Long Range Wireless Transmitters
Ethernet or Internet Connection

- 1000 m* (3280') Range
- NEMA 4 (IP65) Enclosure
- Battery Backed Real Time Clock
- Data Assurance
- Up to 128 End Devices per Receiver
- Up to 7-Year Battery Life

The rugged high-performance, long range OMEGA® ZW-ED wireless sensor/transmitter system provides web-based monitoring of temperature, humidity, and barometric pressure.

The radio is an IEEE 802.15.4 compliant transmitter operating at 2.4 GHz designed to transmit up to 1000 m* (3280') to a ZW-REC coordinator. The ZW-REC connects directly to an ethernet network to serve active web pages and display the data. You can monitor and record temperature, relative humidity, and barometric pressure over an ethernet network or the internet without any special software—just your web browser.

These wireless devices are designed for demanding industrial applications indoors and harsh outdoor environments. The electronics are protected in a rugged weatherproof polycarbonate NEMA 4 (IP65) rated housing. A variety of compatible probes are available to suit your application.

* Without obstructions or interferences
Specifications

**WIRELESS COMMUNICATION**

**Standard:** IEEE 802.15.4, DSSS  
**Frequency:** 2.4 GHz (2400 to 2483.5 MHz), 16 channels  
**Network Topology:** Star topology  
**Transmit Power:** 9.5 dBm  
**Receiver Sensitivity:** -96 dBm  
**Range:** Up to 1000 m* (3280')  
*Without obstructions or interference

**POWER**

**Input Voltage:** 5 to 36 Vdc, 24 Vac ±10%  
**Input Power:** 0.8 W maximum  
**Safety Qualified AC Power Adaptor (Optional):**  
   Nominal Output: 5 Vdc @ 0.6 A  
   Input: 100 to 240 Vdc, 50/60 Hz  
**Operating Temperature:** 0 to 40°C  
(32 to 104°F)  
**Alkaline Battery:** Two C-cell 1.5 Vdc (included)  
**Lifetime:** Estimate of 7 years with frequency of 1 reading per minute  
**Lithium Back-Up** Battery: CR2032 (included)  
**RTC back-up only.**

**ENVIRONMENTAL**

**Operating Conditions:**  
**Base Unit:** -20 to 70°C (-4 to 158°F), 90% RH non-condensing  
**CR2032 Battery:** -20 to 60°C  
(-4 to 140°F), 90% RH non-condensing  
**Alkaline Battery:** -18 to 55°C  
(-0.4 to 131°F), 90% RH non-condensing

**PACKAGING**

**Enclosure Material:** Polycarbonate  
**Enclosure Protection:** NEMA 4 (IP65)  
**Enclosure Dimensions:**  
135.9 L x 82 W x 39 mm D  
(5.35 x 3.23 x 1.56")

**GENERAL**

**Agency Approval:** ECCN 5A992,  
EMC 2014/30/EU, LVD 2014/35/EU,  
RED 2014/53/EU  
**Software:** Compatible with the OMEGA® Dashboard

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**To Order**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td><strong>Wireless End Device (Transmitter)</strong></td>
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<tr>
<td>ZW-ED</td>
<td>Long range wireless end device for use with probes</td>
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<tr>
<td>ZW-ED-LCD</td>
<td>Long range wireless end device for use with probes, LCD display (coming soon)</td>
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<tr>
<td><strong>Accessories</strong></td>
<td></td>
</tr>
<tr>
<td>DM12CAB-8-1-RA</td>
<td>1 m (3.3&quot;) dual M12-8 connector, right angle terminator</td>
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<tr>
<td>DM12CAB-8-3-RA</td>
<td>3 m (9.8&quot;) dual M12-8 connector, right angle terminator</td>
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<tr>
<td>DM12CAB-8-5-RA</td>
<td>5 m (16.4&quot;) dual M12-8 connector, right angle terminator</td>
</tr>
<tr>
<td>UNIV-AC-100/240-5-M8</td>
<td>Universal AC adaptor with M8 connector</td>
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<tr>
<td><strong>Wireless Coordinator (Receiver)</strong></td>
<td></td>
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<tr>
<td>ZW-REC</td>
<td>Long range wireless receiver</td>
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</table>

**Compatible M12 Digital Probes**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
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<tbody>
<tr>
<td>zTP1-P</td>
<td>Stick probe temperature probe</td>
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<tr>
<td>zTP2-P</td>
<td>Lug mount probe temperature probe</td>
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<tr>
<td>zTHP-P</td>
<td>Industrial temperature and humidity probe</td>
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<tr>
<td>zTHP2-P</td>
<td>Compact industrial temperature and humidity probe</td>
</tr>
<tr>
<td>zBTP-P</td>
<td>Industrial temperature and barometric pressure probe</td>
</tr>
<tr>
<td>zBTHP-P</td>
<td>Industrial temperature, humidity and barometric pressure probe</td>
</tr>
</tbody>
</table>

*Comes complete with 2 C-cell batteries and CR2032 battery.  
*Note: Because of transmission frequency regulations, these products may only be used in the US, Canada, and Europe.*