



optimize[®]

CONDITION MONITORING SOLUTIONS TO OPTIMIZE YOUR BOTTOM LINE



The optimize[®] modular condition monitoring solution provides health guidance and predictive maintenance advice for rotating and fixed assets such as pumps, motors, heat exchangers and steam traps. It periodically monitors system vibration, temperature, and pressure allowing everyday users to access simple-to-use monitoring tools from iOS or Android mobile devices.

Using predictive analysis, optimize identifies potential problems with your equipment before they occur, to help you manage system reliability and maintenance. Asset health information is collected, stored and analyzed in the optimize sensor. This allows you to understand the current health and historical trends of your assets, create maintenance reminders and generate detailed reports. As a result, you can perform preventative maintenance before issues become critical to uptime.

And, with optimize Gateway you now have true remote connectivity and mobile device access without having to be within Bluetooth[®] range. You can access data anytime, anywhere...24/7. With the addition of Xylem's Avensor Smart Monitoring Platform, you'll have 24/7 monitoring using our dedicated web application.

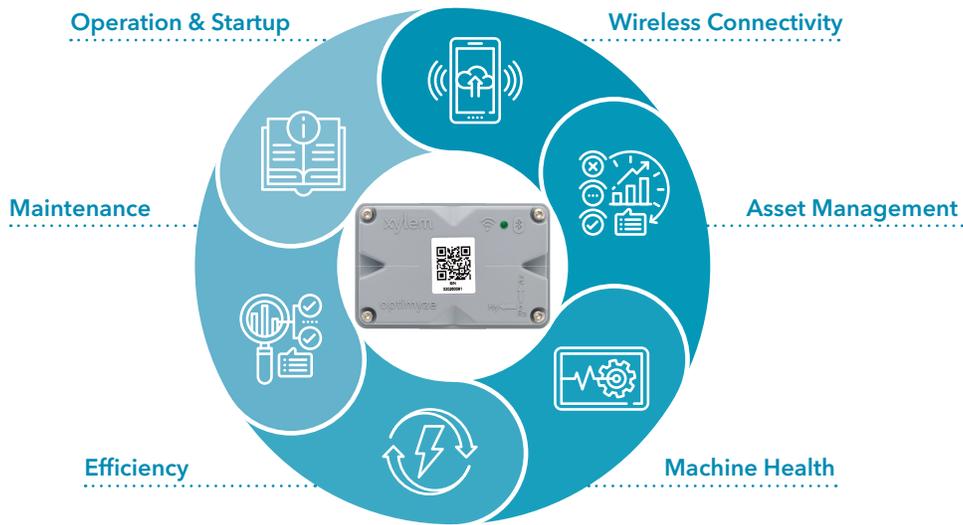
Benefits:

- Condition monitoring of your mechanical and electrical assets enabling predictive maintenance
- Asset management including asset location, maintenance logs, size, manufacturing date, and reminders
- Asset health transparency to optimize reliability
- Optimized reporting that helps to simplify documentation, manage system maintenance and inform purchasing
- The ability to automatically share data with multiple local users
- Conveniently monitor system conditions on our simple-to-use mobile application
- True remote monitoring via the optimize Gateway
- Simple setup using your mobile device
- Remote monitoring via the optimize mobile application or Avensor Smart Monitoring Web application

Industries:

- Commercial Building Services
- Industrial
- Agriculture
- Water Utilities

Optimize the way you work



optimize solutions to meet your needs

Condition Monitoring

- Periodic vibration, temperature, and pressure measurement
- RMS, Kurtosis and FFT (Fast Fourier Transform)
- Instant health guidance using ISO or ANSI/HI vibration standards
- Graphical trending
- Maintenance reminders and logs
- Report generation and asset documentation

Asset Lifecycle Management

- Overview of assets across stations and sites
- Visibility of other key assets and controllers
- Analytics and data export capability
- Alarm and user management
- Connection to SCADA or BMS via OPC UA connector or machine to machine API

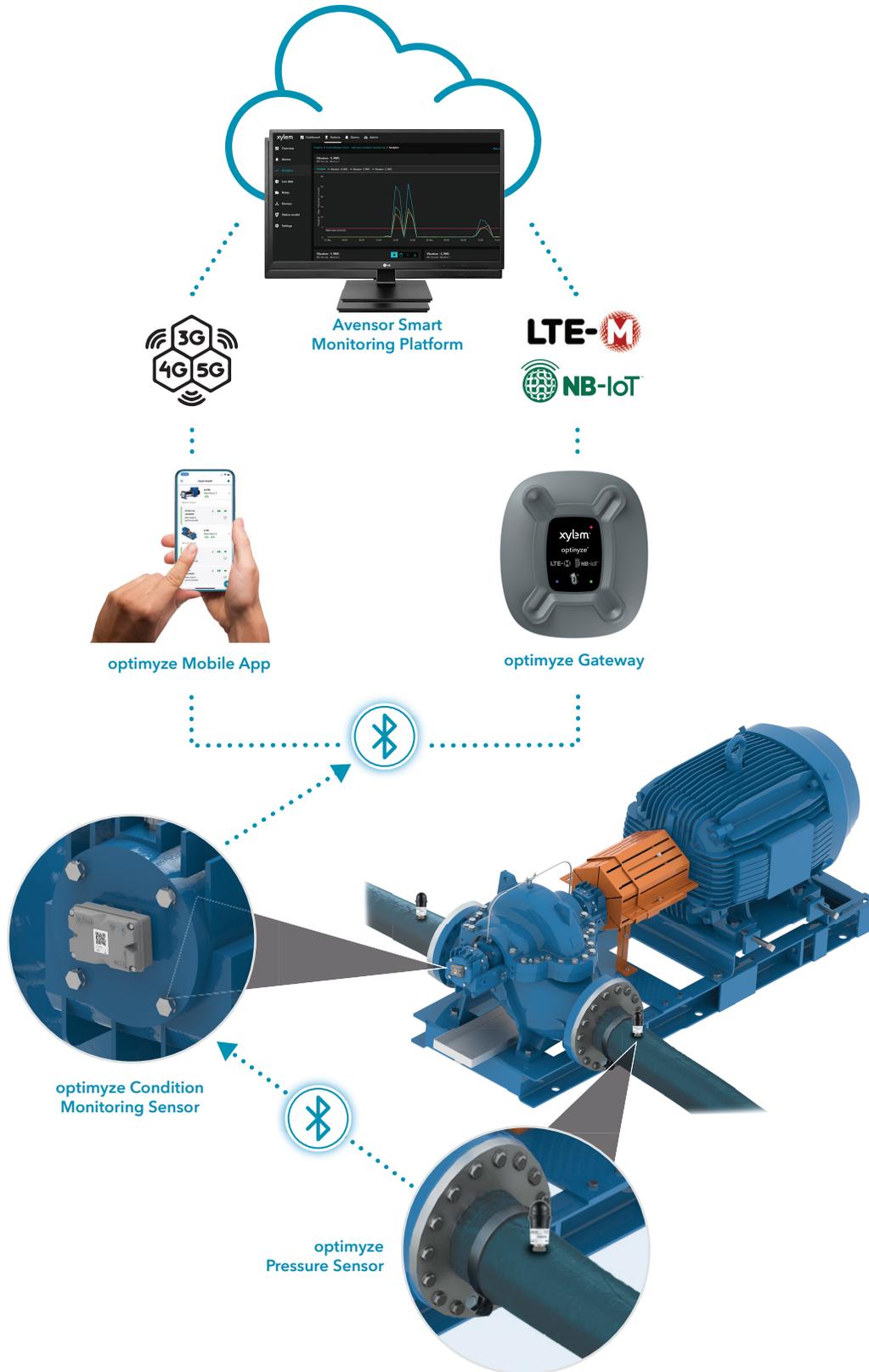
Remote Monitoring

- 24/7 access to asset health information
- One-button pairing and setup
- Cellular LPWAN Connectivity providing effective coverage inside buildings and basements

	 optimize Sensors	 optimize Mobile App	 Avensor Smart Monitoring Platform*	 optimize Gateway*
Condition Monitoring	✓	✓		
Asset Lifecycle Management	✓	✓	✓	
Remote Monitoring	✓	✓	✓	✓

*Annual subscription required (1st year included)

optimize[®] CONDITION MONITORING AND OPTIMIZATION



Xylem Product Cybersecurity

Xylem values your system security and the availability of your critical services. For more information on Xylem cybersecurity practices or to contact the cybersecurity team please visit [Xylem.com/security](https://www.xylem.com/security).



optimize Sensor Specifications

Surface Temperature Measurement

Measurement range	-20°C to +135°C (-4°F to +275°F)
Measurement method	Non-contact infrared laser
Minor gradient accuracy (0°C to 25°C gradient)	+/- 1°C
Moderate gradient accuracy (25°C to 50°C gradient)	+/- 2°C
Large gradient accuracy (50°C to 100°C gradient)	+/- 4°C

Vibration Measurement

Frequency range	5Hz to 1,100Hz
Measurement method	Independent 3-axis
Primary output (per axis)	Single value RMS
Other outputs	Kurtosis and FFT
Vibration limit (max acceleration)	16g
Threshold standard (Global)	ISO 10816-7
Threshold standard (North America)	ANSI/Hi 9.6.4

Power

Batteries (replaceable)	(2) 3.6V AA, 2400mAh, Lithium
Battery life (using default sampling rate at 25°C)	3 to 5 years
Default sampling rate	1 sample per 30 minutes
Available sampling rates (one sample per unit of time)	10 seconds to 12 hours

Wireless Communication

Network type	Bluetooth [®] Low Energy 5.0 ¹
Connection range (without interference)	30 meters (100 feet)

Environmental

Ambient operating range	-20°C to +50°C (-4°F to +122°F)
Storage temperature (5 to 95% humidity non-condensing)	-25°C to +65°C (-13°F to +149°F)
Protection rating	IP56, NEMA 4

Physical Properties

Weight	145g (0.32 lbs.)
Status	LED
Mounting method (standard)	Magnetic (16mm potted magnets)
Mounting method (optional)	Drill and tap with plate
Dimensions	88.6mm x 56.9mm x 35.4mm (3.49in x 2.24in x 1.39in)

Certifications

Certifications	CE, FCC, UL
Intended use (environments)	Non-hazardous, non-corrosive

¹Backwards compatible up to Bluetooth[®] Low Energy 4.2

Part Numbers

optimize sensor	P2007024
optimize optional power supply	P2007066
optimize battery replacement kit	P2007030
optimize optional flat plate mounting kit	P2007031
optimize Gateway	P2007065
optimize Gateway power supply	P2007067
optimize pressure sensor 0 - 100 psi	P2004731
optimize pressure sensor 0 - 250 psi	P2004753
optimize pressure sensor 0 - 500 psi	P2004754
optimize pressure sensor battery	P2004732

optimize Gateway Specifications

Wireless Communication

Network type	Bluetooth [®] Low Energy 4.2
Bluetooth connection range (without interference)	30 meters (100 feet)
Cellular	Category LTE-M, NB-IoT
External antenna	For Bluetooth [®] - 2.4 GHz Dipole; For LTE - Dipole

Environmental

Intended use (environments)	Non-hazardous, non-corrosive
Operating temperature	-40°C to +80°C (-40°F to +176°F)
Operating humidity	10 to 95% non-condensing
Storage temperature	-40°C to +85°C (-40°F to +185°F)
Storage temperature	5 to 95% non-condensing
Protection rating	NEMA 1, IP30

Physical Properties

Weight	0.518 lbs.
Mounting method (standard)	Tabletop or wall mount with mounting screws
Dimensions	110.28mm x 99.16mm x 35.32mm (4.34in x 3.90in x 1.39in)

Certifications

Regulatory	CE, FCC, ISED, and UKCA
Industry	PTCRB, GCF

For Avensor specifications visit: www.xylem.com/avensor

optimize Pressure Sensor Specifications

Wireless Communication

Network type	Bluetooth [®] Low Energy 4.2
Bluetooth connection range (without interference)	30 meters (100 feet)

Environmental

Compensated temperature	-10° to 85°C (14°F to 185°F)
Operating temperature	-40° to 85°C (-40°F to 185°F)
Storage temperature	-40° to 125°C (-40°F to 257°F) without battery
TEB	3% FS
Long term drift	0.2% FS/year (non-cumulative)
Shock	50g, 11 ms, 1/2sine
Vibration	10g, peak, 20 to 2400 Hz
EMI/RFI protection	Yes
Ingress rating	IP-67

Physical Properties

Weight	227g (0.50 lbs.)
Mounting method	¼" NPT Male and G ¼ Male
Dimensions	99.82mm x 34.03mm x 34.03mm (3.93in x 1.34in x 1.34in)

Certification

Regulatory	CE and FCC
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Digital transformation starts with Xylem Vue

optimize[™] Condition Monitoring Solutions are important parts of our full suite of digital solutions, Xylem Vue, that combine smart and connected technologies, intelligent systems and services, and 150+ years of problem-solving expertise. Xylem Vue helps solve your most pressing water challenges and deliver transformative outcomes for your communities - faster and more affordably.

For more information on Xylem Vue, go to xylem.com/XylemVue



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Learn more about optimize[®] solutions

