LANEX

Sensor Cloud Series

Intelligent Sensor-Cloud Infrastructure for Medical & Industrial Automation

Deliver "Intelligent Sensors" sensor cloud solutions engineered through exceptional dedication and proven field experience. From hardware development through edge deployment and continuous service, Sensor Cloud is committed to providing industry-leading sensor accuracy, predictive AI analytics, and robust telemetry system solutions.



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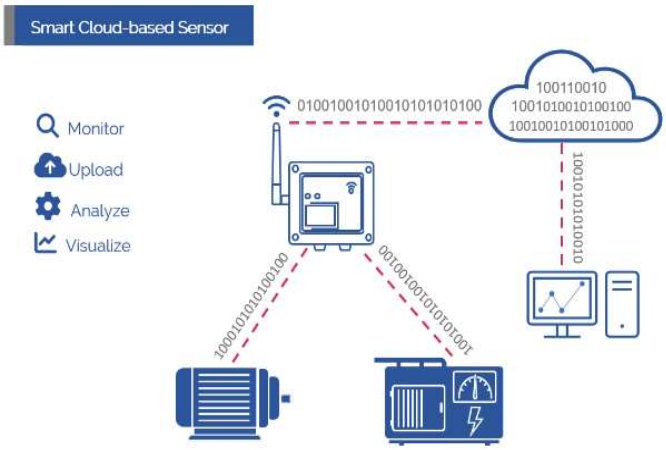
System deployment

- Target Applications: Industrial Gensets, HVAC, Medical Flow, Hazardous Gas Monitoring, Liquid Tanks.
- Remote Portals: Access via PC, Laptop, Tablet, or Mobile.
- Alert Outlets: SMS, Email, Automated Voice Calls, Physical Sirens.

Predictive maintenance

Predictive maintenance is a technique to predict the future failure point of a machine component, so that the component can be replaced, based on a plan, just before it fails. Thus, equipment downtime is minimized, and the component lifetime is maximized.

The aim of predictive maintenance is first to predict when equipment failure might occur, and secondly, to prevent the occurrence of the failure by performing maintenance. Monitoring for future failure allows maintenance to be planned before the failure occurs.



Key Features

- High Performance, 3-AxisAccelerometers
- Small, Low-Cost
- Reliable Packaging with Screw-Down Mounting
- Factory Calibrated

Applications

- Automotive Testing
- Instrumentation
- Equipment Monitoring

Modular Enclosure Form Factors

Industrial Protection & Hardware Enclosures

IP68 Weatherproof

Outdoor Heavy-Duty Enclosure

Engineered for harsh industrial outdoor installations. Completely dust-tight and protected against continuous immersion in water under pressure. Includes screw-down mounting lugs and sealed cable glands.



Material: Diecast / Waterproof ABS
Mounting: Heavy-Duty Screws

IP54 Indoor ABS

Indoor Factory & DIN Enclosure

Compact, high-grade plenum-rated ABS casing designed for rapid panel mounting, indoor plant machinery, and clean room applications. Offers splash and dust resistance with accessible diagnostic ports.



Material: Plenum Rated ABS
Rating: Dust / Splash Proof



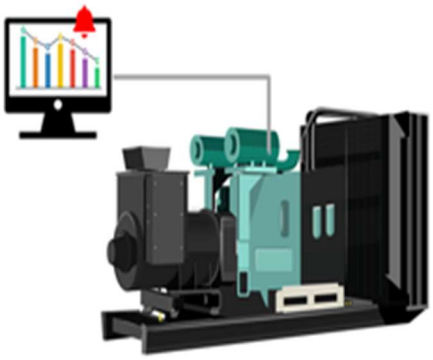
Multi gas detectors

The MQW series of gas sensors are very easy to use and very handy, The gas sensor can detect gas concentrations anywhere from 200 to 10000ppm.The MQW series of gas sensors use a small heater inside with an electro-chemical sensor. They are sensitive to a range of gases and are used indoors at room temperature. Can be used for industrial safety.

MQW Multi-Gas Detector Series
Electro-Chemical Industrial Safety & Hazardous Gas Sensors (200 to 10,000 ppm)

Model	Measuring Gas	Sensitivity Range / Characteristics	Primary Application
MQW2 Series	Methane, Butane, LPG, Propane, Hydrogen, Smoke	200 – 10,000 ppm. High sensitivity to flammable & combustible gases.	Distillery, cleanroom chemical monitoring.
MQW3 Series	Alcohol, Ethanol, Smoke	200 – 10,000 ppm. Uses SnO2 material; high conductivity in target gas presence. Resist gasoline/vapor disturbance.	Power cord, rack-mount kit, quick-start guide
MQW4 Series	Methane, Natural Gas (CNG)	300 – 10,000 ppm. Integrated internal heater for atmospheric stability.	Gas pipeline stations, utility vaults.
MQW5 Series	LPG, Natural Gas, Town Gas	High selectivity for fuel gas leaks; rejects cooking fumes, alcohol, and smoke noise.	Kitchen safety, commercial gas lines.
MQW6 Series	LPG, Natural Gas, Coal Gas, ISO-Butane, Propane	100 – 10,000 ppm. Fast response time for combustible hydrocarbon hazards.	Fuel storage tanks, automotive refilling stations.
MQW7 / MQW8 Series	Hydrogen Gas (H2)	100 – 10,000 ppm. High specificity for hydrogen molecular concentrations in air.	Battery charging rooms, H2 fuel cell sites.
MQW9 Series	Carbon Monoxide (CO), Methane, LPG	200 – 10,000 ppm. Dual carbon monoxide and flammable gas threshold detection.	Boiler rooms, combustion monitoring.
MQW131 Series	Ozone (O3)	High sensitivity SnO2 substrate designed for trace ozone gas detection.	Water treatment, sterilization chambers.
MQW135 Series	Air Quality (Benzene, Ammonia, Alcohol, Smoke)	Broad spectrum indoor air quality (IAQ) monitoring sensor array.	HVAC return air, smart building IAQ.
MQW136 Series	Hydrogen Sulfide (H2S)	High sensitivity to toxic H2S gas with elevated conductivity output in clean air transitions.	Wastewater plants, chemical refineries.
MQW137 Series	Ammonia (NH3)	5 – 200 ppm precision low-concentration ammonia gas measurement.	Cold storage refrigeration, agriculture.
MQW138 Series	Benzene, Toluene, Alcohol, Acetone, Formaldehyde	10 – 1,000 ppm (Benzene/Alcohol), 10 – 3,000 ppm (NH3). Multi-solvent detection.	Paint booths, pharmaceutical manufacturing.
MQW140 Series	Formaldehyde (HCHO / CH2O)	Dedicated high-selectivity sensor engineered exclusively for HCHO gas.	Medical labs, building material safety.

GAS LEAK DETECTORS



Sensor-Cloud App. Diesel Generator Monitoring

Advanced AI Platform & Telemetry Solution for Continuous Power Guarding

Advanced AI platform and smart diesel generator monitoring solution designed to guard business operational continuity. It continuously collects and analyzes key performance indicators (KPIs) from remote diesel generators to maximize uptime and operational efficiency. Compatible with any diesel generator brand.

Critical Machine Monitoring Parameters & Alerts

- On/Off Status
- Running Hours
- Low Fuel Alert
- Coolant Temperature
- Oil Temperature
- Exhaust Gas Temp
- HEPA Filter Status
- Battery Status

Specification / Feature	SENSEDGE Gateway DG101	SENSEDGE Gateway DG102
Design		
Processor Core	L106 32-bit RISC Microprocessor (Tensilica Xtensa)	64-bit Quad-Core ARM Cortex-A53
Clock Frequency	80 / 160 MHz	1.2 GHz
Memory & Flas	16 MB Flash Memory (External QSPI up to 16 MiB)	1 GB LPDDR2 SDRAM + 16 MB Flash
Graphics Acceleration	N/A	Broadcom Dual Core VideoCore IV (Full HD 1080p @ 30fps)
Networking & Wireless	802.11n Wi-Fi (WEP, WPA/WPA2, Open)	10/100 Ethernet, 802.11n Wi-Fi
I/O Interfacing & Expansion	11 Digital I/O Pins, 1 Analog Input (3.2V Max), SPI, I2C, UART, 10-bit ADC	40-pin extended GPIO, 4x USB 2.0, 1x CSI Camera Connector, SPI, I2C, UART
Power Supply Input	5V DC - 1.2A	5V DC - 2.0A

SENSE-EDGE GATEWAY

Sensor-Cloud Predictive Maintenance

Sensor-Cloud - Predictive Maintenance

Vibration Sensors - Predictive Machine Diagnostics	
Sensing type:	3 Axis vibration sensor
Accuracy:	±3 g
Rating	10,000 g in any axis
Features:	10,000 g shock survival. Excellent temperature stability. BW adjustment with a single capacitor per axis RoHS/WEEE lead-free compliant
Temperature Range (Powered)	−55°C to +125°C
Temperature Range (Storage)	−65°C to +150°C
Power Supply:	5 V DC
Enclosures	ABS, plenum rated

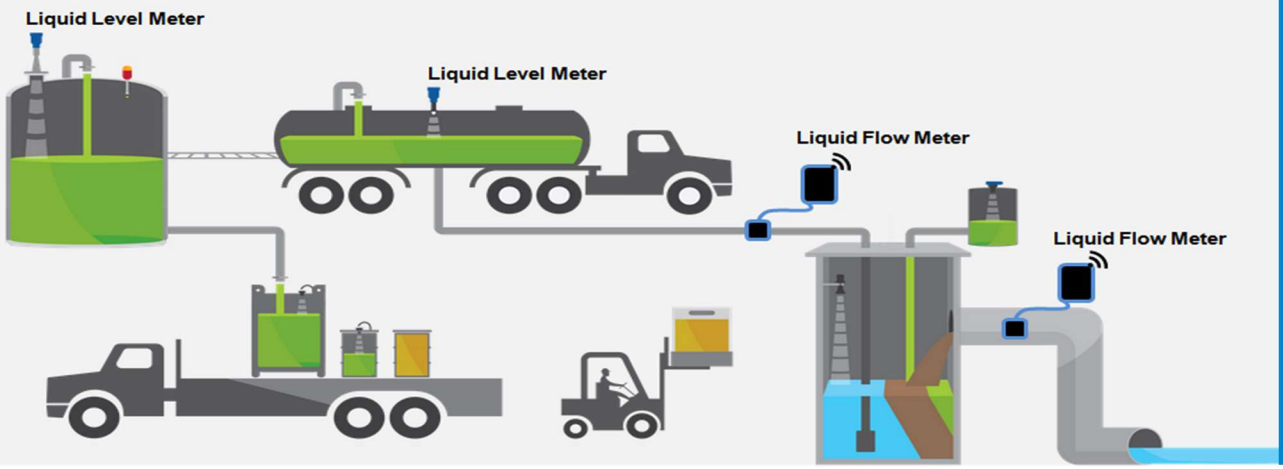
Apps: Automotive testing, heavy motors, rotating equipment.

Barometric & Altitude Sensor - Pressure & Environmental Node	
Sensing Scope:	Barometric Pressure, Temp & Altitude
Pressure Range:	300 to 1100 hPa (9,000m to -500m sea level)
Pressure Accuracy:	Up to 0.03 hPa / 0.25m resolution
Temp Range:	−40°C to +85°C (Accuracy ±2°C)
Wireless Protocols:	2.4GHz 802.11n Wi-Fi
Networking:	10/100 Ethernet, 2.4GHz Wi-Fi
Power Supply:	5.1V DC - 0.5A

Apps: Weather stations, environmental telemetry, altitude tracking.

Differential Pressure - Medical & HVAC Airflow Sensor	
Sensing Type:	Differential (Two Port), Static Velocity
Accuracy:	±1% F.S.O (0-500, 0-1000, 0-2000 Pa)
Response Time:	Ultra-fast 250ms (zero point drift free)
Stability:	<±1% F.S.O per year (Square-root output)
Proof / Burst Pressure:	40" W.C. proof / 60" W.C. burst
Compensated Temp:	0°C to +85°C
Power Input:	20 – 28 V DC

Apps: Respiratory medical devices, cleanroom HVAC, duct airflow.



Sensor for every need?

Customized solutions to fit your specific needs. Our team handles all your needs efficiently

- ✓ Determine required measurement.
  what type of measurement and select suitable sensor.
- ✓ Select Data Transfer method.
  What network are available? wired network or wifi network.
- ✓ Install Sensors by yourself.
  Easy installation to fix sensors on wall or machine
- ✓ Access to Sensor Cloud
  Access to sensor Cloud from your devices (Pc, laptop, tablet or mobile)

Business Opportunity

Increase business profitability by utilizing liquid consumption

- ✓ detect leaks and malfunctions.
- ✓ Reduce Liquid waste.
- ✓ reduce time and cost required to collect data.
- ✓ Managing consumption at every level.
- ✓ Monitoring data on utilities suppliers.
- ✓ Tracking storage (daily, monthly and others).
- ✓ Increase efficiency of operating equipment.
- ✓ Predicting usage on expansion planning.

LANEX

LANEX is a leader in cloud-native networking software and network disaggregation solutions. Powered by TeleSources Solutions, founded in 2015 based in London. For more information, visit us at www.lanex.uk