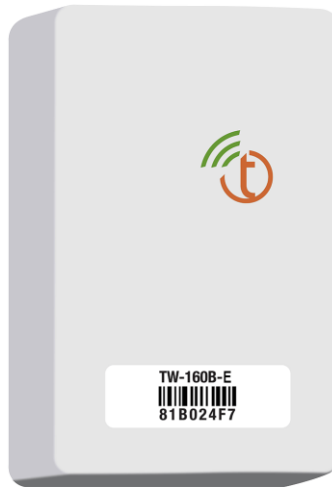


# Standard Range Encoder MDT

## Metering Data Transceiver



The Standard Range Encoder MDT has a true encoder interface that directly reads the meter face value of encoded meters to transmit an absolute reading towards the DCAP every hour. It auto-detects the data format between Sensus meters, Sensus compatible meters (Master-Meter, Badger, etc.), and Neptune meters.

The Standard Range Encoder MDT has an open field range of over 3500 feet and is shipped with two AA batteries for expected battery life from five to seven years.

The MDT is available either with a single encoded input for single meter usage or dual encoded inputs for co-located hot and cold water meters. A special Pulse + Encoder Dual MDT is also available.

Other variations and features are available such as:

- GWF-AllRead Encoder (pairs with the GWF UNICOCoder® water meter available from Tehama). MDT also reads Units, Count Factor, Hot/Cold from GWF meters.
- IP-68 rated Submersible version for pit or outdoor installation
- Integrated Remote Display, California approved

## Specifications

Inputs Options	<ul style="list-style-type: none"> <li>• TW-160B-E: Sensus UI-1203 or Neptune, auto-detecting</li> <li>• TW-160B-G: GWF AllRead UNICOCoder® Interface</li> </ul>
MDT Data Storage	• TW-160B-E/G: Four to five readings max
Data Resolution	• TW-160B-E/G: 1-hour interval
Radio	902 – 928 MHz; FCC and IC Certified Open field range over 3500 feet*
LED	Indicates on/off and RF network connection status. From button press: <ul style="list-style-type: none"> <li>• Solid Green: good Link Quality</li> <li>• Solid Amber: OK Link Quality</li> <li>• Red or Flashing: poor Link Quality or syncing to Network</li> </ul>
Operating Envir.	-20 to 145-degree F, up to 90% RH, non-condensing.
Power	<ul style="list-style-type: none"> <li>• Two AA Alkaline (standard)</li> <li>• Two AA Lithium (Optional, for sub-freezing temperatures)</li> <li>• Sealed primary lithium battery (Submersible)</li> </ul>
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

<b>Battery powered</b>		
Encoder MDT, battery powered	TW-160B-E	Single Encoded input, one-hour interval data, no on-board memory
Single M-Bus MP MDT, battery powered	TW-160B-G	Single GWF M-Bus MP Encoded Meter input, one-hour interval data, no on-board memory
<b>Multi-input</b>		
Dual Encoder MDT, Battery Power	TW-160B-EE	Dual Encoded input, one-hour interval data, no on-board memory
Dual M-Bus MDT, Battery Power	TW-160B-GG	Dual GWF M-Bus Encoded Meter input, one-hour interval data, no on-board memory
Encoder + Pulse Dual input MDT, Battery Power	TW-160B-EP	Single Encoded input, Single Pulse input, one-hour interval data, no on-board memory
<b>Submersible MDT, fully potted with sealed 10+year battery</b>		
Submersible MDT, Encoder	TW-167S-E	Single Encoded input, one-hour interval data. Fully potted for submersible pit meter applications and outdoor environments <i>Separate Data Sheet available on web site</i>
Submersible GWF M-Bus MP MDT	TW-167S-G	Single GWF M-Bus MP Encoded Meter input, one-hour interval data. Fully Potted for submersible pit meter applications and outdoor environments <i>Separate Data Sheet available on web site</i>

\*: 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 our [App Note 119: Max Range Series FAQ](#) in the Resources section of our website for more information.

Are you unsure how an Encoded Water meter works or what the Count Factor might be? Please see our [App Note AN-117 Encoded Meter FAQ](#) for the answer to all your questions. You can find this on our web site.

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