Standard Range MDT - Metering Data Transceiver

The Tehama Wireless MDT records data from various meter types and transmits the data via radio towards the DCAP. It is compatible with most utility meters used for submetering and sends the meter reading data every hour.

The standard unit is powered by two AA batteries providing a five year battery life under normal conditions. An optional line powered variations are also available for most models.

Enhanced features and input options beyond simple pulse counting can be ordered from Tehama Wireless to allow collection and transmission of additional information relevant to submetering in the multifamily housing market. These include:

- Time of Use (ToU) interval data with on-board memory and time-stamping at 15-mins or 5-mins intervals
- 2nd Pulse input
- Encoded meter input (Sensus or Neptune)
- Temperature measurement (on-board or with external probe)
- 24VAC and dry contact Runtime counter

Specifications

| Inputs Options | • Pulse signal from electric, run-time, gas or water meters
|                | • Encoded protocol of Neptune or Sensus
|                | • Optional temperature sensor
|                | • Hersey pulse water meter
|                | • Other inputs also supported
| MDT Data Storage | • TW-160B-P: None
|                 | • TW-160xx-PTx: Over 4000 data pts. (31+ days @ 15 Min interval)
| Data Resolution | • TW-160B-P: 1 hour interval
|                 | • TW-160xx-PT: 15 minute interval standard, Optional 5 min available
| Radio           | 902 – 928 MHz; FCC Certified; Open field range of up to 2000 feet*
| 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)
|                 | • 9V to 15V DC input (Optional, from wall transformer or certain electric meters)
| Typical Battery Life | 5 years @ 50 to 90 deg. F, Reduced at extreme temperatures
| Dimensions      | 4.3” x 2.2” x 1.2”

Continual product enhancements may cause specifications to change without notice.

*Actual range may vary depending on installation location and topography.
## Models

### Battery powered

<table>
<thead>
<tr>
<th>Model Description</th>
<th>Model Code</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pulse MDT, battery powered</td>
<td>TW-160B-P</td>
<td>Single pulse input counter, 1-hour interval data, no on-board memory</td>
</tr>
<tr>
<td>Pulse MDT, ToU, Battery Powered</td>
<td>TW-160B-PT</td>
<td>Single Pulse input, 15 minute guaranteed(*) Time-of-Use interval data with on-board data memory</td>
</tr>
<tr>
<td>Encoder MDT, battery powered</td>
<td>TW-160B-E</td>
<td>Single Encoder (Neptune, Sensus) Register input, one hour interval, no on-board memory</td>
</tr>
<tr>
<td>Hersey Compatible MDT, battery Power.</td>
<td>TW-160B-Y</td>
<td>Single Hersey-only pulse input, one hour interval, no on-board memory</td>
</tr>
<tr>
<td>Runtime MDT, Battery powered</td>
<td>TW-160B-R</td>
<td>24VAC zone valve runtime counter. Counts seconds and circuit fault status. 1-hr interval Tx.</td>
</tr>
</tbody>
</table>

### External Powered

<table>
<thead>
<tr>
<th>Model Description</th>
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<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pulse MDT</td>
<td>TW-160LC-P</td>
<td>Single pulse input counter, 1-hour interval data, no memory. DC9-15V input with screw terminals.</td>
</tr>
<tr>
<td>Pulse MDT, ToU,</td>
<td>TW-160LC-PT</td>
<td>Single Pulse input, 15 minute guaranteed(*) Time-of-Use interval data with on-board data memory. DC9-15V input with screw terminals</td>
</tr>
<tr>
<td>Pulse MDT, ToU, tamper</td>
<td>TW-160LC-PTC</td>
<td>Above with added door/tamper contact input.</td>
</tr>
</tbody>
</table>

### Multi-input

<table>
<thead>
<tr>
<th>Model Description</th>
<th>Model Code</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dual Pulse MDT, Battery Power</td>
<td>TW-160B-PP</td>
<td>Dual pulse input counters, one hour interval data, no on-board memory</td>
</tr>
<tr>
<td>Encoder MDT plus Pulse, Battery Power</td>
<td>TW-160B-EP</td>
<td>Encoder plus Pulse input, one hour interval data, no on-board memory</td>
</tr>
<tr>
<td>Pulse MDT, Internal Temp, Battery Power</td>
<td>TW-160B-PI</td>
<td>Single Pulse input, Internal temperature, 1-Hr interval data, no on-board memory</td>
</tr>
<tr>
<td>Pulse MDT, ToU, Internal Temp, Battery Power</td>
<td>TW-160B-PIT</td>
<td>Single Pulse input, Internal temp., 15 minute guaranteed(*) Time-of-Use interval data with on-board data memory</td>
</tr>
<tr>
<td>Runtime MDT, External Temp, Battery Power</td>
<td>TW-160B-RX</td>
<td>24VAC zone valve runtime counter with external temperature (probe sold separately). Counts seconds &quot;On&quot; and circuit fault status. 1-hour interval Tx.</td>
</tr>
</tbody>
</table>

*: Adequate repeater coverage is required for guaranteed delivery.
Most multi-input features can be applied to externally powered units. Other combinations and sensor inputs are available by special order. Please contact Tehama for details.

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

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Rev.1902