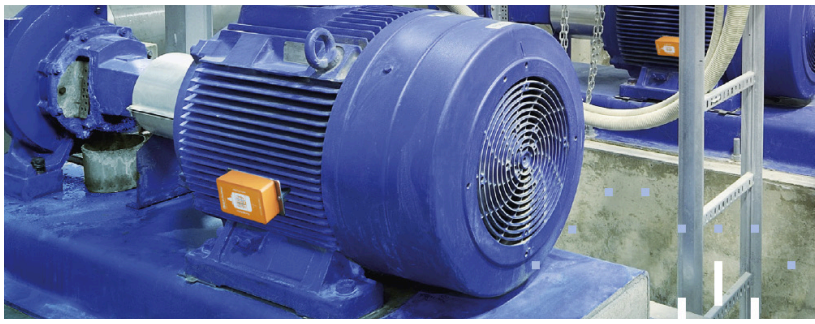
ADI OtoSense™

SMART MOTOR SENSOR

Leader in predictive maintenance for electric motors

ADI OtoSense™ Smart Motor Sensor is an AI-based, full turnkey hardware and software solution that helps avoid downtime & optimize maintenance cost.



Actionable diagnostics

Diagnose 9 mechanical and electrical motor faults

- Includes fault severity and recommended actions to address specific faults
- Performance indicator identifies potential issues with the load or a change in the process that might require additional action

Scalable

Quick to set up, easy to use

- No wires or additional gateways required
- Works with most motors (see Motor Compatibility overleaf)
- Easy to use interface reduces training and device maintenance

Motor compatibility

- 3-phase squirrel cage induction motor
- Standard low voltage IEC and NEMA motors
- Frames up to 450 (IEC 60034) or 500 (NEMA MG1) whose power range varies from 0.37 kW to 500 kW or from 0.5 hp to 700 hp
- Motors driven by any type of device: directly on line (DOL), by variable frequency drive (VFD), soft starter, and star delta

Automated

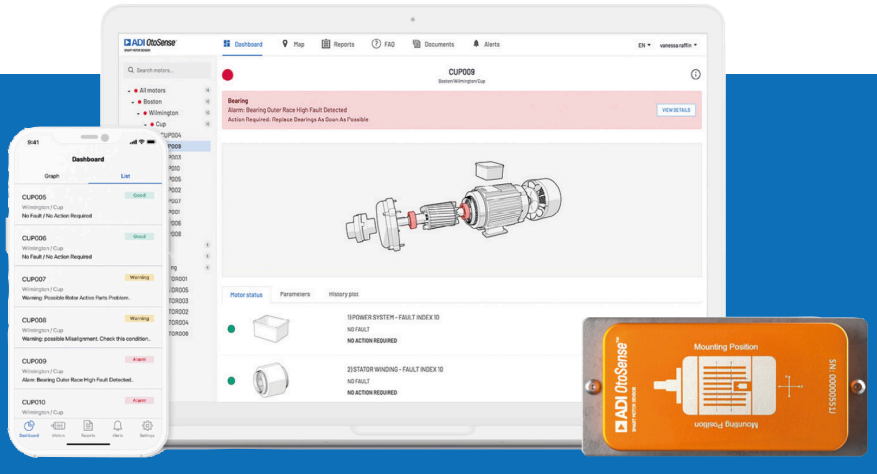
Automatically generated diagnostics and alarms customized to your motor

- No need to manually set alarms or thresholds
- No manual device training required
- No experts required for initial analysis

Optimizing Resources & Critical Asset Utilization

With ADI OtoSenSe SMS, you can monitor / manage your Enterprise's critical assets from all locations through a single organizationally shared dashboard

- Optimize your maintenance scheduling
- Better plan your maintenance repair
- Prevent equipment failures
- Avoid unscheduled downtime



otosense.analog.com/pdm

Order Your Trial Kit

Detectable Motor Faults

Power system
Asymmetry in motor currents

Stator winding
Stator resistance variation

Rotor
Rotor resistance variation

Motor shaft/ Balance
Gravity center displacement

Eccentricity
Stator/rotor concentricity issue

Alignment
Motor/load misaligned

Cooling system
Motor cooling system problem

Soft/loose foot
Fixing system problem

Bearing
Failures/defects in bearing

otosense.analog.com/pdm

Order Your Trial Kit

Requirements

Network

Network	Dedicated 2.4GHz network (5GHz networks notsupported)
Security	WEP, WPA, or WPA2
Signal strength	Greater than -60dB
Ports	Port 8883 and HTTPS port (443) must be open

Environment

Operation	-40˚ to +60˚
Storage	50˚ to avoid energy leakage fromlithium batteries

App

iPhone	iOS 13 or later
iPad	iPadOS 13 or later
Android phone/tablet	Android 6.0 (Marshmallow) or later

Specifications

Physical characteristics

Weight	0.5 kg
Case material	ABS
Mounting Cooling	fins
Battery type	4 x replaceable AA lithium batteries

Vibration measurement

Amplitude range	±40 g
Frequency range	1 Hz to 3.1 kHz
Data format	Waveform, FFT, rms
2-axis vibration	Axial and radial

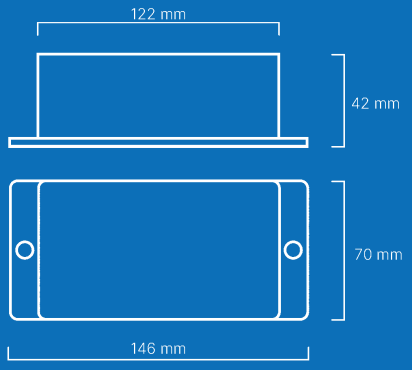
Wireless communication

Network standard	Wi-Fi b/g/n
Radio standard	IEEE 802.11 b/g/n
Frequency	2.4 GHz
Range (nominal)	>50 m

Certifications and standards

CE IP55

IK08 (IEC60068-2-75)



12 /21 V.1