



Keep it running

LUDECA

Sensoteq Tau[®] Construction/Mining System

Sensoteq Tau® provides innovative machine health monitoring for industrial applications. Tau combines a proprietary means of transmitting data with professional software and robust hardware for wireless condition monitoring analysis.







SCREENING

CRUSHING

FEEDING

Sensoteq Tau® wireless sensor system measures and transmits data every minute to ensure the most accurate diagnosis can be performed on your machinery for predictive maintenance purposes, not only reducing downtime & costs, but also increasing efficiency and extending your machines' life. Tau is particularly useful in dangerous and difficult to reach locations.

The system identifies faults based on set limits which, if breached, alerts users via email or text that there is an issue.

Tau is renowned for its powerful capabilities and used by vibration analysts worldwide.





Sensoteq Analytix[®]

Sensoteq Analytix® pioneers the user interface world when it comes to condition monitoring. Sleek, modern design meets powerful, advanced analysis and reporting tools to give you one of the most advanced platforms available.

View high level data with overall health rating. Dive deeper with full spectrum analysis, tracking harmonic peaks, bearing fault frequencies and side band amplitudes. Data trends allow for long-term projections. Generate and send graphs at the click of a button.

With new features and updates added quarterly, Analytix ensures you remain ahead of the game.



Tau Wireless Sensor

Sensoteq Tau® sensors measures tri-axial vibration and temperature to produce an all-encompassing picture of machine health.

Tau vibration sensing elements use Smart Wake to recognise when your machine is running. It only provides critical information required for accurate monitoring when in motion, extending battery life and producing more reliable results.

Tau's proprietary sub 1GHz ISM band protocol allows the sensor to achieve a continuous connection to Analytix while maximising battery life.





Tau Gateway

The Tau Gateway provides an uplink from your plant to the Analytix cloud platform via Wi-Fi or cellular connection. It also serves as a sensor, monitoring and transmitting ambient temperature.

The Tau Gateway listens for RF communications from the sensors, collates them into Wi-Fi protocol and communicates this data for viewing and analysis.

Tau's proprietary sub 1GHz ISM band protocol relays long-range, stable transmissions effortlessly in high noise environments, ideal for large-scale quarry and mine site installations.

Gateway Specifications

Sensoted Kappa and Sensoted Tau Sensors

Proprietary RF Link Ensures Robust Data Connection

Detects

- ► Screen Defects
- ► Mechanical Looseness
- ► Shaft and Bearing Wear

- ► Bearing Failure
- ► Misalignment
- ► Imbalance
- ► Electrical Noise and Resonance

Key Measurements

Stroke Plots, Screen Efficiency Data (Stroke Angle, Length, G Force, Deflection, etc.), RMS Velocity/Acceleration, Peak to Peak, Acceleration Time Waveform, Spectrum (Acceleration, Velocity, Displacement)

2.5 kHz

Fmax (X, Y, Z)

Vibration Limt (+/-)

3+ Years

Battery Life

IP69K/ATEX

Environmental Protection (ATEX Zone 0)

16G

Wireless Range (Line of Sight)

IP64/ATEX

250m

Key Benefits

Easy Install

Compatibility

Small Form Factor

Sensoteq Install App

Sensoteq Analytix Platform

Environmental Protection (ATEX Zone 2)

WiFi

Connection to LAN

Cellular

Optional Connection