

# BSSANALYTICS

# ANALYZE REACT OPTIMIZE

## BSS Analytics

BSS Analytics is an advanced platform for condition monitoring of rotating machine components, which provides both a simple overview and in-depth understanding of data.

### Product description

BSS Analytics ensures lower costs, less risk, and increased efficiency by:

- Reducing direct and indirect operating costs
- Streamlining capacity management
- Providing insightful risk management
- Remote control of critical functions
- Ensuring quality control in machines with close tolerances
- Increasing the uptime of machines

BSS Analytics is a standalone system that can be integrated with existing data collection devices, e.g. data from a machine condition monitor. BSS Analytics is connected to BSS Gateway and BSS IoT Sensor. Using the API, data from BSS Analytics can be integrated into other systems.

BSS Analytics can be setup quickly and easily on machines which are suspected to work below expected efficiency and hereby create a remote connection to a vibration specialist who can analyze and evaluate to determine the cause and action to be taken to resolve the issue.

### AREAS OF APPLICATION



Fault detection
Remote analysis
System health / diagnostics
System monitoring

### KEY FEATURES



Analysis tools
Remote configuration of sensors
Data visualization
24/7 monitoring

### INTEGRATION PROGRAMS



Matlab
PowerBI
Python
Java
.NET
.NET ML (Microsoft AI and machine learning framework)
Nuget Package

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## BSS Gateway

### Product description

Gateway collects, processes and sends data from sensors up to the cloud platform.

- Easy installation
- Data over the Internet
- Versatile connection to cloud platforms
- LTE modem, WiFi 802.11 ac, Bluetooth 5.0
- Data caching

BSS Gateway is part of the BSS Monitoring System, but can also be used as a standalone device if you want to connect your BLE data to the Internet.



AREAS OF APPLICATION	
	Connects BLE to the Internet
	Local backup storage space

KEY FEATURES	
	Edge version of BSS Analytics
	Analysis tools
	BLE sampling

HARDWARE SPECIFICATIONS	
	Operating temp.: 0°C - +85°C
	Power supply: 12V DC
	Processor: ARM Cortex-A72
	Ram: 2 GB
	Storage space: 8 GB eller 32 GB

## BSS IoT Sensor

### Product description

The BSS IoT Sensor detects vibrations and provides an indication of the development of degradation of the machine's performance compared to the normal image. These errors can be easily detected without manual measurements and sent via BSS Gateway to a cloud platform.

#### STMWB55CEG MCU

- ARM32 architecture
- ARM Cortex-M4 64 MHz MCU
- 8 analog channels, up to 16 kHz simultaneous sampling
- Bluetooth low energy 5.2
- Supports up to four sensors

#### ADXL335 accelerometer

- 2-Axis analog accelerometer
- ± 3 g acceleration full-scale range
- 0.5-1600 Hz range for X and Y axis

The BSS IoT Sensor can be used in conjunction with the BSS Monitoring System or used with any other gateway if the gateway is configured for it.



AREAS OF APPLICATION	
	Condition monitoring
	Vibration analysis
	SCADA

KEY FEATURES	
	Analog sensor data collector
	Frequency analysis
	Bluetooth LE sampling
	Real-time sampling

HARDWARE SPECIFICATIONS	
	Operating temp.: -40°C - +85°C
	Power supply: 5-12V DC

