

Radio Telemetry Hand Held Display

Features



- Powered by internal battery
- Can select up to 20 remote instruments
- Tactile keypad, with dual range selection, peak/valley hold, auto-tare and on/off controls
- Dual Range
- Environmentally sealed to IP65 / NEMA4
- European and USA licence free radio
- 7½ digit LCD display, with 8 status annunciators
- 1 year manufacturer's warranty



Introduction

The TDM is a completely portable, precision instrument packaged in a small, robust IP65 / NEMA 4 enclosure, with a radio transceiver for communicating with all our remote telemetry strain devices. Reads gross/net and offers peak and trough capture and various calibration modes.

For simplified use, the operator has access to six keys. 2 separate ranges are available, which enable the instrument to read and display two values.

The menu options offer the ability to tailor the instruments response to the application. In each range all the variables can be set, including Zero and Filtering. An annunciator shows 'range' has been selected. There is also a window, to apply a legend, describing each range. Once these parameters are set, it provides the user with the simplest of indicators.

The Case is Registered Design No. 3021311

Specifications

Telemetry Data Parameter-License Exempt	Minimum	Typical	Maximum	Units
Protocol ASCII XP				
Modulation - FM half duplex			FM	
Data rate			10	Updates/Sec
868 MHz European				
Power	6		20	mW
Range			300	Metres
Channels			36	
915 MHz USA, Canada				
Power	3		10	mW
Range			200	Metres
Channels			130	

Indication

Display Type	7½ digit 7 segment LCD display 8.8 mm high, 8 status annunciator
Display Resolution	± 9.999.999
Annunciators	Local and remote low battery warning, range, error, peak, trough, net

Module Transmits & Receives giving:

1. Full error detection correction
2. Ability to switch to low power modes
3. Calibration & configuration via radio telemetry
4. Addresses of up to 20 remote TSC/TLC units
5. Remote shunt calibrations check
6. Gross and net outputs
7. Remote tare
8. Remote battery check
9. Data Encryption for complete security

Control Variables

Front Panel User Keys	6 x Tactile Keys for:- ON/OFF Switches TDM power on/off RANGE Selects between 2 measurement ranges HOLD Switches Hold on/off GROSS/NET Toggles between gross and net mode PEAK Peak capture TROUGH Trough capture
Settable Parameters	Least Significant Digit (count by 1, 5 or 10) Digital Filtering 0-1-1 second, 1-10 updates/second Decimal Point Position Transducer selection

Product Order Codes

TDM	TDM Radio Telemetry Hand Held Display
-CA	Black leather case, with shoulder strap & clear viewing window
-LI	Lithium battery (non-rechargeable) giving extended life

Physical

Dimensions	90 x 152 x 34mm (depth)
Weight	250 grams
Legends	Insert legend labels for engineering unit identification

Options

433MHz for greater range
Black leather case, Lithium battery, External antenna

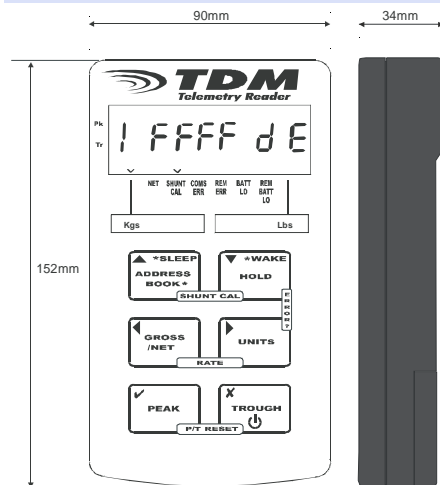
Support Modules

TCM	Radio Telemetry to RS232/485 Converter
TDUDIS	Radio Telemetry Display Module
TIO	Radio Telemetry Input/Output Module
TLC1	Radio Telemetry Strain Gauge or Load Cell Digitiser
TSC	Radio Telemetry Embedded Strain Gauge Digitiser
VisualLink	PC SCADA application

CE & Environmental

Storage temperature	-40 to +65°C (excluding batteries)	EMC Emissions	BS EN 55011:1998
Operating temperature	-10 to +50°C (excluding batteries)	EMC Immunity	BS EN 61000-4-2:1995
Relative humidity	95% maximum non condensing		BS EN 61000-4-3:2002
Safety/Low Voltage Directive	73/23/EEC amended by 93/68/EEC BS EN 61010-1:2001, IEC 1010-1-1990		BS EN 61000-4-4:2004
EMC Directive	89/336/EEC Basic Standard BS EN 61326:1998		BS EN 61000-4-11:2004

Mechanical Dimensions



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