MAX Range Pulse MDT

Metering Data Transceiver



The MAX Range Pulse MDT can transmit the meter pulse count three to four times further than the Tehama Standard Range MDT within buildings. Its usage allows for far fewer or even zero Repeaters for faster system installations and is ideal for manufactured housing or multifamily properties with limited Repeater installation locations.

The MAX Range Pulse MDT records data from meters that generate a pulse output and transmits the totalizer count via radio towards the DCAP hourly. It is compatible with nearly all water, gas and electric utility meters that use a reed switch or a piezoelectric pulse generator.

The Tehama MAX Range MDTs have a ten-mile open field range, powered by two AA batteries for expected battery life from five to seven years.

The MDT is available either with a single pulse input for single meter usage or dual inputs for co-located hot and cold water meters or other two-meter combinations.

Other variations and features are available such as:

- Top-of-the-hour synchronize Time of Use (ToU) with 15-minute interval data
- Generated Pulse version for older Hersey and newer Zenner meters
- IP-68 rated Submersible version for pit or outdoor installation
- Integrated Remote Display version, California approved

Specifications

Inputs Options	• Pulse signal from water, electric, gas, run-time, or BTU meters • Hersey/Zenner pulse water meter (generated pulse meters)
MDT Data Storage	• TW-170B-P: Four to five readings • TW-170xx-PTx: Over 2000 data pts. (28+ days @ 15 Min interval)
Data Resolution	• TW-170B-P/Y: 1-hour interval • TW-170X-PT: 15-minute interval, Top of the Hour synchronized
Max Pulse Rate	20 pulses per second, 25mS minimum pulse width
Radio	902 – 928 MHz; FCC and IC Certified; Open field range nearly ten miles*
LED	Indicates on/off and RF network connection status
Operating Envir.	-20 to 145 degree F, up to 90% RH, non-condensing.
Power	• Two AA Alkaline (standard) • Two AA Lithium (Optional, for colder temperatures) • Sealed primary lithium battery (Submersible)
Typical Battery Life	5-7 years @ 50 to 90 deg. F, Reduced at extreme temperatures 10-12 years @ 40 to 100 deg. F (Submersible)
Dimensions	4.3" x 2.2" x 1.2" (Regular), 6.2” x 2.4” x 1.5” (Submersible)

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

Models

Battery powered		
Pulse MDT, battery powered	TW-170B-P	Single pulse input counter, one-hour interval data, no on-board memory
Hersey/Zenner MDT, battery Power.	TW-170B-Y	Single short generated pulse input, typical of Hersey or Zenner meters, one hour interval, no on-board memory
Pulse MDT, ToU, Battery Powered	TW-170B-PT	Single Pulse input, 15-minute guaranteed (*) Time-of-Use interval data with on-board data memory. Readings are synchronized to the top of the hour for accurate billing
Multi-input		
Dual Pulse MDT, Battery Power	TW-170B-PP	Dual pulse input counters, one-hour interval data, no on-board memory
Pulse MDT, Internal Temp, Battery Power	TW-170B-PI	Single Pulse input, Internal temperature, 1-Hr interval data, no on-board memory
Pulse MDT, ToU, Internal Temp, Battery Power	TW-170B-PTI	Single Pulse input, Internal temp., 15-minute guaranteed (*) Time-of-Use interval data with on-board data memory. Readings are synchronized to the top of the hour for accurate billing
Submersible, fully potted with sealed 10+year battery		
Submersible MDT, Pulse	TW-177S-P	Single pulse input counter, one-hour interval data. Fully potted for submersible pit meter applications and outdoor environments *Separate Data Sheet available on our web site*

*: Adequate repeater coverage is required for guaranteed delivery.
Other combinations and sensor inputs are available by special order. Please contact Tehama for details.

Note 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.

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Rev.2207