



DM Handheld Telemetry Device

Telemetry Device Range Overview

The JCM range of telemetry devices allow data acquisition and control over a radio link. Devices can talk to each other as well as special dedicated function devices such as a hand held reader or a PC interface.

Although no one can guarantee perfect radio communications our three-stage error detection protocol will ensure that if data is received it is correct and readings and values can be relied upon.

Low power sleep modes ensure that battery life is maximized for applications where only occasional communications is required and where devices are placed in hard to access locations.

The devices use a text based communications protocol so you can communicate just as easily using a serial terminal program (such as HyperTerminal) as when integrating the supplied driver into your own applications.

Devices are available in a choice of European 868MHz or USA 915MHz frequencies.



TDM Overview

The TDM offers a handheld display of data from the telemetry device range. This battery powered handheld device makes remote monitoring simple. The ability to display peak, trough and a frozen reading adds to the usefulness. The TDM is also capable of calibrating remote devices that support it.

Holding up to twenty device IDs in memory makes switching between multiple remote devices a breeze.

The TDM does not expose itself to the radio interface. I.e. other devices cannot talk to the TDM.

- Store up to 20 device IDs for quick selection of different devices.
- Read back the Gross value from a device in either primary or secondary engineering units. (The secondary unit scaling can be programmed from the TDM)
- Select from 3 update rates: 3 per second, 1 per second or 1 every 3 seconds.
- Perform various functions on the reading such as Hold, Peak Hold, Trough Hold, Peak/trough Reset, Gross/Net.
- Send a device to sleep (low power mode) or wake a device.
- Operate remote Shunt Cal output (If supported by the remote device).
- Calibrate a remote device using Manual, Automatic or Table driven methods.
- Display remote error indication and remote battery low indication.
- Retrieve the remote Error Status from a device and optionally reset the errors.

Communications Overview

The telemetry devices each have a unique device ID which must be used for all communications either with a master or other devices within the system. The ID is fixed at production and is referred to in hexadecimal format. The range covered is from **000001** to **FFFFFF** which gives an address range of **1** to **16777215** decimal. With 16 million addresses it can be guaranteed that no two devices will have the same ID.

Picture of Load Cell attached to 2 x 50 tonne shackles and Hand Held Remote Readout and Aluminium Carry Case is shown below.

** Note: The Load cell and hand held unit only fit in the carry case , the shackles shackles are packed separately

