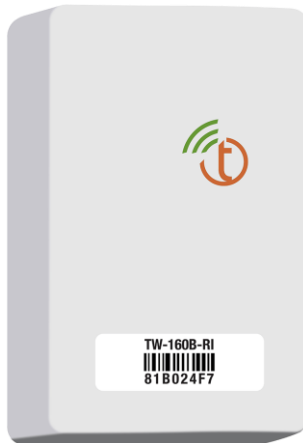


# MDT - Metering Data Transceiver

## Runtime Versions



The Tehama Wireless Runtime MDT records the “On” time in seconds for the most accurate measurement available. The running count is stored and transmitted to the DCAP once an hour. Versions of the Runtime MDT can detect a 24VAC zone valve control state or a dry contact or relay switch input. Optionally the unit can be ordered with an internal temperature sensor for ambient readings or with the dry contact version, an external thermistor for location accurate measurements. The 24VAC zone valve version also detects the integrity of the zone valve connection and will generate an alert if tampered with.

The unit is powered by two AA batteries providing a five to seven year battery life under normal conditions. An optional line powered variation is also available for the dry contact switch version. The dry contact switch versions are also available with the Max range radio system.

The local MDT time base for time stamping data is driven by a highly accurate watch crystal and is regularly updated from the DCAP via the RF network. The DCAP’s time is set regularly via the Internet and tied to stratum 2 atomic clocks.

## Specifications

Inputs Options	<ul style="list-style-type: none"> <li>• 24 VAC zone valve control signals</li> <li>• Dry Contact (Relay) from control signal</li> <li>• Internal thermistor temperature sensor</li> <li>• External thermistor temperature sensor</li> </ul>
MDT Data Storage	• TW-160B-R(I), TW-160B-RC(I): 4 data points max
Data Resolution	• TW-160B-R(I), TW-160B-RC(I): 1 hour interval
Radio	Frequency: 902 – 928 MHz; FCC Certified <b>Standard:</b> 10mW, Open field range over 3500 feet* <b>Max:</b> 80mW, Open Field range approaching 10 miles*
LED	Bi-color LED Indicates on/off and RF network connection quality
Operating Environment	-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>• 5V to 15V DC input from wall transformer</li> </ul>

Typical Battery Life	• 5 to 7 years @ 50° to 90° F, Reduced at extreme temperatures
Dimensions	3.5" x 2.1" x 1.2"

Continual product enhancements may cause specifications to change without notice.

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

## Models

24VAC input Runtime MDT, Battery powered	TW-160B-R TW-160B-RI	<b>-R:</b> 24VAC zone valve runtime counter, Counts number of seconds circuit is energized and circuit fault. 1-hr interval RF transmissions. <b>-RI:</b> Adds internal temperature measurement
Dry contact input Runtime MDT, Battery powered, Standard Range	TW-160B-RC TW-160B-RCI TW-160B-RCX	<b>-RC:</b> Relay control signal runtime counter. Counts number of seconds relay input is closed 1-hr interval RF transmissions. <b>-RCI:</b> Adds internal temperature measurement <b>-RCX:</b> Add external thermistor support (thermistor sold separately)
Dry contact input Runtime MDT, Battery powered, Max Range	TW-170B-RC TW-170B-RCI TW-170B-RCX	<b>-RC:</b> Relay control signal runtime counter. Counts number of seconds relay input is closed 1-hr interval RF transmissions. <b>-RCI:</b> Adds internal temperature measurement <b>-RCX:</b> Add external thermistor support (thermistor sold separately)
Dry contact input Runtime MDT, Line powered	TW-160LC-RC TW-160LC-RCI TW-160LC-RCX	Same functions as TW-160B-xxx models but uses external DC power (5V-15VDC) from external power supply.

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