

# SteamIQ Steam Trap Monitor

## Description

The SteamIQ Steam Trap Monitor transforms steam system maintenance through advanced IoT technology, providing continuous, real-time monitoring of steam trap conditions. Engineered for superior accuracy, reliability, and ease of use, SteamIQ effortlessly enhances operational efficiency, reduces energy waste, and significantly lowers maintenance costs.

Eliminating the inefficiency and unreliability of manual steam trap surveys, SteamIQ Monitors attach quickly and securely to the outlet piping of any steam trap. The system performs 60 ultrasonic assessments every hour, offering precise detection of trap health and operational status. SteamIQ's intelligent analytics swiftly identify faults and track trap activity levels, allowing facilities to proactively address issues before they escalate into costly problems.

Utilizing cutting-edge LoRaWAN™ wireless technology, SteamIQ offers exceptional communication range of up to 60 miles line-of-sight. Gateways strategically placed around your facility deliver secure, real-time data directly to the cloud via cellular backhaul, independent from existing facility networks. This ensures uninterrupted monitoring with zero impact on your IT infrastructure. SteamIQ monitors can easily integrate with existing customer-owned LoRaWAN networks.

With robust hardware rated IP67 and boasting an industry-leading 12-year battery life, SteamIQ is designed to withstand harsh industrial environments and challenging conditions. Coupled with its intuitive cloud-based dashboard, SteamIQ provides actionable insights at both facility-wide and detailed individual trap levels. Seamlessly integrating into existing IoT ecosystems through a flexible API, SteamIQ scales effortlessly from single-location operations to global enterprise deployments.

SteamIQ doesn't just monitor steam traps—it transforms data into decisions, empowering facility managers to dramatically reduce energy consumption, carbon emissions, and downtime, thereby maximizing plant productivity and sustainability.

- Ultrasonic detection mechanism coupled with thermistor
- IP67 rated
- Temperature rating -40°C to +85°C
- Continuous monitoring
- Aluminum die cast housing
- Variable length waveguide
- Durable powder coating
- LoRaWAN class A communication protocol
- Operates on existing networks
- Onboard spectral analysis and edge processing
- Helps reduce energy and emissions loss significantly
- Immediate identification of failure location for quick response
- Non-intrusive installation
- A range of clamps to suit pipework up to 100mm (4")
- No need for height access equipment to check trap operation
- 12 Year battery life
- Easy to operate cloud interface with clear indication

## Certification and Approvals

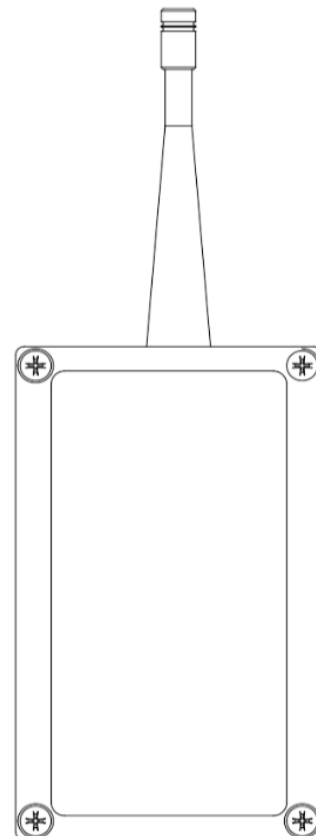
Radio:  
FCCID: 2AVL60001101  
FCC Part 15.247

EMC Emissions and immunity:  
- EN 61326 -1: 2013  
- EN 61326-2-1: 2013  
- EN 61326-2-3: 2013

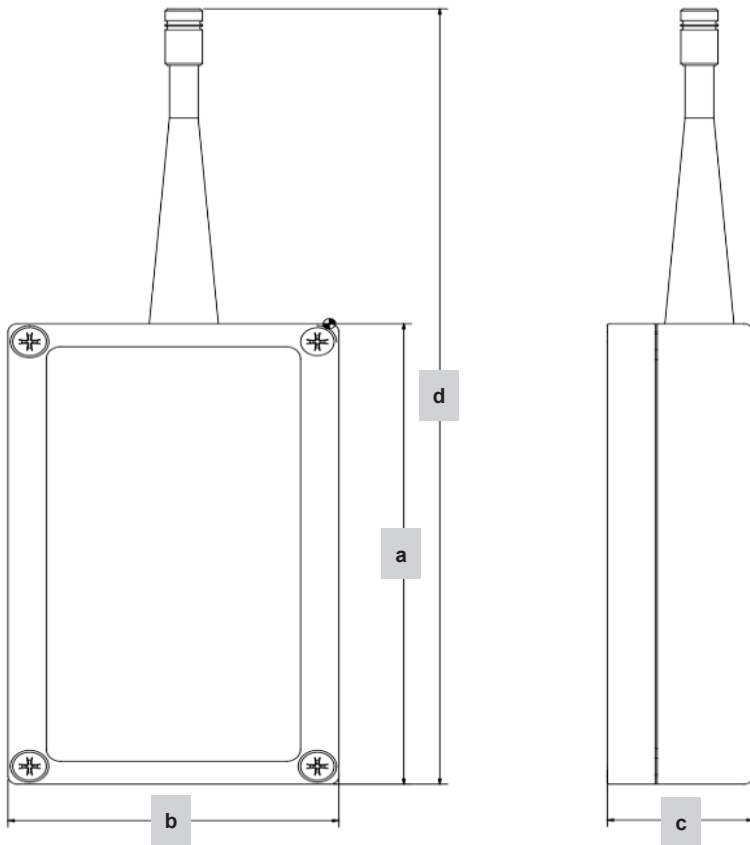
Safety:  
- Complies with IEC / EN 61010 1 2010 (third edition) CSA 22.2.

## Associated equipment

- LoRaWAN gateway
- Cloud based dashboard
- Pipe Clamps



**Dimensions** (approximate) in mm



Dim	mm (")
a	116.0 (4.56")
b	69.1 (2.72")
c	30.5 (1.2")
d	311.0 (12.25")

**Technical Data**

<b>Power Supply</b>	
Battery Type	Saft LS14500 3.6V lithium thionyl chloride battery or equivalent
Battery Life	Up to 12 years under normal use
<b>Functional</b>	
Radio Output	LoRaWAN Class A, max SF10
Output Power	+14dBm Normal, +20 dBm boost
Frequency Band	EU 860 - 930 MHz
	North America 902 - 928 Mhz
<b>Environmental</b>	
Operating Temperature Range	-40°C to +85°C, -40°F to +185°F
Maximum relative humidity	95%
Process Pressure	0 PSIG to 3000 PSIG
Process Temperature	0°F to 500°F, typ.
Maximum Altitude	8000'
Weight	approx. .75 lbs

**Materials**

Housing	Die cast aluminum, powdercoated
Pipe Clamp Standard	Cast Iron, electroplated
Pipe Clamp Stainless	Stainless Steel 304
Wave Guide	Varies. Typ zinc plated steel, stainless steel option available
Antenna	TFP
Cover O ring	Silicone
Antenna O ring	EPDM rubber

## Spare Parts

Only the parts listed below are available for the SteamIQ Steam Trap monitoring system. No other parts are supplied as spares.



SteamIQ Steam Trap Monitor	- 1
Antenna (standard)	- 2
Saft LS14500 3.6V lithium thionyl chloride battery	- 3
Waveguide (threaded rod 3/8"-16 x 3.25")	- 4
Waveguide (threaded rod 3/8"-16 x TBA" use when monitor subjected to greater than 65°C)	- 4
Locknuts (3/8"-16 hex nut)	- 4
Pipe Clamp Standard (sizes available)	- 5
Pipe Clamp Stainless (sizes available)	- 6