Description:

The Fracttal Sense Pulse is a new member of the Fracttal Sense range, and its main objective is to provide continuous monitoring of all types of electrical machines in the industry. In this way, our customers will be able to make use of all the functionalities that Fracttal One provides in terms of asset management and maintenance, as well as access new and valuable data.

One of the main features of Fracttal Sense Pulse is the triaxial vibration sensor, which allows estimating the operating condition and probabilities of failure of a machine. It also has a temperature probe that, along with vibration measurements, will help diagnose the current state of the monitored electrical machine.

Like all Fracttal Sense devices, the display is a differentiating element compared to other existing IoT devices in the market. This display allows for a quick assessment of the system, as it has an intuitive color code, where green represents a normal vibration range, yellow indicates that the equipment measurements are above the normal range, and red indicates that the vibrations have reached a critical level and corrective action should be taken.

Technical Specifications

· Dimensions (H x W x D): 12cm x 17.5cm x 5cm.
· Triaxial and overall vibration measurement in RMS velocity units (m/s).
· RMS values in the range of 10 Hz to 1000 Hz, making these measurements directly comparable to ISO 10816 for machines supported by this standard.
· Configuration of maximum vibration limits to alert in case of system anomalies.
· Temperature measurement probe in the range of -50°C to 90°C

Applications:

· Medical sector
· Agro-industrial
· Mining
· Industry
· Food sector

Variables:

RMS

ºC

Sensor:

The Fracttal Sense Pulse triaxial vibration sensor is a device developed to work in conjunction with Fracttal Sense devices and the Fracttal One platform. In this way, it provides our customers with valuable new data to improve maintenance management.
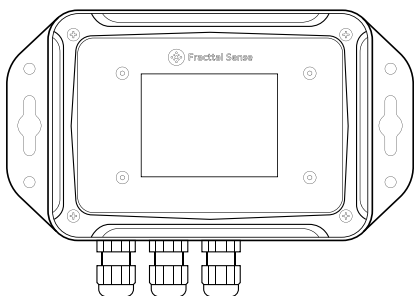
Our sensor allows for triaxial and overall vibration measurements to determine the state and probability of failure of different electrical machines that can be found in the industry. The information provided by the sensor is directly comparable to ISO 10816 for machines that are compatible with it.

This sensor is ideal for complementing the different tools of the Smart Maintenance Software, Fracttal One, and with it, our customers can have the peace of mind that their electrical machines will be constantly monitored so that if a failure or change in behavior occurs, they will be notified to take the necessary measures.

Technical Specifications:

· Triaxial vibration sensor.
· Calculation of RMS velocity for the three main axes.
· Calculation of overall RMS velocity.
· Sampling rate of 3.2 KHz.
· The estimation of all RMS velocities is done for a frequency range between 10 Hz and 1000 Hz. This range ensures that the obtained data can be directly compared to the information provided by ISO 10816 for machines supported by this standard.

Fracttal Sense Device:

Vibration Sensor: