

DATAEAGLE Condition Monitoring System Local Dashboard

IoT ready-to-use: Condition Monitoring of Motors and Machines

The **DATAEAGLE CMS Local Dashboard** is ideally suited for condition monitoring of e.g. engines and machines in industrial environments. The aim is to implement condition monitoring in the sense of Industry 4.0 simply, quickly and locally. Therefore, the sensor data is available in a ready-made Node-RED™-Dashboard via the Ethernet port at the gateway.

The system consists of a small multisensor for harsh industrial environments (**CISS from Bosch**) and a worldwide usable IoT Gateway (**DATAEAGLE 2730**) as well as the already mentioned dashboard for visualization of the sensor values.

The robust CISS sensor can be mounted directly on the motor, pump or machine and transmits the data via Bluetooth Low Energy to the central IoT Gateway **DATAEAGLE 2730**, where it can receive values from up to 8 CISS sensors simultaneously. The values are pre-processed and can be accessed via an Ethernet interface. The dashboard is based on the IoT software Node-RED™ and offers the possibility to process the sensor data individually and/or to integrate them into a separate database.

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Bluetooth Low Energy



Ethernet



CISS SENSOR

Robust acceleration, vibration and condition detector is attached directly to the machine

DATAEAGLE 2730

Receives the sensor values via Bluetooth from up to 8 CISS sensors & preprocessing of the measured values

LOCAL DASHBOARD

Access to the Sensor values via Ethernet to local Node-RED Dashboard

Use Cases for Condition Monitoring

Local process monitoring with the DATAEAGLE CMS Local Dashboard

The DATAEAGLE Condition Monitoring System can be used both as original equipment and as a retrofit solution for existing systems. Depending on the requirements, the following inertial and environmental sensors are available within the CMS: Acceleration, gyroscope, magnetometer, digital light, pressure, microphone, temperature and humidity. The sensor values are updated in real-time in the dashboard.



DATAEAGLE Condition Monitoring System Local Dashboard

IoT ready-to-use. Condition monitoring directly on the process with local Dashboard

- ✓ Ready-to-use system for condition monitoring e.g. of motors, pumps and machines
- ✓ Industrial gateway with Ethernet interface
- ✓ Visualization of the sensor values in the real-time dashboard
- ✓ Further processing of the values e.g. alarm and counting function of the events via Node-RED possible
- ✓ No monthly costs



acceleration



gyroscope



pressure



digital light



humidity



temperature



magnetometer



microphone