

# EVERGEN® POWERSTRAP™ FACET EHPU-EMR



## 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

# EVERGEN® POWERSTRAP™ FACET EHPU-EMR

## 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

Model Number	Description
EHPU-S-H-EMR	EVERGEN® PowerStrap™, 2"-6", Horizontal configuration
EHPU-S-V-EMR	EVERGEN® PowerStrap™, 2"-6", Vertical configuration
EHPU-L-H-EMR	EVERGEN® PowerStrap™, 6"-14", Horizontal configuration
EHPU-L-V-EMR	EVERGEN® PowerStrap™, 6"-14", Vertical configuration

## 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.

## Battery Life Extension (Years)

The tables below depict estimated battery life (in years) with and without an II-VI 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

Battery Only		$\Delta T^{\circ}\text{C}$ $\Delta T^{\circ}\text{F}$	Energy Harvesting (Pipe to Ambient $\Delta T$ )			
Transmission Rate	Battery Life (Years)		20 36	25 45	30 54	35 63
1 sec	0.9		>10	>10	>10	>10
2 sec	1.7		>10	>10	>10	>10
4 sec	2.8		>10	>10	>10	>10
8 sec	4.5		>10	>10	>10	>10
16 sec	6.9		>10	>10	>10	>10
32 sec	9.7		>10	>10	>10	>10
60 sec	10		>10	>10	>10	>10

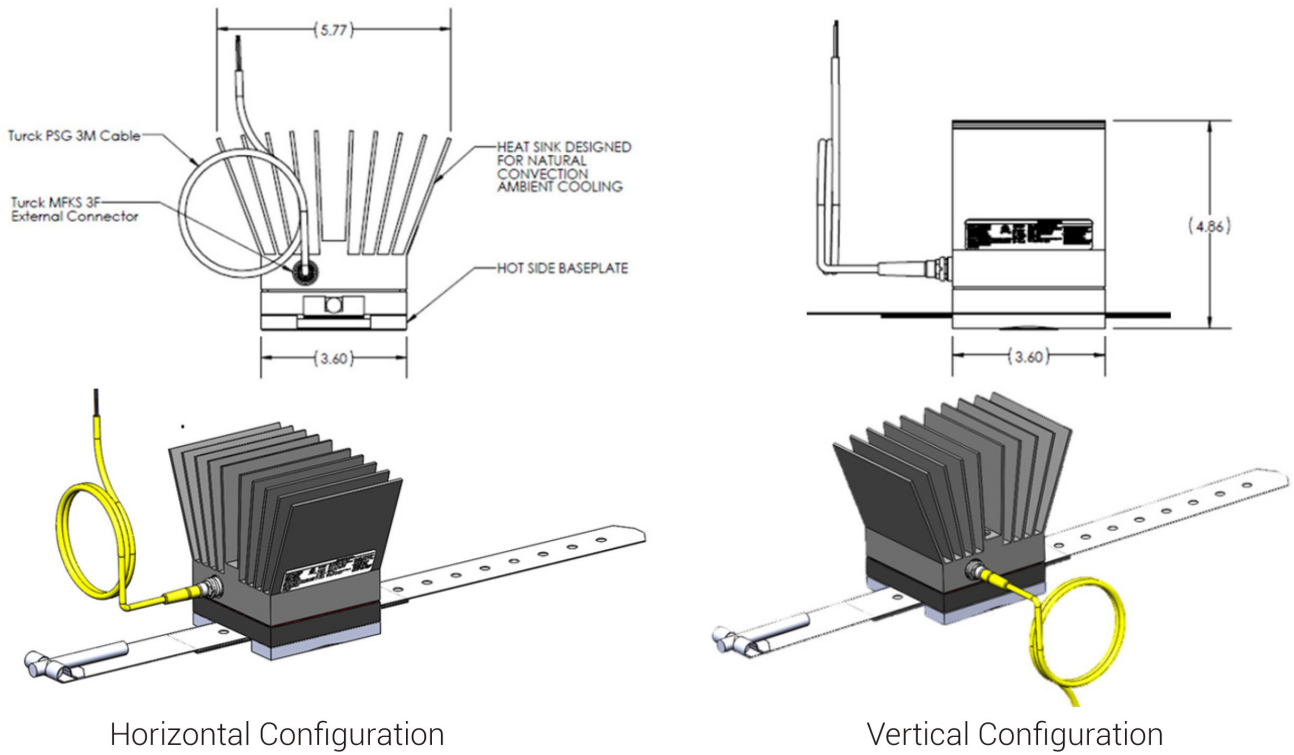
### Rosemount 3308A Wireless Guided Wave Radar Level

Battery Only		$\Delta T^{\circ}\text{C}$ $\Delta T^{\circ}\text{F}$	Energy Harvesting (Pipe to Ambient $\Delta T$ )			
Transmission Rate	Battery Life (Years)		20 36	25 45	30 54	35 63
1 sec	N/A		N/A	N/A	N/A	N/A
2 sec	N/A		N/A	N/A	N/A	N/A
4 sec	1.3		>10	>10	>10	>10
8 sec	2.3		>10	>10	>10	>10
16 sec	4.1		>10	>10	>10	>10
32 sec	6.6		>10	>10	>10	>10
60 sec	9.5		>10	>10	>10	>10

Rosemount 3051S Wireless Pressure Transmitter

Battery Only		Energy Harvesting (Pipe to Ambient $\Delta T$ )							
Transmission Rate	Battery Life (Years)	$\Delta T^{\circ}C$	20	25	30	35	40	50	60
		$\Delta T^{\circ}F$	36	45	54	63	72	90	108
1 sec	0.6		1.3	2.7	>10	>10	>10	>10	>10
2 sec	1.3		>10	>10	>10	>10	>10	>10	>10
4 sec	2.2		>10	>10	>10	>10	>10	>10	>10
8 sec	3.7		>10	>10	>10	>10	>10	>10	>10
16 sec	5.8		>10	>10	>10	>10	>10	>10	>10
32 sec	8.6		>10	>10	>10	>10	>10	>10	>10
60 sec	10		>10	>10	>10	>10	>10	>10	>10

**Mechanical Characteristics**



All units are in inches unless otherwise stated.