Technical Data Sheet for EHPU-EMR
EverGen® PowerStrap™ Facet

PRODUCT FEATURES
- EU RoHS Compliant
- EU REACH Compliant
- Non-Invasive thermal energy harvesting power compatible with Emerson wireless Rosemount sensors
- Alternative to replaceable primary cell batteries
- Extends existing sensor battery life to >10 years
- Configurable for vertical and horizontal pipes
- Designed for pipe diameters ranging from 2” to 14”
- Operational in all geographic locations
- 5 minute, non-invasive installation on pipes
- 2 meter long cable for convenient installation
- Adjustable strap construction for single bolt tightening
- Standard 1 year warranty
- Class 1 Division 1 Groups A, B, C, & D certified
- Patented – US 8,933,317

CERTIFICATIONS
US & CANADA Standards
- UL Intrinsically Safe
- Certificate: 262684
- Class I, Division 1, Groups A, B, C, and D;
- Class II, Division 1, Groups E, F, and G;
- Class III, Division 1;
- Class I, Zone 0, AEx ia IIC T4 Ga
- Ex ia IIC T4 Ga
- -40 °C < Ta < 65 °C

ORDERING OPTIONS

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EHPU-S-H-EMR</td>
<td>EVERGEN® PowerStrap™, 2”-6”, Horizontal configuration</td>
</tr>
<tr>
<td>EHPU-S-V-EMR</td>
<td>EVERGEN® PowerStrap™, 2”-6”, Vertical configuration</td>
</tr>
<tr>
<td>EHPU-L-H-EMR</td>
<td>EVERGEN® PowerStrap™, 6”-14”, Horizontal configuration</td>
</tr>
<tr>
<td>EHPU-L-V-EMR</td>
<td>EVERGEN® PowerStrap™, 6”-14”, Vertical configuration</td>
</tr>
</tbody>
</table>

OPERATION CAUTIONS
For maximum reliability, storage and operation below a hot side temperature of 130°C is recommended. The ambient operating temperature range is from -40°C to +65°C.

INSTALLATION
For proper installation please refer to the operation and installation manual.

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**BATTERY LIFE EXTENSION (Years)**

The tables below depict estimated battery life (in years) with and without an II-VI Marlow EverGen® PowerStrap as a function of different base to ambient temperature differentials. When energy harvesting is available, battery is held in reserve. Maximum battery shelf life for lithium-ion batteries is 10 years. Performance is given for various Emerson Wireless Rosemount sensor products at different sensor transmit cycles.

### Rosemount 648 Wireless Temperature Transmitter

<table>
<thead>
<tr>
<th>Battery Only</th>
<th>Energy Harvesting (Pipe to Ambient ΔT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission Rate</td>
<td>Battery Life (Years)</td>
</tr>
<tr>
<td>1 sec</td>
<td>0.9</td>
</tr>
<tr>
<td>2 sec</td>
<td>1.7</td>
</tr>
<tr>
<td>4 sec</td>
<td>2.8</td>
</tr>
<tr>
<td>8 sec</td>
<td>4.5</td>
</tr>
<tr>
<td>16 sec</td>
<td>6.9</td>
</tr>
<tr>
<td>32 sec</td>
<td>9.7</td>
</tr>
<tr>
<td>60 sec</td>
<td>10</td>
</tr>
</tbody>
</table>

### Rosemount 3308A Wireless Guided Wave Radar Level

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Transmission Rate</td>
<td>Battery Life (Years)</td>
</tr>
<tr>
<td>1 sec</td>
<td>N/A</td>
</tr>
<tr>
<td>2 sec</td>
<td>N/A</td>
</tr>
<tr>
<td>4 sec</td>
<td>1.3</td>
</tr>
<tr>
<td>8 sec</td>
<td>2.3</td>
</tr>
<tr>
<td>16 sec</td>
<td>4.1</td>
</tr>
<tr>
<td>32 sec</td>
<td>6.6</td>
</tr>
<tr>
<td>60 sec</td>
<td>9.5</td>
</tr>
</tbody>
</table>

For additional performance information, contact one of our Applications Engineers at 877-627-5691.

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**MECHANICAL CHARACTERISTICS**

Horizontal Configuration

Vertical Configuration

All units are in inches unless otherwise stated.

For customer support or general questions please contact a local office or visit our website at [www.marlow.com](http://www.marlow.com).

Marlow reserves the right to make product changes without notice.