microTEMP™

Rugged, Wireless, Non-Intrusive Temperature Sensors

Out-of-range temperatures can not only damage machinery and plant equipment, but can compromise the quality of your processes. This makes temperature measurement a priority for many Petrochemical and Downstream Oil & Gas systems.

Sensor Networks microTEMP™ is an intrinsically safe, fully wireless, non-intrusive, network of sensors that allows for direct and real-time temperature measurement. Powered by long-life batteries (10 years), it operates using long-range, sub-gigahertz LoRaWan® wireless connectivity.

Each microTEMP sensor can take temperature measurements every five minutes and stores the temperature and time stamp in memory. The sensors transmit data after 12 readings have been taken and stored. Collection intervals are set at the factory, and can be updated remotely in the future as needed. Data is automatically sent to webPIMS™, a cloud-based LoRaWAN system for analysis, trending, and more. Data can also be sent to historians (PI or similar) in your local network for self-serve storage and analysis.

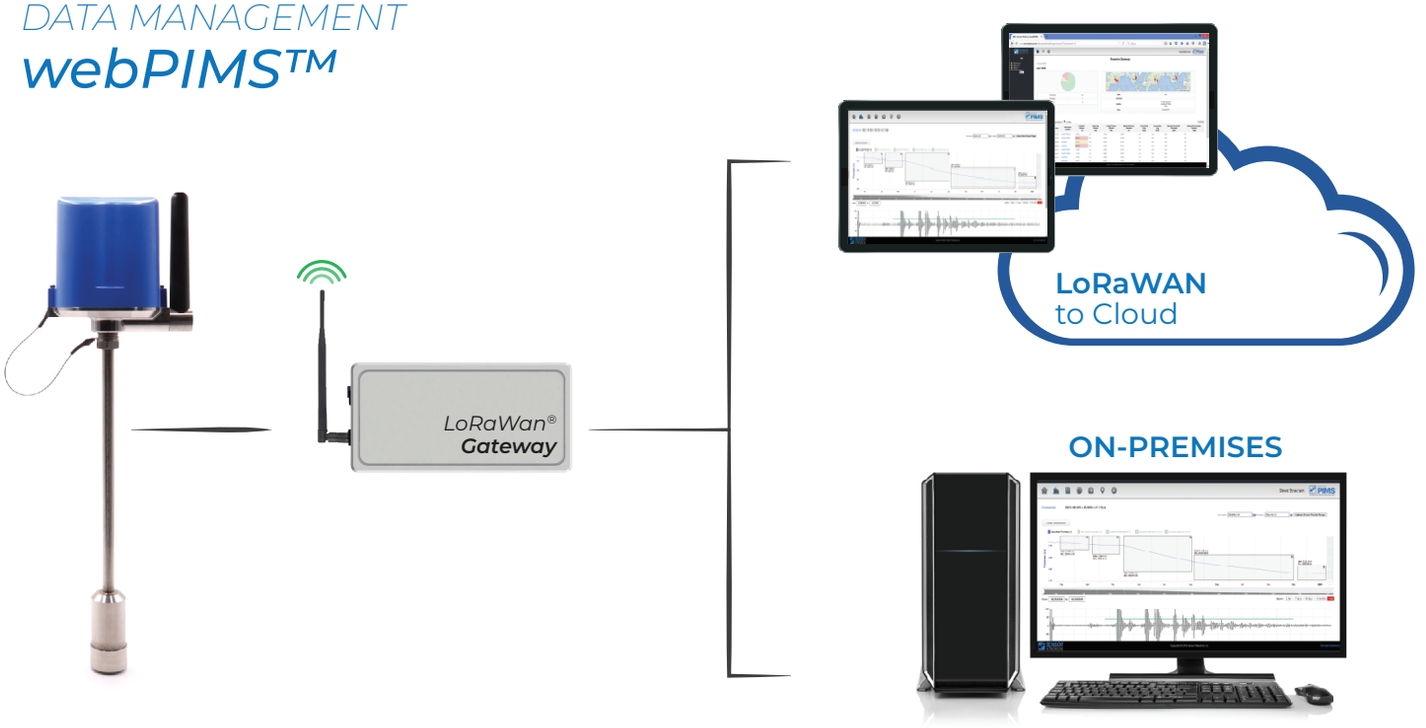
- Operates using LoRa-WAN Sub-Gigi-hertz digital radio frequency.
- 10-years at 6 data collections/day (2x D-Size Batteries - 3.6VDC).
- Built-in thermocouple for surface temperature readings | -40 to 1,112°F (-40°C to 600°C)..
- Ethernet or Cellular back-haul through gateway.
- Installed temporarily or permanently in under 5 minutes per sensor.
- Hazardous-area certified to UL/CSA Class 1 Div. 1, Gas Groups A-D, T4 & ATEX IECEX Zone 0.

Eddyfi Technologies
Remote Monitoring

SENSOR NETWORKS,INC

DATA MANAGEMENT

webPIMS™



microTEMP Specifications

Sensor Tip Diameter	1.25" (31.75 mm)
Sensor Surface Temperature	-40 to 1,112°F (-40 to 600°C)
Weight	31.0 oz. (880g)
Size (height x housing dia.)	15 x 2.8" (394 x 70 mm)
Hazardous Location Rating	See chart on the right | Intrinsically Safe
Temperature Accuracy*	-40 to 392°F ±5.8°F (-40 to 200°C ±3.2 °C) | >392°F (200°C) ±2.0%
Ingress Protection Rating	IP-67
Resolution	0.45°F (0.25°C)
Battery Life (typical)	10 years at 6 collections a day (68°F/20°C)
Construction	316 stainless steel
Mounting Options	Band clamp Magnetic base (rated up to 250°F/121°C)
Data	Temperature, time/date stamp
Data Access	Cloud-based via webPIMS and/or local network
Local Network	LoRaWAN (node to gateway)
Connectivity	Gateway to cloud (cellular or ethernet)
Sensor Count	1,000 microTEMP units per gateway

**Readings will be more accurate if sensor is installed within pipe insulation.*

UK CA 2503 CE 2776 Ex II 1 G Ex ia IIC T4 Ga, Ta = -40°C to +70°C
CML 21ATEX2356X | CML 21UKEX2357X | IECEx CML 21.0044X

NRTL LISTED MET c US
Ex ia IIC T4 Ga | Class I, Div 1, Gp A-D T4 Ex ia
Class I Zone 0, AEx ia IIC T4 Ga | Class I, Div 1 Gp A-D T4
Ta = -40°C to +70°C
E114158 - Hazardous Location

WARNING: USE ONLY TADIRAN TL-5930, SL-2780 OR XENO XL-205F BATTERIES
WARNING: SPECIAL CONDITIONS FOR SAFE USE, SEE INSTRUCTIONS

IP 67
BATTERY POWERED: 2 Cells, 7.2V, 0.94W
PROGRAMMING PORT: Um = 5V

Contains:
IC: 23069-CW24012
FCC: 2ANDP-CW24-012
Made in the USA

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