Tehama Submersible MDT

Fully Potted for use in meter pits



Our IP68 rated Submersible MDT combines our MAX Range MDT with a newly designed enclosure and full epoxy encasement to provide a fully **waterproof** product. The sealed, waterproof battery enables the MDT to operate for well over 10 years in normal operation.

The submersible MDT comes in two variations, a backwards compatible version (Standard Range) that operates in any existing Tehama Network, and our new **MAX Range** version. Both variations can be ordered with either one pulse meter input or one Encoder or GWF AllRead input. All now have an internal temperature sensor. Meters interface to the sealed MDT wires by using waterproof IDC Splice connectors (or similar) between MDT and the Meter. Like our other MDT models, an LED provides instant feedback of the state of the MDT. A magnet waved across the side of the case replaces the button on our regular MDTs and is used to generate an instant transmission (for field testing) and to query the device about its RF status. See Operation on next page for details.

For pit meters, the enclosure is designed to be mounting to the bottom of a plastic pit lit using screws through the two tabs, or with a waterproof adhesive. The radio range and performance of the MDT will be optimal if it is mounted to the plastic pit lid and being upside down will keep the radio within an air pocket, also beneficial for radio range.

Specifications

Inputs Options	• S-PI: Pulse input from water, electric, gas, run-time, or BTU meters • S-EI: Sensus/Neptune encoded protocol • S-GI: GWF AllRead encoded for Unico2coder® MP meters • All variations now have internal Temperature sensor
Data Resolution	1-hour interval
Radio	902 – 928 MHz; FCC and IC Certified; Open field range nearly 2 miles (Compatible Models) * Open field range nearly 10 miles (MAX Range Models) *
LED	Indicates RF network connection status and on/off state
Operating Environment	-20º to 145º F IP68 rated, fully submersible
Power	Sealed primary lithium battery, 3.6V
Typical Battery Life	10+ years @ 50º to 90º F, reduced at extreme temperatures
Dimensions	6.2” x 2.4” x 1.5”

*Actual range may vary depending on installation location and topography.
Continual product enhancements may cause specifications to change without notice.

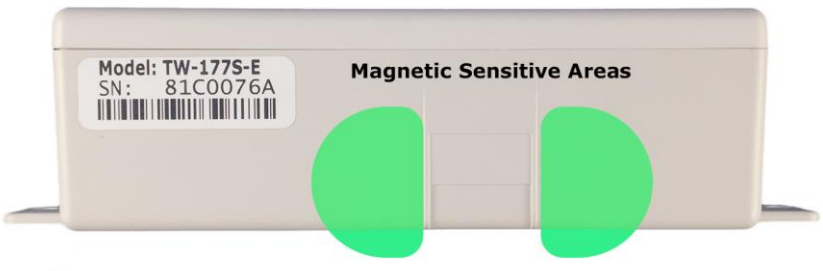
Models

Submersible MDT, Pulse, Standard Range	TW-167S-PI	Single pulse input counter, one-hour interval data. Temperature
Submersible MDT, Encoder, Standard Range	TW-167S-EI	Single input for Neptune/Sensus Encoder registers (auto-detecting), one-hour interval. Temperature
Submersible MDT, GWF Encoder, Standard Range	TW-167S-GI	Single input for GWF Unico2coder® MP Encoder registers, one-hour interval. Temperature
Submersible MDT, Pulse, MAX Range	TW-177S-PI	Single pulse input counter, one-hour interval data. Only for MAX Range networks. Temperature
Submersible MDT, Encoder, MAX Range	TW-177S-EI	Single input for Neptune/Sensus Encoder registers (auto-detecting), one-hour interval. Only for MAX Range networks. Temperature
Submersible MDT, GWF Encoder, MAX Range	TW-177S-GI	Single input for GWF Unico2coder® MP Encoder registers, one-hour interval. Only for MAX Range networks. Temperature

** Standard and MAX Range systems are NOT compatible: only MAX Range MDTs must be used with a MAX Range Repeater (and MAX Range DCAP) and vice versa.
Refer to AN-119 in the documents section of our website for more information.

Operation

The Submersible MDT operates exactly like our regular MDT. A button press is created by waving a magnet near the areas shown. Status and control are the same as our regular MDTs, including a "press" to initiate a read and transmit it to the DCAP. The LED on the top provides the same feedback as on our regular MDTs.





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