

# Features & Software

## Overview

Figure 1: TriVibe Sensor

Machine Saver's IIOT TriVibe provides the highest resolution vibration data for small antifriction (ball/roller) element bearing machines in the world. The TriVibe gathers information needed for Machine Learning Artificial Intelligence Data with superb resolution for slow and high speed machines all with one universal TriVibe.

TriVibe has the lowest total cost of ownership (TCO) with our unique "wire less" semi-tethered approach which allows 24/7 information gathering, internal calibration verification, no batteries to replace and no lost machine information.

TriVibe delivers multi sensor, multi axis, 50,000+ samples per second via serial Modbus RS485, polling overall vibration and temperature data continuously near real-time. TriVibe captures the time waveform and spectral FFT data on all axis simultaneously for high resolution machine health information to determine the root cause of the machine anomalies before the problem. The TriVibe paired with our gateway or our edge devices with machine learning algorithms can learn faster and more accurately to automatically diagnose impending machine failures long before they occur.

## Layout

### Features and Benefits

Maintenance free – no battery to change

No periodic calibration verification required

Acquire spectrum (FFT) data via MODBUS automatically upon an alarm

Easy mounting with small footprint

One cable run between all sensors

1Hz to 8kHz frequency response

Programmable band pass filters

Programmable alarm setpoints

Configurable for impact or mechanical looseness sensing

IP67 (NEMA 6P)

Includes temperature sensor

## Compatible Software

Modbus Client - A Graphical User Interface for reading, writing and monitoring Modbus RTU + Modbus TCP.

MachineCloud (Reporting Portal) - Cloud Based System, 24/7 Monitoring by Level 4 Analysts, Simple Maintenance Reports Upon Detection and Verification of Anomaly.

MachineCloud (Analysis Portal) - Cloud Based System for Vibration Analysts, Machine Learning Anomaly Detection Filters, Focused Component-Based Issue Highlighting, Banding Alarms.

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