

PRODUCT CATALOGUE

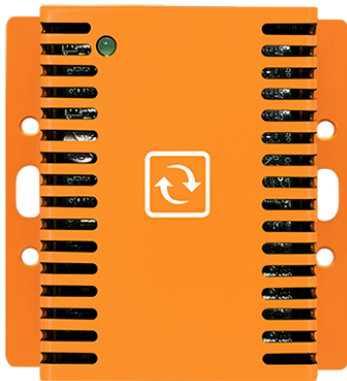


Open & modular sensor platform to
prevent failures in mission critical
by detecting anomalies

AUGUST 2024



Introducing our versatile sensor platform, meticulously tailored to cater to the distinct needs of three critical industries:



ServersCheck ®:

Our journey commenced with ServersCheck—a comprehensive software and hardware solution dedicated to monitoring data & IT infrastructure. Encompassing all products, including refrigerant gas sensors, ServersCheck stands as a holistic offering, ensuring the seamless functionality of IT components.



SwitchMon ™:

Expanding our product line, SwitchMon is designed to prevent failures in switchgear, transformers, and critical power systems through continuous thermal and environmental monitoring. In the first phase, SwitchMon focuses on monitoring the environment in which these critical power systems operate. The Second phase involves continuous thermal monitoring of the switchgear, ensuring optimal conditions and preventing potential failures in essential power infrastructure.



Prevent-iOn ™:

Elevating our commitment to safety, the Prevent-iOn is dedicated to preventing battery fires and failures through off-gas and anomaly detection. It targets ESS, wind turbines, solar farms, and hydrogen systems in two phases. First, it monitors the environment where these systems operate. Second, it monitors specific conditions: detecting gas from Li-ion batteries in ESS, monitoring switchgear in wind turbines, and detecting overheating cables in solar farms with LHD.

In essence, our sensor platform not only optimizes monitoring for specific industries but also provides nuanced product differentiations to address the unique requirements of each sector.



Architecture Overview

The architecture overview provides a high-level description of the structural design and interaction of various components within a system. It serves as a blueprint that outlines the system's components, their relationships, and how they work together to achieve the desired functionality. By detailing the system's architecture, stakeholders can better understand the framework that supports the system's operations, ensuring that all aspects are efficiently integrated and aligned with the overall objectives. This overview is essential for guiding the development, implementation, and maintenance of the system, ensuring that it meets performance, scalability, and reliability requirements.

The architecture for the three solutions—ServersCheck, SwitchMon, and Prevent-iON—integrates advanced monitoring and management capabilities for various applications. ServersCheck focuses on environmental and infrastructure monitoring, employing a robust network of sensors to track parameters like temperature, humidity, and power usage, and providing real-time alerts and analytics through a centralized dashboard. SwitchMon is designed for network monitoring, ensuring optimal performance and security by continuously evaluating switch statuses, traffic loads, and potential vulnerabilities, with real-time notifications and comprehensive reports to facilitate proactive management. Prevent-iON is tailored for preventing failures in energy storage systems (ESS), wind turbines, solar farms, and hydrogen applications. It utilizes a multi-layered approach including sensors for early detection of thermal runaway, advanced algorithms for risk assessment, and automated systems for thermal runaway management.

Together, these solutions offer a comprehensive suite for monitoring and managing environmental conditions, network performance, and energy system safety, leveraging real-time data, advanced analytics, and automated responses to enhance operational efficiency and reliability.



Standard Base Unit

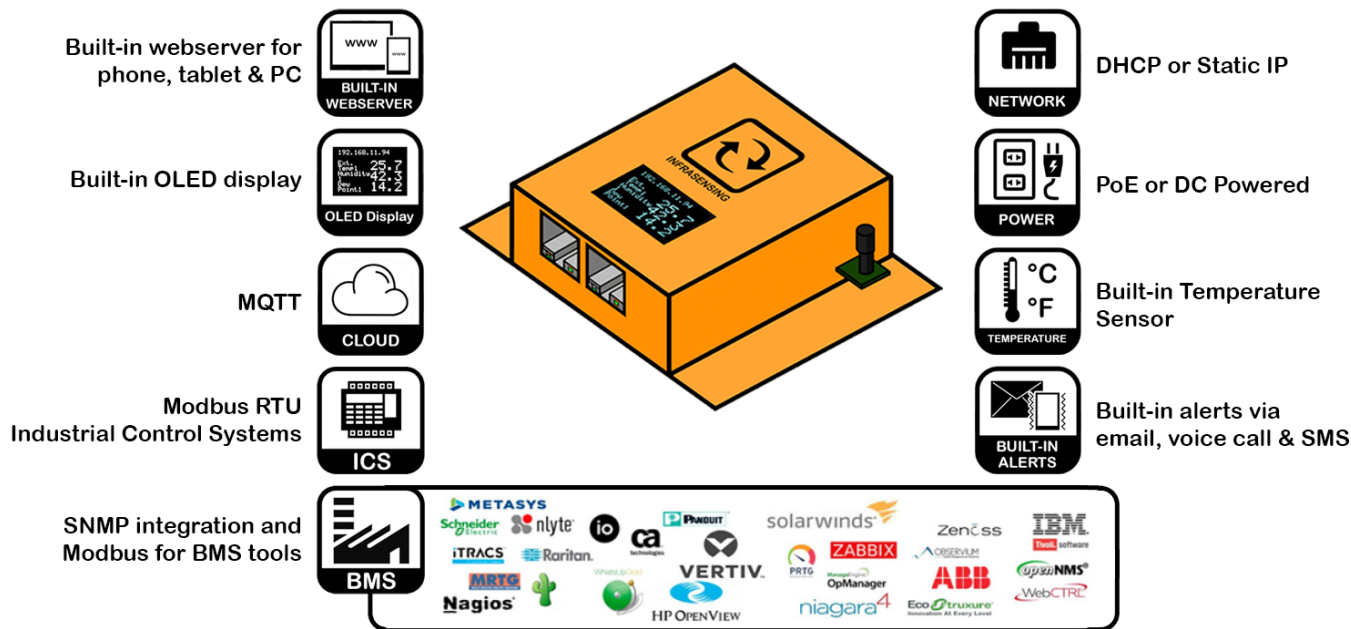
This Base Unit is our standard base unit. It is optimized for ServersCheck, ensuring seamless integration with Network Management Systems over SNMP and Building Management Systems over Modbus TCP. The unit is the foundation of any ServersCheck implementation.



BASE-IT-5



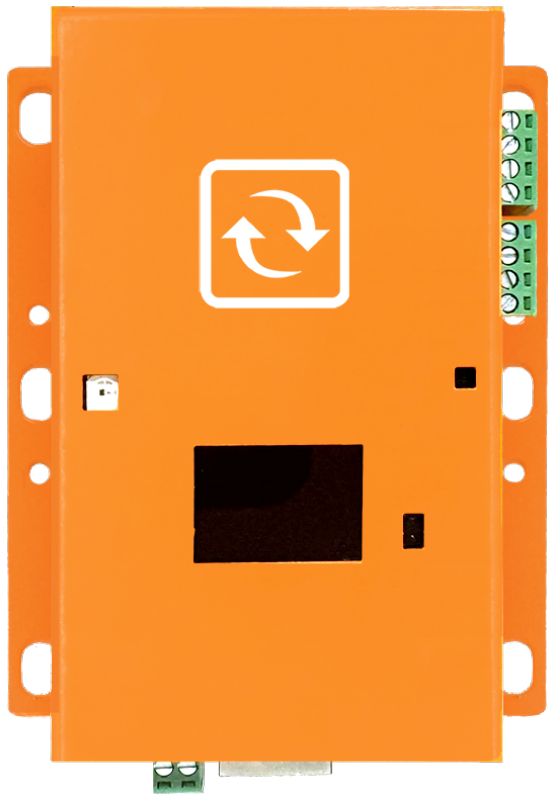
Display:	OLED
Web Server:	HTTP
Built-in Alerting:	Email, voice call or SMS
Protocols:	SNMP v2, v3/Modbus TCP Optional MQTT, Modbus RTU
POE:	IEEE 802.3af
Network:	IPv4 at 10/100 Mbps
External Probes:	2 optional probes
Power Adapter:	12V DC
Operating temperature range:	0°C to +75°C (32°F to +167°F)
Humidity (operating & storage):	< 90% rH (non-condensating)
Sensor enclosure:	Steel enclosure, industrial grade
Mounting option:	0U rack, DIN rail, magnetic or wall mountable





Industrial Base Unit

This Industrial Base Unit is expertly optimized for **SwitchMon™** and **Prevent-iOn™**, offering unparalleled compatibility and performance. Engineered for industrial environments, it seamlessly integrates with SwitchMon and Prevent-iOn. This ensures robust and efficient operation, providing critical support for real-time monitoring and proactive maintenance, making it an essential asset for maximizing productivity and minimizing downtime in any industrial setup.



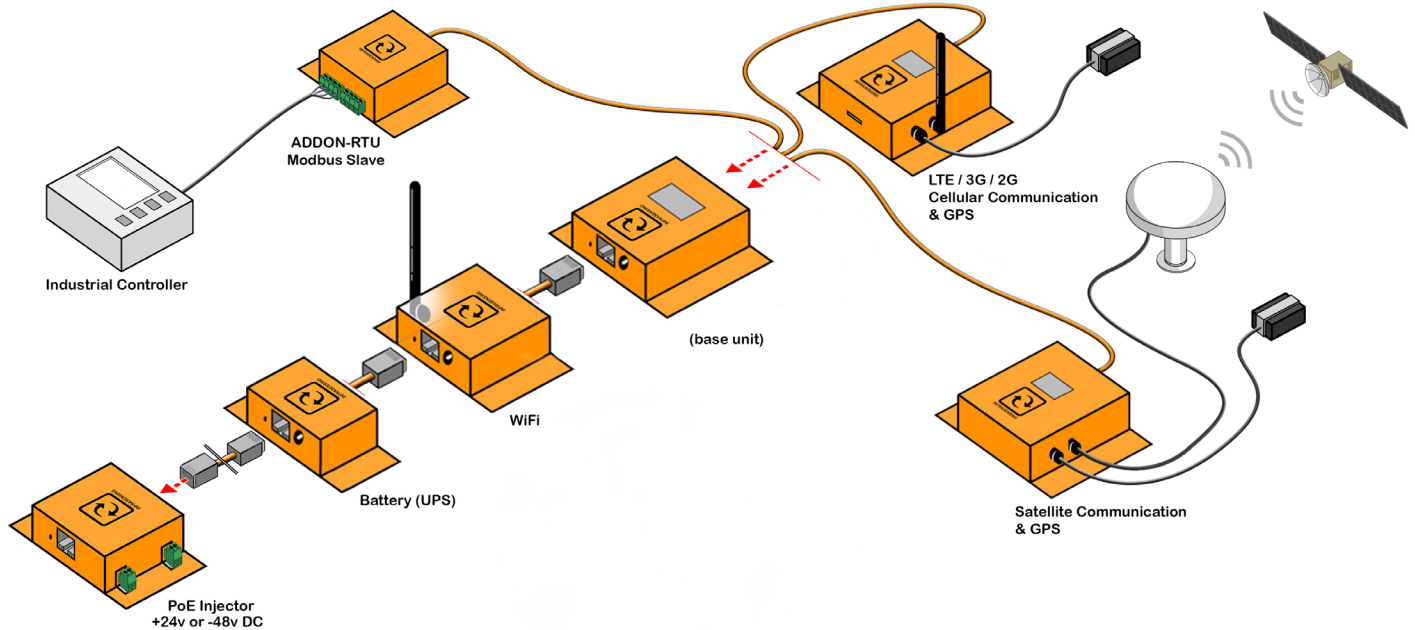
BASE-IND-6

TCP/IP:	IPv4 at 10/100 Mbps
Network data transfer:	SNMP GET (50 - 130 bytes) , SNMP Trap (143 - 280 bytes)
Built-in:	Web server, SNMP v2 & v3 (MD5/AES), Modbus TCP
Built-in alerting options:	Email, Slack, voice call or SMS
Network protocols:	DHCP or status IPv4
Storage:	2GB of on-board data (sensor) logging
Dry contact outputs:	1
Powered by:	PoE: IEEE 802.3at or BASE-PWR (Optional AC power adapter) or BASE-PWR-USB (USB power adapter)
Connectivity:	RJ45 cable transmitting data & power from Base Unit to Sensor
Cable specification:	RJ45 CAT 6/7 recommended, Up to 100m (330ft) subject to cable quality & interference
Power usage:	684 mW (without sensors attached)
Industrial IP protocols:	SNMP, Modbus TCP, TLS, (HTTPS), MQTT
Industrial RS-485 protocols:	Modbus RTU
Operating temperature range:	-25°C to +70°C (13°F to +158°F)
Humidity (operating & storage):	< 90% rH (non-condensating)
Sensor enclosure:	Steel enclosure, industrial grade
Mounting option:	OU rack, DIN rail, magnetic or wall mountable

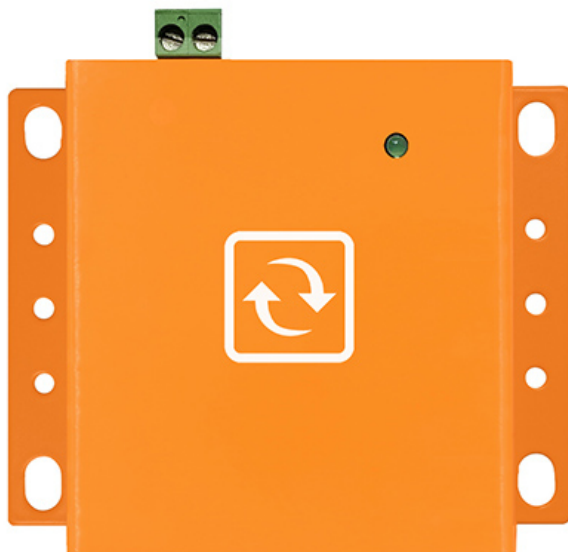


The Base Unit, requires by default a network cable and 12v DC or POE power input with network based alerting.

With the optional add-on modules, customers can add other network and power connectivity options to the base units. The Cellular Alerting & GPS modules enable to receive alerts even when your IP network is down and provides location data.



Industrial PoE+ Injector Add-On



ADDON-POE

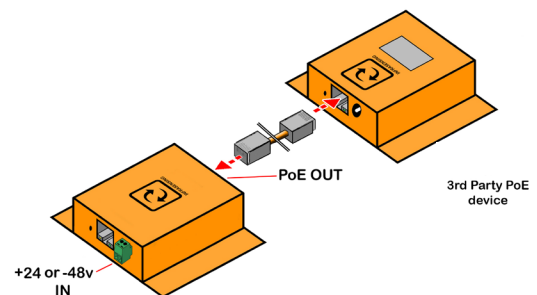


DC +24v input power for industrial applications
DC -48v input power for telecom applications
Provides PoE+ power out (max 22W)

Standards: IEEE PoE 802.3at Class 4 Mode B (PoE+)
Network speed: 10/100 Mbps

Operating temperature range: 0°C to +75°C (32°F to +167°F)
Humidity (operating and storage): < 90% rH (non-condensating)

Sensor enclosure: Steel enclosure, industrial grade
Mounting option: 0U rack, DIN rail, magnetic or wall mountable

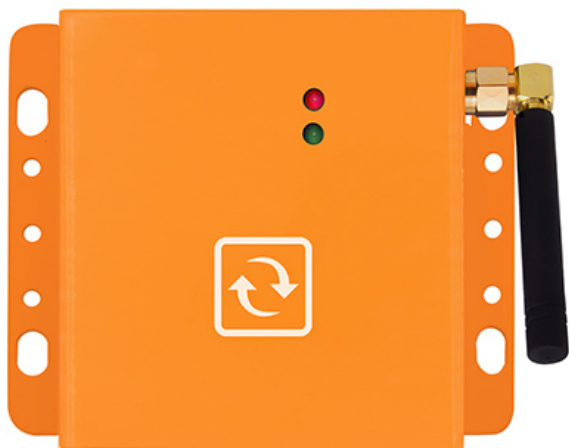




Wifi Add-On



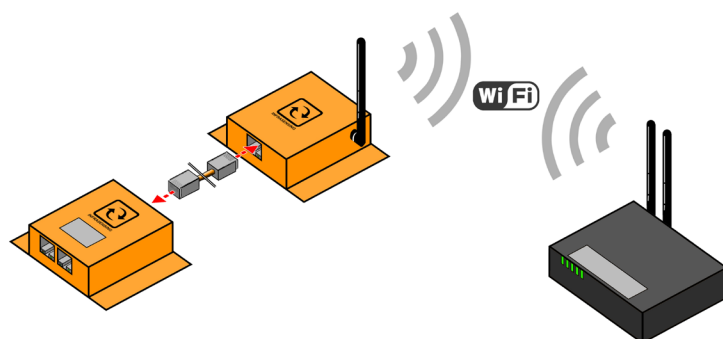
ADDON-WIFI



Wifi frequency: 2.4GHz
Wifi standards: 802.11b/g/n

Operating temperature range: 0°C to +75°C (32°F to +167°F)
Humidity (operating and storage): < 90% rH (non-condensating)

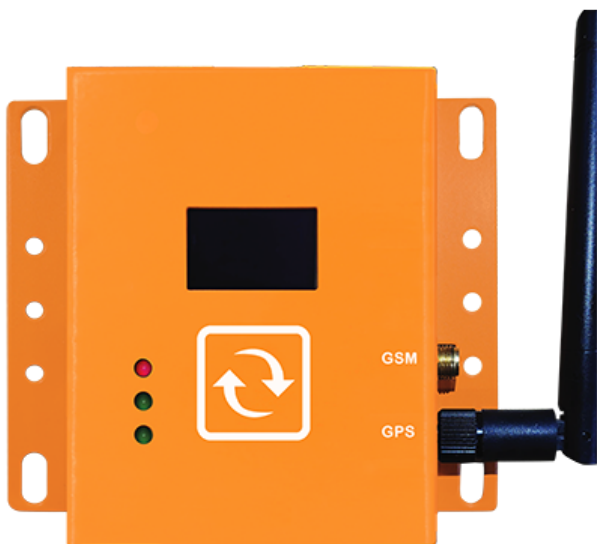
Sensor enclosure: Steel enclosure, industrial grade
Mounting option: 0U rack, DIN rail, magnetic or wall mountable



LTE/3G/2G Cellular Add-On



ADDON-LTE

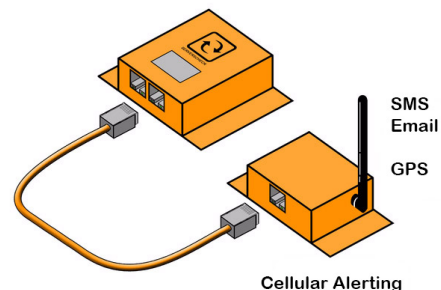


LTE FDD: FDD/B2/B4/B12
Optional positioning: GPS
Wireless module: Quectel wireless module embedded
Carrier approvals: Deutsche Telekom(Europe), AT&T/Sprint/U.S.
Cellular/Telus/Rogers(Canada)

Regulatory approvals:
GCF (Global), CE (Europe), FCC (North America), IC (Canada), Anatel (Brazil),
IFETEL (Mexico), SRRC/CCC/NAL (China), KC (South Korea), NCC (Taiwan, China),
JATE/TELEC (Japan), RCM (Australia & New Zealand), FAC (Russia), NBTC
(Thailand), IMDA (Singapore), ICASA (South Africa)

Operating temperature range: -40°C to +85°C (-40°F to +185°F)
Humidity (operating and storage): < 90% rH (non-condensating)

Sensor enclosure: Steel enclosure, industrial grade
Mounting option: 0U rack, DIN rail, magnetic or wall mountable



Cellular Alerting



Satellite Add-On



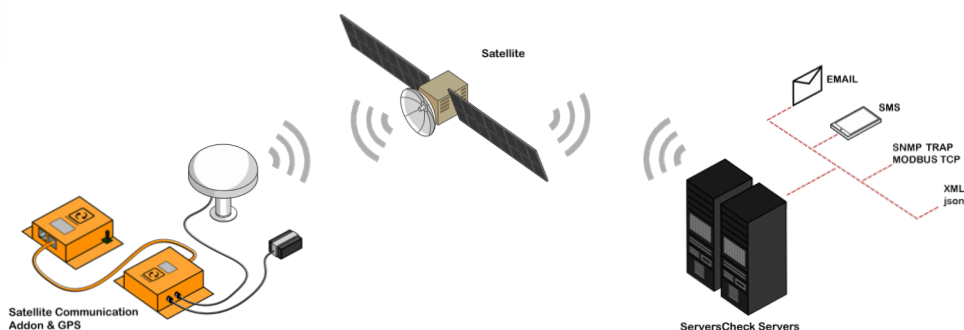
ADDON-SATELLITE



Frequency: 1616 to 1626.5 MHz
Position: GPS, GALILEO
Satellite network: Iridium
Regulatory approval: FCC, CE, IC, RED, ANATEL, AUSTRALIA

Operating temperature range: -40°C to +85°C (-40°F to +185°F)
Operating humidity range: < 90% rH (non-condensating)

Sensor enclosure: Steel enclosure, industrial grade
Mounting option: 0U rack, DIN rail, magnetic or wall mountable



Satellite Communication Addon & GPS

ServersCheck Servers

Modbus RTU (Slave) Add-On



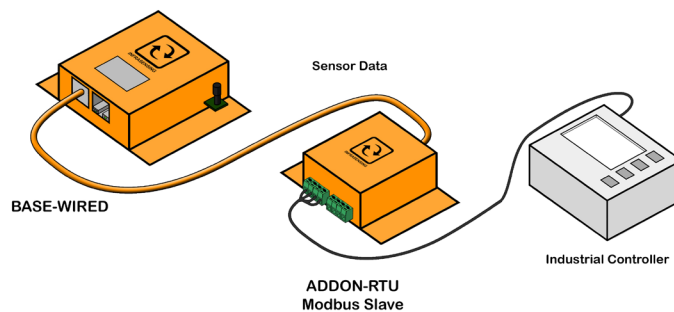
ADDON-RTU



Connected like a sensor, behind the base unit
Surge protection on the RS-485 data line
3000 VDC Isolation protection
Operates as a Modbus RTU Slave
One RS485 bus
1 Device IN and 1 Device OUT terminal block.

Operating temperature range: -40°C to +85°C (-40°F to +185°F)
Operating humidity range: < 90% rH (non-condensating)

Sensor enclosure: Steel enclosure, industrial grade
Mounting option: 0U rack, DIN rail, magnetic or wall mountable





Sensorhub for Base Unit

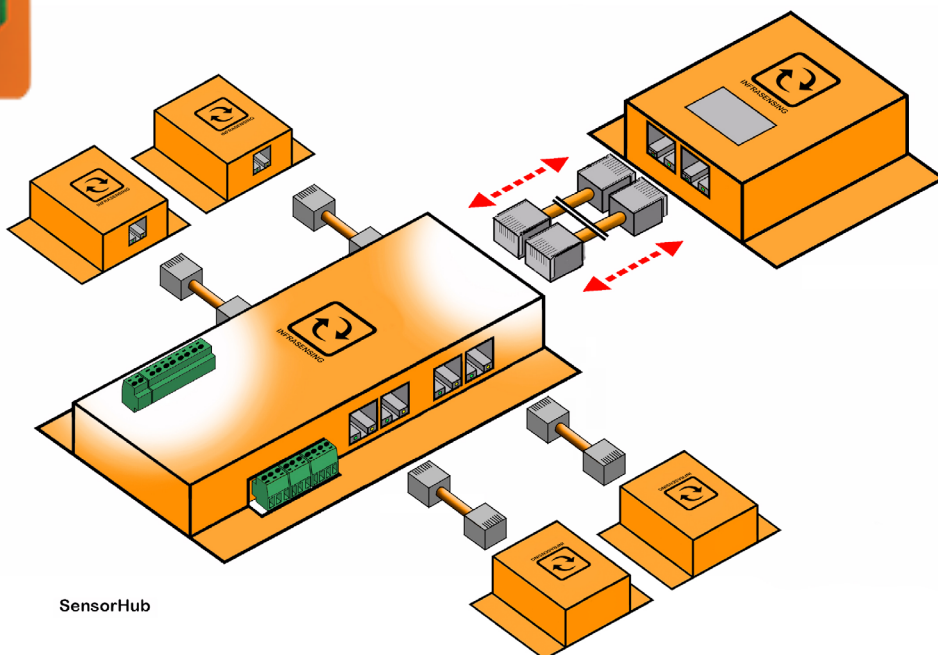
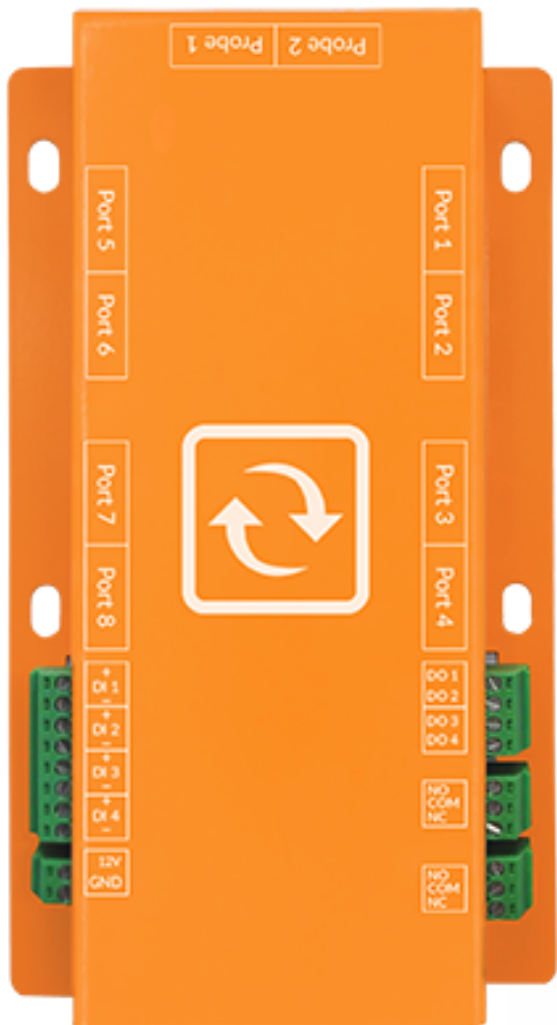
EXP-8HUB



Expansion ports for external sensor probes: 8
Dry contact input ports: 4
Dry contact output ports: 4 (digital sink 100mA)
Relay contact rating: 250VAC/24VDC, 8A

Operating temperature range: 0°C to +75°C (32°F to +167°F)
Operating humidity range: < 90% rH (non-condensating)

Sensor enclosure: Steel enclosure, industrial grade
Mounting option: 0U rack, DIN rail, magnetic or wall mountable



SensorHub

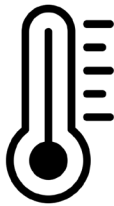


Environment Monitoring

Environment Monitoring is crucial for maintaining the optimal performance of mission-critical systems by continuously monitoring their operating environment. This solution employs a unified set of sensors, common across all product lines: **ServersCheck®**, **SwitchMon™** and **Prevent-iOn™** to provide comprehensive oversight. It ensures that any deviations from normal conditions are promptly identified and addressed, safeguarding the stability and efficiency of critical infrastructures.

The monitoring system focuses on detecting four types of anomalies: thermal, environmental, power, and mechanical. Thermal monitoring helps prevent overheating and potential fires, while environmental monitoring ensures factors like humidity and air quality are within safe limits. Power monitoring detects irregularities in voltage and current, preventing power surges and outages. Mechanical monitoring identifies physical wear and tear or other mechanical issues. Together, these capabilities provide a robust defense against disruptions, ensuring that mission-critical systems operate reliably and efficiently.

In this section, we will cover the environment sensors used to detect these anomalies and their integration across the **ServersCheck®**, **SwitchMon™** and **Prevent-iOn™** product lines.



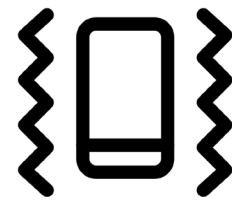
thermal



environmental



power

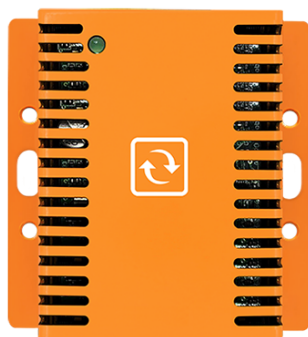


mechanical



Environment Sensors - Thermal

Temperature & Humidity Sensor

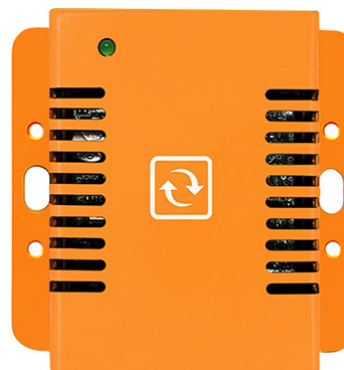


ENV-THUM

Temperature Resolution: 0.01°C (0.018°F)
Temperature Accuracy: $\pm 0.2^{\circ}\text{C}$ ($\pm 0.36^{\circ}\text{F}$) from 0°C to 90°C (32°F to 194°F)
Humidity Resolution: 0.01 % RH
Humidity Accuracy: $\pm 2\%$ RH between 0%RH to 100%RH
Humidity Range: 0 to 100 % RH

Operating temperature range: 0°C to +75°C (32°F to +167°F)
Humidity (operating and storage): < 90% rH (non-condensating)

Temperature Sensor



ENV-TEMP

Temperature Resolution: 0.01°C (0.018°F)
Temperature Accuracy: $\pm 0.2^{\circ}\text{C}$ ($\pm 0.36^{\circ}\text{F}$) from 0°C to 90°C (32°F to 194°F)
Temperature Reading: -40°C to 125°C (-40°F to 257°F)

Operating temperature range: 0°C to +75°C (32°F to +167°F)
Humidity operating and storage: < 90% rH (non-condensating)



Environment Sensors - Environmental

Digital Airflow Sensor

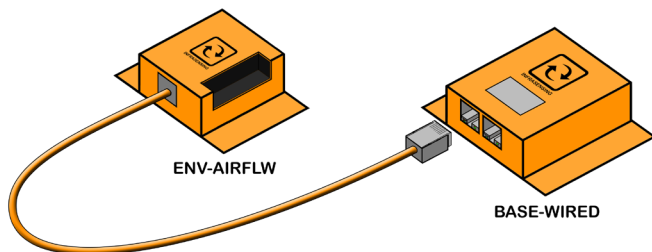
ENV-AIRFLW



Accuracy: $\pm 10\%$ FS
Air mass flow range: 0 m/s to 3 m/s
Flow polling rate: minimum of 1 second

Operating temperature range:
-10°C to +65°C (14°F to +149°F) in PoE mode
Relative humidity (operating and storage):
< 90% rH (non-condensating)

Sensor enclosure:
Steel enclosure, industrial grade
Mounting option:
OU rack, DIN rail, magnetic, or wall mountable sensor



Digital sound & noise level (dbA) sensor

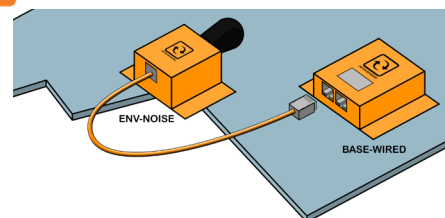
ENV-NOISE



Sensor Accuracy: ± 0.5 dB
Sound (dB) Resolution: 0.1 dB precision
Sensor Range: 30-120dB

Operating and storage temperature range:
0°C to +50°C (32°F to +167°F)
Relative humidity (operating and storage):
< 80% rH

Sensor enclosure:
Steel enclosure, industrial grade
Mounting option:
OU rack, DIN rail, magnetic, or wall mountable sensor



Indoor Air Quality (IAQ) Sensor

ENV-AIRQUALITY



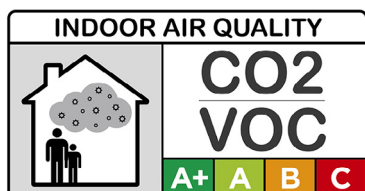
CO2 output range: 0 - 40,000 ppm
CO2 measurement range: ± 40 ppm
CO2 repeatability: ± 10 ppm
VOC measurement output range: 0 - 500 VOC Index
VOC repeatability: $\leq \pm 5$ VOC index points or % mass volume(m.v.)
Temperature measurement range: -10°C to +60°C
Temperature accuracy: ± 0.8 °C (1.44°F) accuracy from 15 °C - 35 °C (27 °F - 63 °F)
Relative humidity measurement range: 0 to 100 % RH
Relative humidity accuracy: 15 °C - 35 °C, 20 %RH - 65 %RH = ± 6 %RH

Powered and communicates with: Base Unit (BASE-XX) (required)
Connectivity: RJ45 cable transmitting data & power from Base Unit to Sensor
Cable specification: RJ45 CAT 6/7 recommended
Up to 100m (330ft) subject to cable quality & interference
405 mW

Sensor power usage:

Operating temperature range: 0°C to 50°C (32°F to 122°F)
Humidity (operating and storage): < 90% rH (non-condensating)

Sensor enclosure: Steel enclosure, industrial grade
Mounting option: OU rack, DIN rail, magnetic, or wall mountable sensor
Dimensions: 71.1 mm (2.8") x 68.8 mm (2.7") x 28.8 mm (1.1")
Weight: 130g (0.29 lb)





Environment Sensors - Environmental

Differential Air Pressure Sensor

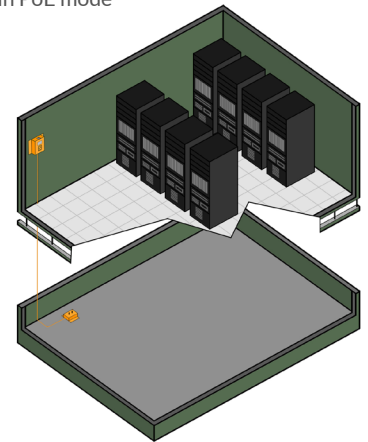
ENV-AIRPRESSURE



Pressure accuracy: 0.1 Pa
Pressure range: -500 to + 500 Pa
Flow polling rate: minimum of 1 second
Temperature range: -40°C to +85°C (-40°F to +185°F)
Temperature repeatability: $\pm 0.1^{\circ}\text{C}$
Temperature accuracy: $\pm 3^{\circ}\text{C}$ (5.4°F)

Operating temperature range: -10°C to +65°C (14°F to +149°F) in PoE mode
Humidity (operating and storage): < 90% RH (non-condensating)

Sensor enclosure: Steel enclosure, industrial grade
Mounting option: 0U rack, DIN rail, magnetic, or wall mountable sensor
Dimensions: 76 mm (3") x 68 mm (2.7") x 23 mm (0.9")
Weight: 110g (0.234lbs)



Atmospheric Corrosion (ACM) Sensor



ENV-CORROSION



Silver corrosion: Å Aangstrom
Copper corrosion: Å Aangstrom

Design standard: ANSI/ISA 71.04-2013

Operating temperature range: 0°C to +75°C (+167°F)
Humidity (operating and storage): < 90% rH (non-condensating)

Sensor housing: Plastic industrial grade enclosure
Mounting option: 0U rack, DIN rail, or wall mountable



Environment Sensors - Leak Detection

Industrial Water leak Location Sensor

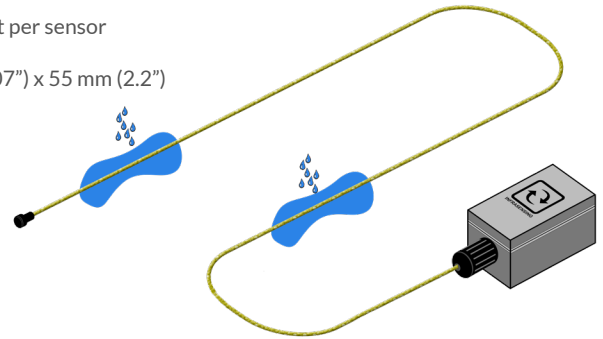
ENV-WLEAK-LOC-COMBO5



Water detection trigger: 120 seconds
Drying time: Cable dries and resets within 15 seconds of removal from standing water
Standard cleaning method: Wipe with clean damp cloth
Cable breaking strength (including connectors): 70lbs/32kg
Data output: Provides a WET/DRY indication in Base Unit

Operating temperature range: 0°C to + 75°C (32°F to +167°F)

Sensor housing: IP 66
Sensor cable: Expandable up to 50m/164ft per sensor
Mounting option: Wall, floor or ceiling mount
Dimensions: 128 mm (5.03") x 78 mm (3.07") x 55 mm (2.2")
Weight: 570g (01.26 lbs.)



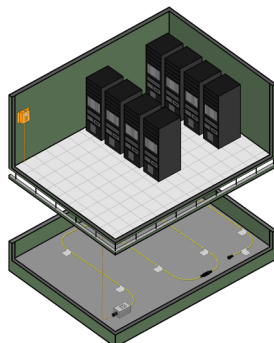
Water Leak Sensing

ENV-WLEAK-COMBO-5M



Water detection trigger: 1-2 seconds
Drying time: Cable dries and resets within 15 seconds of removal from standing water
Standard cleaning method: Wipe with clean damp cloth
Cable breaking strength (including connectors): 70lbs/32kg
Data output: Provides a WET/DRY indication in Base Unit

Operating temperature range: 0°C to + 75°C (32°F to +167°F)



Water Spot Sensor

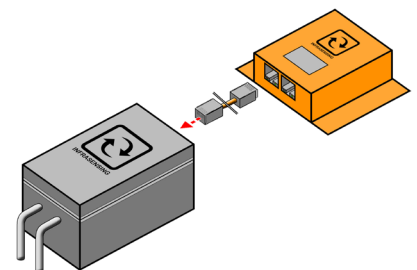
ENV-WSPOT



Trigger: 2 metal rods must make contact with water to trigger sensor
Standard cleaning method: Wipe with clean damp cloth
Data output: Provides a WET/DRY indication in Base Unit

Operating temperature range:

Sensor housing: IP 66
Mounting option: Wall, floor or ceiling mount
Dimensions: 65 mm (2.5") x 95 mm (3.74") x 55 mm (2.16").
Weight: 236g (0.52 lbs)





Environment Sensors - Leak Detection

Optical Oil Leak Sensor

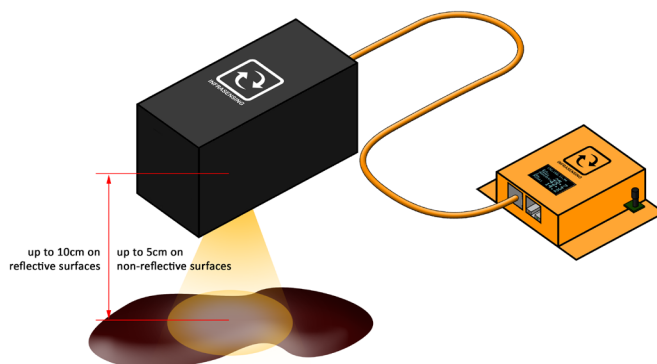
ENV-LEAK-OPTICAL



Data output: Provides a WET/DRY indication in Base Unit
Maximum height from surface: 10 cm
Detection time: 3 seconds

Operating temperature range: 0°C to +75°C (32°F to +167°F)
Humidity (operating and storage): <90% rH (non-condensating)

Sensor enclosure: Black plastic IP65 rated enclosure
Mounting option: Wall, floor or ceiling mount
Dimensions: 146 mm (5.7") x 63 mm (2.5") x 60.89 mm (2.4")
Weight: 570g (1.26 lbs)



Fuel Leak Detection Sensor

ENV-FLEAK-COMBO



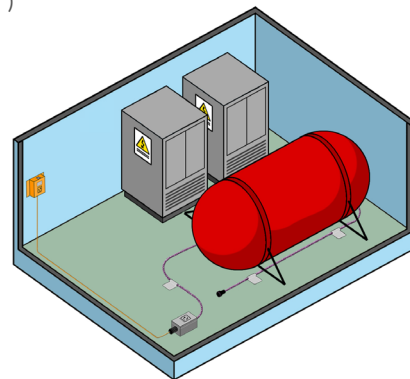
Fuel type/response time at 20°C (68 0°C): #1 diesel fuel (60 minutes) JP5 jet fuel (70 minutes)
#2 diesel fuel (120 minutes) JP8 jet fuel (50 minutes)
Gasoline (12 minutes) Jet-A jet fuel (50 minutes)

Cable breaking strength (including connectors) : 22700g (50 lb)
Data Output: Provides a WET/DRY indication in Base Unit

Operating temperature range: 0°C to +75°C (32°F to +167°F)

Sensor enclosure: IP68
Sensor cable: Expandable up to 30m/100ft per sensor
Mounting option: Wall, floor or ceiling mount
Dimensions: 65 mm (2.5") x 95 mm (3.74") x 55 mm (2.16")

Fuel Type	Typical response time at 20°C (68°F)
#1 diesel fuel	60 minutes
#2 diesel fuel	120 minutes
Gasoline	12 minutes
JP5 jet fuel	70 minutes
JP8 jet fuel	50 minutes
Jet-A jet fuel	50 minutes





Environment Sensors - Security Sensors

Light (Lux) Sensor

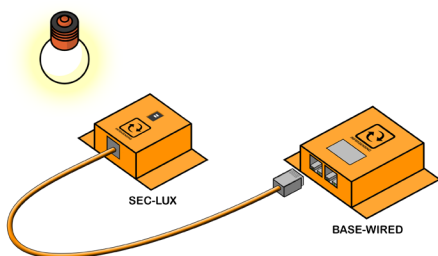
SEC-LUX



Unit: LUX(lx)
Range: 0 to 65000 lx
Resolution: 1 lux

Operating temperature range:
0°C to +75°C (32°F to +167°F)

Humidity (operating and storage):
< 90% rH (non-condensating)



Security Sound & Noise Sensor

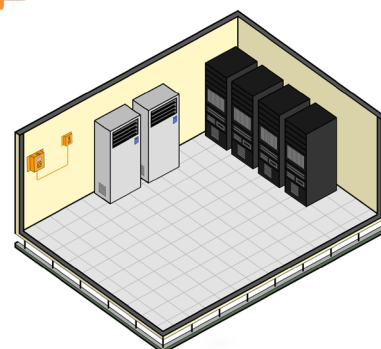
SEC-SOUND



Sensor Accuracy: $\pm 1\text{db}$
Sound (dB) resolution: 1 db precision
Sensor range: from 10db to 90db

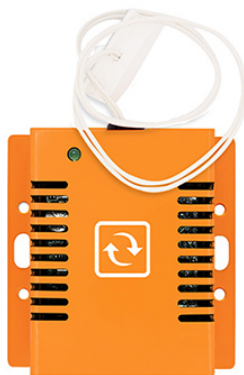
Operating temperature range:
0°C to +75°C (32°F to +167°F)

Humidity (operating and storage):
< 90% rH (non-condensating)



Door Contact Sensor

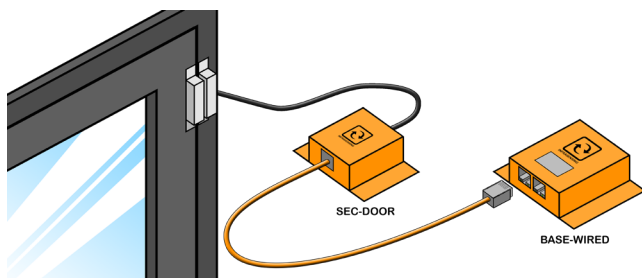
SEC-DOOR



Magnetic door contact sensor with self-adhesive or screw mount
Returns OPEN or CLOSE state
0.15" (0.4m) cable from door contact to probe

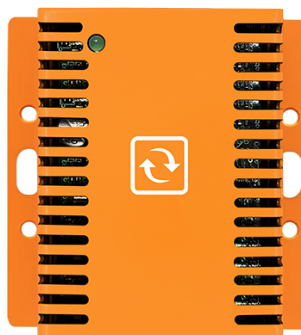
Operating temperature range:
0°C to +75°C (32°F to +167°F)

Humidity (operating and storage):
< 90% rH (non-condensating)



Tilt Sensor

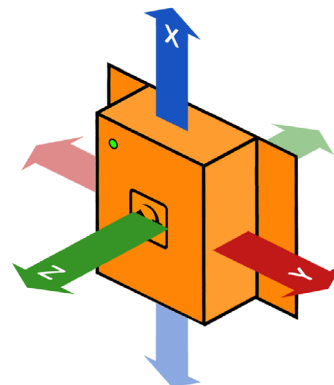
SEC-TILT



Axes displayed by sensor: X, Y, and Z
Maximum measurement of tilt: $\pm 180^\circ$

Operating temperature range:
0°C to +75°C (32°F to +167°F)

Humidity (operating and storage):
< 90% rH (non-condensating)





Environment Sensors - Security Sensors

Motion Sensor

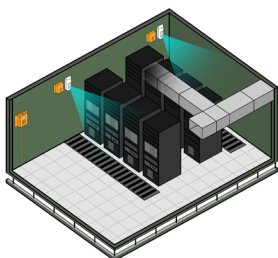
SEC-MOTION



Radiated RF immunity:
20 V/m with 80% AM over range,
27MHz to 1.0GHz
Conducted RF immunity:
10V with 80% AM over range
150kHz to 80MHz
Static immunity: 15 kV
Transient immunity: 2.4 kV @ 1.2 joules

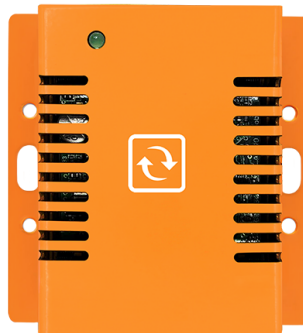
Operating temperature range:
0°C - 37°C (32°F - 100°F)

Humidity (operating and storage):
< 95% rH (non-condensating)



Digital Shock / Vibration Sensor

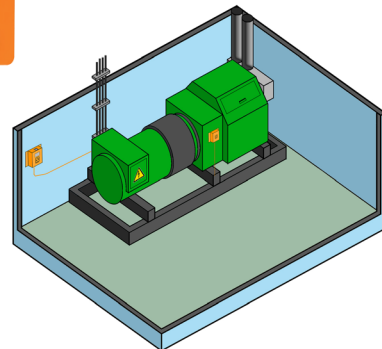
SEC-SHOCK



Vibration unit: $\pm 2g$
Sensor sensitivity: 0.18g

Operating temperature range:
0°C to +75°C (32°F to +167°F)

Humidity (operating and storage):
< 90% rH (non-condensating)



Smoke Sensor

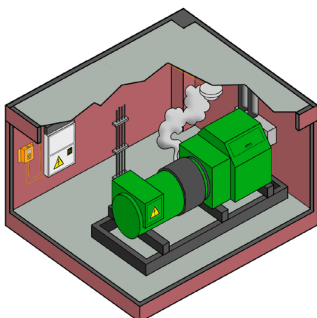
SEC-SMOKE



Photoelectric smoke detection
Built-in Drift Compensation Reduces False
Alarms; Self-diagnostics Meets NFPA 72
Sensitivity Testing Requirements without
the Need for External Meters

Operating temperature range:
0°C - 37°C (32°F - 100°F)

Humidity (operating and storage):
< 95% rH (non-condensating)





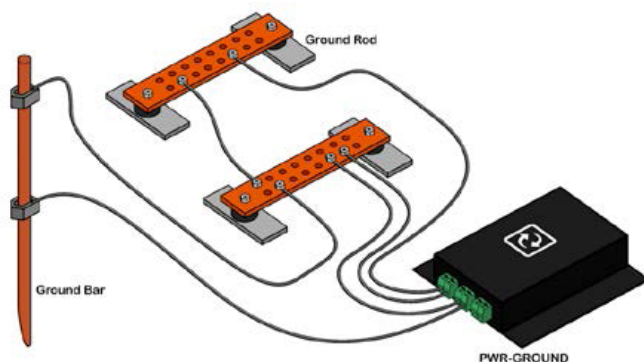
Ground Monitoring



PWR-GROUND



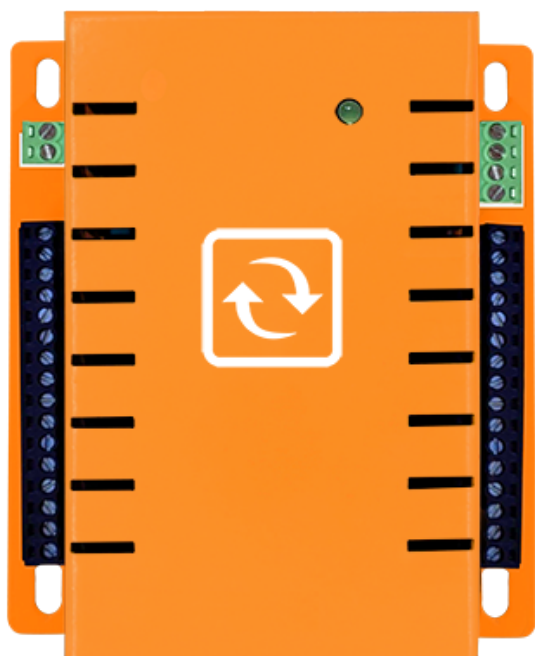
Range:	0 to 5000 Ohms
Injected current:	0.7 mA
Ground metering points:	3 different ground terminals
IO isolation:	1000 V AC
Used voltage:	3.0 V
Operating temperature range:	0°C to +75°C (32°F to +167°F)
Humidity (operating and storage):	< 90% rH (non-condensating)





Environment Sensors - Industrial

IO - Dry Contact Sensor

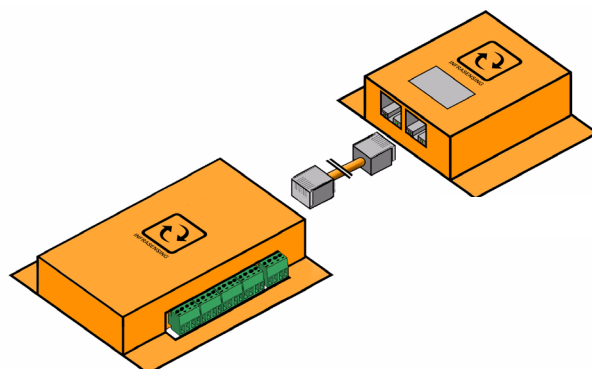


IND-IO

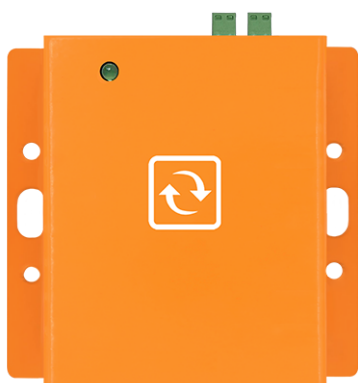


Dry contact inputs: 16
Dry contact outputs: 4
Power output: 12 VDC power out to power attached devices (for example smoke, motion, door sensors) - max 700mA
Contact polling rate: min 1 second

Operating temperature range: 0°C to +75°C (32°F to +167°F)
Humidity (operating and storage): < 90% rH (non-condensating)



Industrial 0-10V



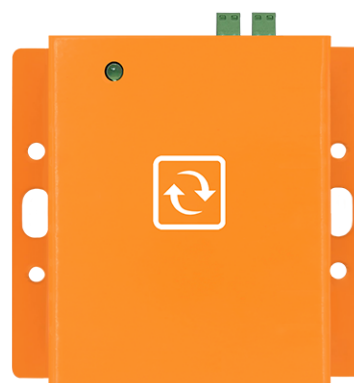
IND-0-10V



Sensor accuracy: $\pm 1\%$
Auxillary power supply: 12VDC 50mA max

Operating temperature range: 0°C to +75°C (32°F to +167°F)
Humidity (operating and storage): < 90% rH (non-condensating)

Industrial 4-20mA



IND-4-20mA

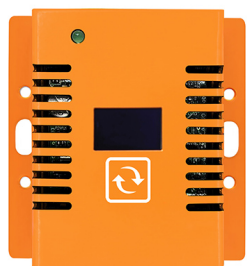


Sensor accuracy: $\pm 1\%$
Auxillary power supply: 12VDC 50mA max

Operating temperature range: 0°C to +75°C (32°F to +167°F)
Humidity (operating and storage): < 90% rH (non-condensating)



Daisy Chain Booster



DAISY STARTER



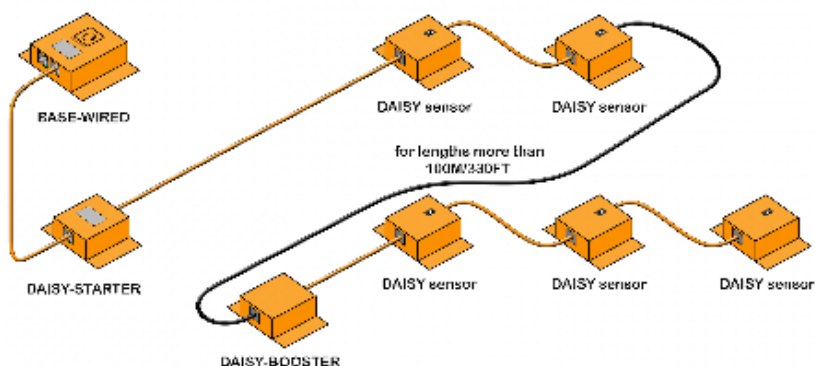
DAISY-BOOSTER



Power Source: Daisy Chain Sensor
Power Usage: 300mW
Voltage output: 12V

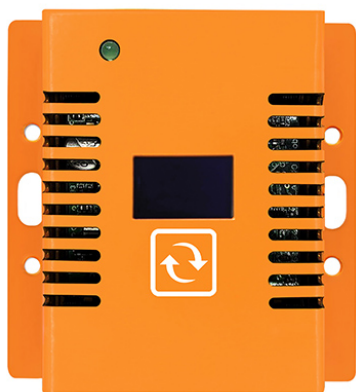
Operating temperature range: 0°C to +85°C (32°F to +185°F)
Humidity (operating and storage): < 90% RH (non-condensing)

Sensor enclosure: Steel enclosure, industrial grade
Mounting option: 0U rack, DIN rail, magnetic, or wall mountable sensor
Dimensions: 72.25mm (2.84") x 67.13mm (2.64") x 22.56mm (0.89")
Weight: 108g (0.24lbs)



Daisy Chain Starter

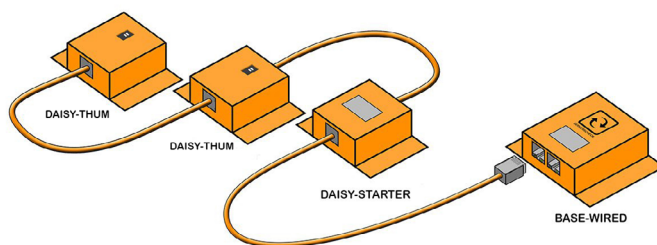
DAISY STARTER



Power Source: Base Unit (BASE-XX), power adapter 12V 2A is required when connecting more than 10 daisy chain sensors
Power Usage: 288mW

Operating temperature range: 0°C to +75°C (+167°F)
Humidity (operating and storage): < 90% RH (non-condensing)

Sensor enclosure: Steel enclosure, industrial grade
Mounting option: 0U rack, DIN rail, magnetic, or wall mountable sensor
Dimensions: 73.28mm (2.89") x 67.77mm (2.67") x 23.14mm (0.91")
Weight: 110.0g (0.242 lbs.)





To ensure the highest level of performance and reliability in mission-critical systems, precise and continuous monitoring of the operating environment is essential. In the previous section, we discussed the comprehensive capabilities of our unified sensor network used across all product lines, including ServersCheck®, SwitchMon™, and Prevent-iOn™.

Now, we will focus on the sensors specifically designed for each of these product lines:

ServersCheck® employs sensors that focus on environmental and infrastructure monitoring, ensuring that factors like temperature, humidity, and air quality are within optimal ranges.

SwitchMon™ uses sensors designed for network performance and security, continuously evaluating switch statuses, traffic loads, and potential vulnerabilities.

Prevent-iOn™ incorporates sensors aimed at early detection and prevention of failures in energy storage systems, wind turbines, solar farms, and hydrogen applications, particularly focusing on thermal runaway detection and management.

In the following sections, we will delve into the specific types of sensors used in each product line, detailing their functionalities, deployment, and how they contribute to the overall monitoring strategy. This will provide a clear understanding of how each product line ensures the stability, efficiency, and safety of mission-critical systems through specialized monitoring.

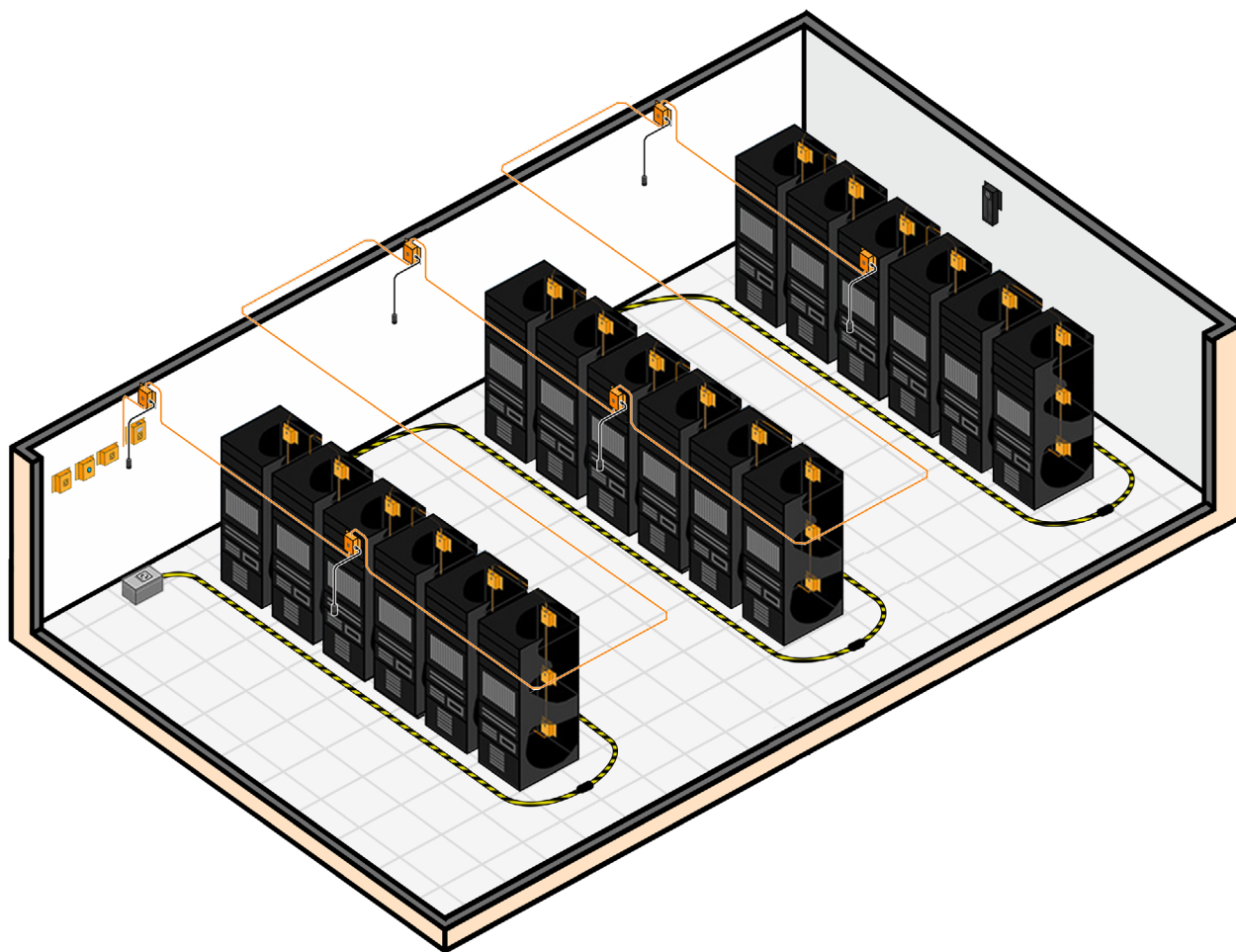


ServersCheck ®

ServersCheck: Preventing failures by detecting anomalies in data center and IT infrastructure

Introducing ServersCheck by InfraSensing, a cutting-edge sensor platform meticulously tailored for data infrastructure across various environments, from IDF and server rooms to edge data centers and hyperscale facilities. Born out of a commitment to elevate monitoring solutions, ServersCheck redefines the landscape of data and IT infrastructure management. This comprehensive platform seamlessly integrates both software and hardware, offering a holistic approach to monitor the intricate details and vital components of data and IT environments.

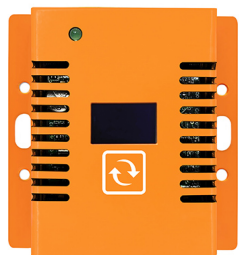
At its core, ServersCheck stands as a beacon of innovation, empowering businesses to ensure the resilience and optimal performance of their critical infrastructure. With a focus on precision, reliability, and adaptability, ServersCheck by InfraSensing emerges as a pivotal solution, meeting the unique challenges and demands of the data and IT industry. As we delve into the realm of monitoring technology, ServersCheck is not just a platform; it's a transformative force shaping the future of data and IT infrastructure



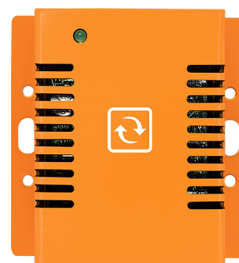


Daisy Chain Temperature & Humidity Sensors

Daisy Chain Temperature (Humidity) Sensor



DAISY STARTER 



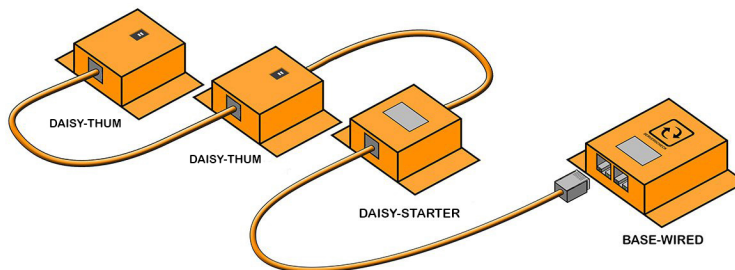
DAISY-TEMP 
DAISY-THUM 

Temperature Resolution: 0.01°C (0.018°F)
Temperature Accuracy: $\pm 0.2^{\circ}\text{C}$ ($\pm 0.36^{\circ}\text{F}$) from 0°C to 90°C (32°F to 194°F)
Temperature Reading: -40°C to 125°C (-40°F to 257°F)
Reading unit: in Celsius or Fahrenheit

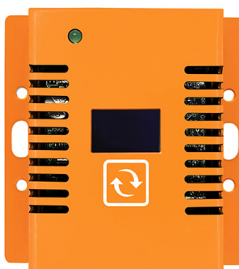
Operating temperature range: 0°C to +75°C (32°F to +167°F)
Humidity (operating and storage): < 90% rH (non-condensating)

Sensor enclosure: Steel enclosure, industrial grade
Mounting option: 0U rack, DIN rail, magnetic, or wall mountable sensor
Dimensions: 68 mm (2.68") x 72 mm (2.83") x 28 mm (1.10")
Weight: 120g (0.26lbs)

Maximum length of daisy chain: Up to 20 sensors per base unit within 100m/330ft of total length
Longer distances possible with optional DAISY-BOOSTER



ISO17025 Calibrated Cylindrical Daisy Chained Temperature & Humidity Sensor



DAISY STARTER 



DAISY-THUM-C 

Temperature resolution: 0.02°C (0.36°F)
Temperature accuracy: $\pm 0.5^{\circ}\text{C}$ ($\pm 0.9^{\circ}\text{F}$) from 0°C to 50°C (32°F to 122°F)
Temperature reading: -55°C to +125°C (-67°F to +257°F)
Relative humidity range: 0 to 100 % RH
Relative humidity resolution or precision: 0.01%RH
Relative humidity accuracy: $\pm 2\% \text{RH}$ between 0%RH to 100%RH

Operation temperature range: 0°C to +75°C (32°F to +167°F)
Operating humidity range: < 90% rH (non-condensating)

Sensor enclosure: Plastic material enclosure
Optionally available in aluminum enclosure
Mounting option: Secure mounting with bolt and nut mechanism
Can be mounted using two M24 nut
Dimensions: L: 51.8mm (2.04") W: 24mm (0.94") Ø: 24
with a 2m cable that connects to a T-daisy chain connector
Weight: 32.9g (0.071lbs)

Maximum length of daisy chain: Up to 13 sensors per base unit within 100m/330ft of total length
Longer distances possible with optional DAISY-BOOSTER



Power Monitoring for IT Infrastructure

AC Power Failure Sensor



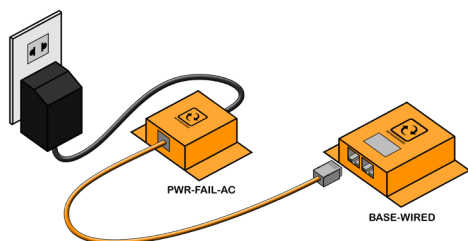
PWR-AC-FAIL



Power adapter style:
EU, UK or US
Power adapter specs:
Input : Autoswitching
90-240 VAC/47-63 Hz
Output: 9 VDC, 1.5 A, 2m
cord terminated with 2.1mm (center
positive) plug

Operating temperature range:
0°C to +40°C (32°F to 104°F)

Humidity (operating and storage):
5-95% rH (non-condensating)



AC Power Quality Sensor



PWR-AC-QUAL

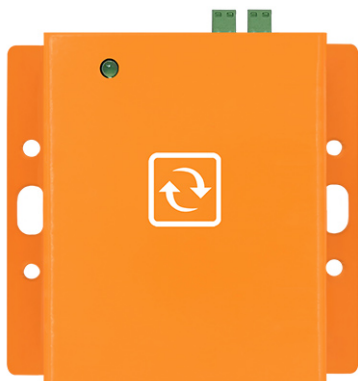


Voltage:
Detects:

100-240V AC Single Phase
short and long power failures or
interruptions voltage swells, spikes or
over-voltage voltage sags, dips or under-
voltage harmonic voltage distortions (THD)
frequency fluctuations

Operating temperature range: 0°C to +75°C (32°F to +167°F)
Operating Humidity Range: < 90% rH (non-condensating)

DC Voltage Sensor (12-80v)



PWR-DC-VOLT



Voltage: 12-80V DC
Polarity: Dual polarity, up to 3kV protection
Voltage channel: Up to 2 channels

Operating temperature range: 0°C to +75°C (32°F to +167°F)
Humidity (operating and storage) : < 90% rH (non-condensating)

AC Current Sensor



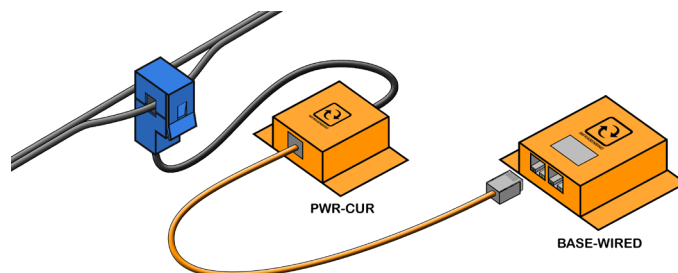
PWR-AC-CUR



Input Current: 0-100A
Non-linearity: +/-3%
Resistance Grade: B
Readings in: A (Ampere)

Operating temperature range:
-25°C to +70°C (-13°F to +158°F)

Humidity (operating and storage):
< 90% rH (non-condensating)





Power Monitoring for IT Infrastructure

Ultrasonic Fuel Level Sensor

PWR-FUEL



Measurement method:

Tank depth:

Accuracy distance:

Chemical resistance:

Operating temperature range:

Humidity (operating and storage):

Tank type style:

Sensor housing material:

Acoustic sonic measurement

0-2000 mm (6.5 ft)

0-2000 mm (6.5 ft) at 2 mm accuracy

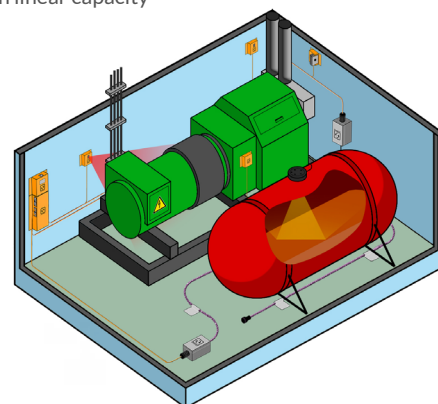
Petrol, diesel

4°C to 65°C (39°F to 148°F)

< 90% rH (non-condensating)

Metal and plastic with non linear capacity

IP 65 plastic housing

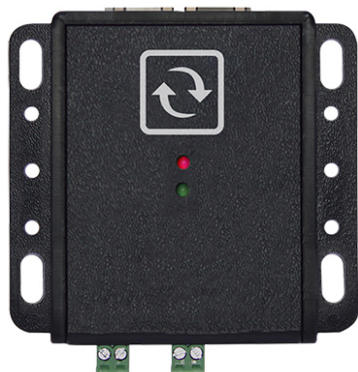


Battery Monitoring System

PWR-BAT-STRING



PWR-BAT-CELL



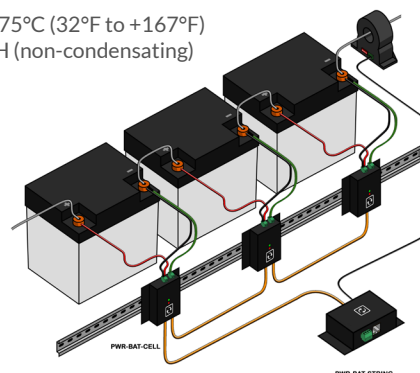
Optional version	PWR-BAT-STRING-485 (with RS485 support)		
PWR-BAT-STRING	Measurement Range	Accuracy	Resolution
Total string current	0-300A	± 0.5%	0.07A
PWR-BAT-CELL	Measurement Range	Accuracy	Resolution
Terminal voltage	1-65V	± 0.5%	2%
Battery temperature	-55~+125°C / -67 ~+257 °F	± 0.5°C / 0.9 °F	0.1°C / .18 °F

Operating temperature range:

Humidity (operating and storage):

0°C to +75°C (32°F to +167°F)

< 90% rH (non-condensating)



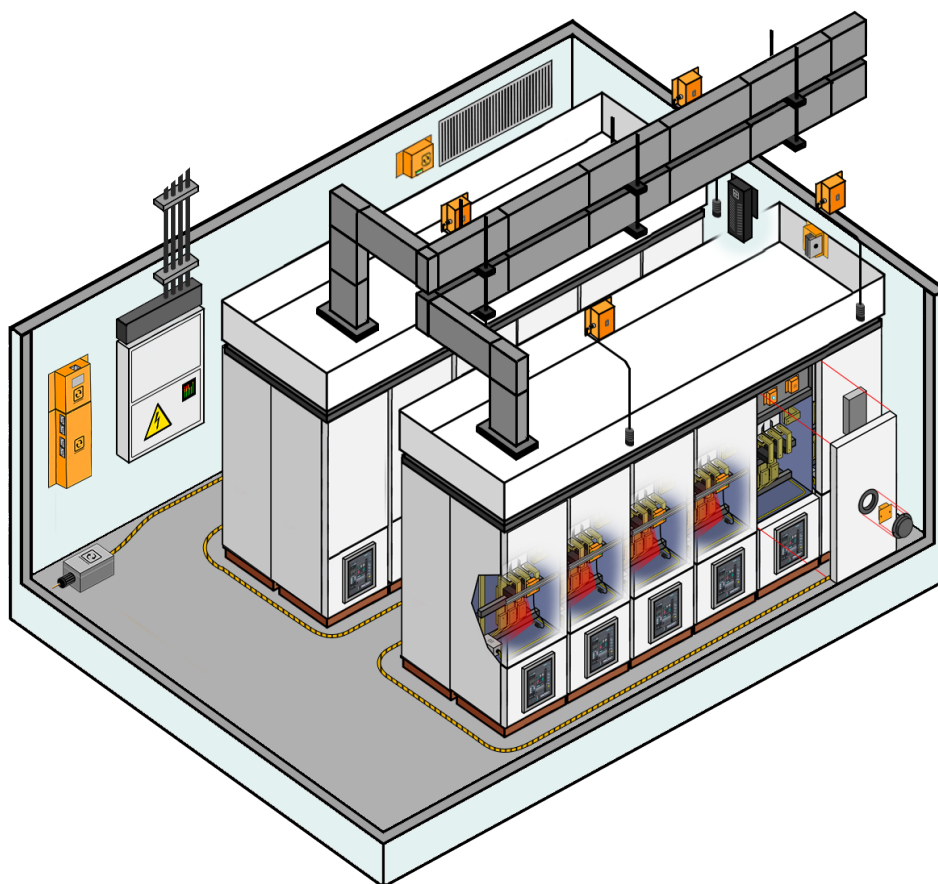


SwitchMon™

SwitchMon: Continuous thermal and environment monitoring for switchgear and critical power

SwitchMon is InfraSensing's cutting-edge product line designed to prevent failures in switchgear, transformers, and critical power systems. Switchgear systems, crucial for mission-critical infrastructures, are expected to see continued growth due to rising electricity demand, infrastructure expansion, modernization of power grids, and advancements in technology. Additionally, the shift towards renewable energy sources requires switchgear to manage and connect distributed energy resources.

SwitchMon addresses these needs through a two-phase approach. The first phase involves monitoring the environment where critical power systems operate to detect potential threats early. The second phase provides continuous thermal monitoring of switchgear, offering real-time insights and identifying issues before they lead to failures. By integrating these capabilities, SwitchMon ensures reliable performance and enhanced safety for essential power infrastructure.





Thermal Imaging Sensors

Infrared Thermal Image Sensor



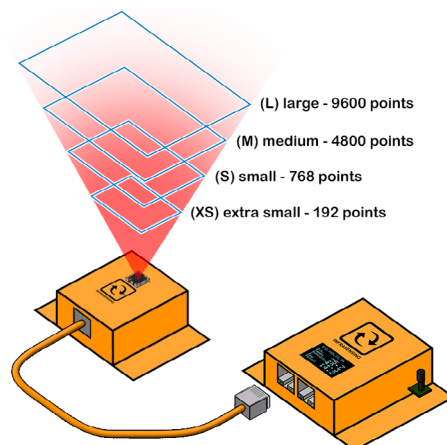
THIMG-(XS,S)



THIMG-(M, L)



Image Resolution	Accuracy	75°
Part Number	X-Small	±1°C
Object Temperature	THIMG-XS	Small
Thermal Image Size	-40°C to 300°C	THIMG-S
	768 pts	-40°C to 300°C
Temperature Reporting	(16 x 12 pixels)	768 pts
Horizontal Field of View	min & max temp	(32 x 24 pixels)
Vertical Field of View	110° (wide)	min & max temp



110° (wide)	min & max temp
75°	51° (narrow)
±1°C	63°
Medium	±5°C
THIMG-M	Large
0°C to 120°C	THIMG-L
4800 pts	0°C to 120°C
(80 x 60 pixels)	9600 pts

Infrared Thermal Image Sensor



THIMG-SC



Target temperature range:	-40°C to 300°C (-40°F to 572°F)
Temperature accuracy:	±1°C (±1.8°F)
Field of View (FoV):	110° horizontal (wide) / 75° vertical
Max object distance:	Up to 5m
Resolution:	32x24 pixels
Operating temperature range:	-10°C to +85°C (14°F to 185°F)
Humidity operating and storage:	< 90% rH (non-condensating)
Sensor enclosure:	Plastic material enclosure
Mounting option:	Secure mounting with bolt and nut mechanism Can be mounted using two M24 nut



Sulfur Hexafluoride (SF6) Gas Sensor

GAS-SF6



Measurement range: 0-1000ppm

Accuracy: $\pm 1\%$ of FS range for readings below 25% of range
 $\pm 2\%$ of FS range for readings below 50% of range
 $\pm 5\%$ of FS range above 50% of range

Response time (T90): 30s

Warm up time: 5 minutes

Operating temperature range: -20°C to $+50^{\circ}\text{C}$ (-4°F to $+122^{\circ}\text{F}$)

Humidity (operating and storage): 0-90% rH (non-condensating)

Sensor housing: Steel enclosure, industrial grade

Mounting option: OU rack, DIN rail, magnetic, or wall mountable sensor





Daisy Chain Sensors

Daisy Chain Temperature Magnet Sensor



DAISY STARTER 



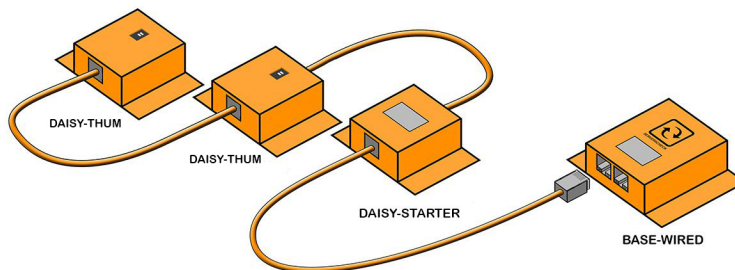
DAISY-TEMP-MAGNET 

Temperature precision: $\pm 0.1^{\circ}\text{C}$ (0.18°F)
Temperature accuracy: $\pm 0.25\%$ (0.45°F)
Temperature range: -50°C to 200°C (-58°F to 392°F)

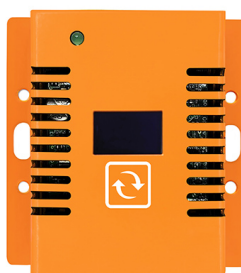
Operation temperature range: 0°C to $+75^{\circ}\text{C}$ (32°F to $+167^{\circ}\text{F}$)
Operating humidity range: $< 90\%$ rH (non-condensating)

Sensor enclosure: Steel enclosure, industrial grade
Mounting option: 0U rack, DIN rail, magnetic, or wall mountable sensor
Dimensions: 74mm ($2.9''$) \times 67.5mm ($2.7''$) \times 24mm ($0.9''$)
Weight: 120g (0.26lbs)

Maximum length of daisy chain: Up to 20 sensors per base unit within 100m/330ft of total length Longer distances possible with optional DAISY-BOOSTER



Daisy Chain Infrared Spot Temperature Sensor



DAISY STARTER 



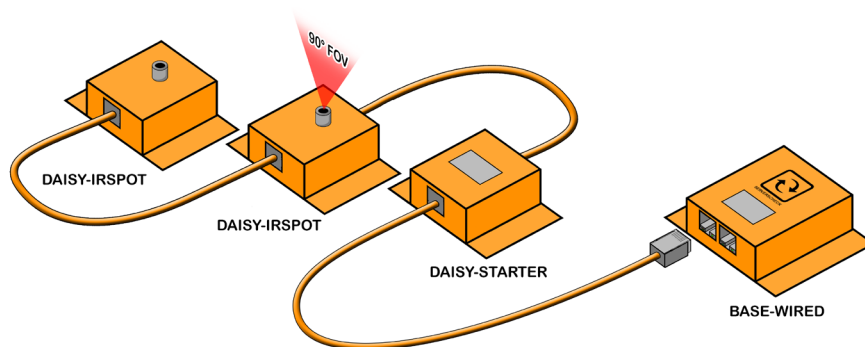
DAISY-THIMG- IR- 

Temperature Accuracy: $\pm 0.5^{\circ}\text{C}$ ($\pm 0.9^{\circ}\text{F}$) accuracy from 0°C - 50°C (32°F to 122°F)
Field of View (FoV): 5° , 12° , 35°
Resolution: 0.02°C / 0.036°F
Temperature Reading: -70°C to $+380^{\circ}\text{C}$ (-94°F to $+716^{\circ}\text{F}$) in PoE mode
Reading unit: in Celsius or Fahrenheit

Operating temperature range: 0°C to $+75^{\circ}\text{C}$ (32°F to 167°F)
Humidity (operating and storage): $< 90\%$ rH (non-condensating)

Sensor enclosure: Steel enclosure, industrial grade
Mounting option: 0U rack, DIN rail, magnetic, or wall mountable sensor
Dimensions: 72.26mm ($2.84''$) \times 67.66mm ($2.66''$) \times 23.81mm ($0.94''$)
Weight: 114.9g (0.253lbs.)

Maximum length of THIMG-IRSPOT daisy chain: Up to 20 sensors per base unit within 100m/330ft cable length Longer distances possible with optional DAISY-BOOSTER





Additional SwitchMon Sensors

Industrial Infrared Spot Sensor



THIMG-IRSPOT

Temperature Accuracy:	$\pm 0.5^{\circ}\text{C}$ ($\pm 0.9^{\circ}\text{F}$) accuracy from 0°C to 50°C (32°F to 122°F)
Field of View (FoV):	$35^{\circ}/12^{\circ}/5^{\circ}$
Temperature Reading:	-70°C to 380°C (-94°F to 716°F)
Resolution:	0.02°C (0.36°F)
Operating temperature range:	0°C to $+75^{\circ}\text{C}$ (32°F to 167°F)
Humidity operating and storage:	< 90% rH (non-condensating)
Sensor enclosure:	Steel enclosure, industrial grade
Mounting option:	0U rack, DIN rail, magnetic, or wall mountable sensor

*Optional daisy chain version can have up to 20 IR Spot sensors per Base Unit.

Magnetic Temperature Sensor



ENV-TEMP-MAGNET

Temperature Precision:	$\pm 0.1^{\circ}\text{C}$ (0.18°F)
Temperature Accuracy:	$\pm 0.25\%$ (0.45°F)
Temperature Range:	-50°C to 200°C (-58°F to 392°F)
Operating temperature range:	0°C to $+75^{\circ}\text{C}$ (32°F to $+167^{\circ}\text{F}$)
Humidity (operating and storage):	< 90% rH (non-condensating)

*Optional daisy chain version can have up to 20 sensors per Base Unit within 100m/330ft of total length Longer distances possible with optional DAISY-BOOSTER

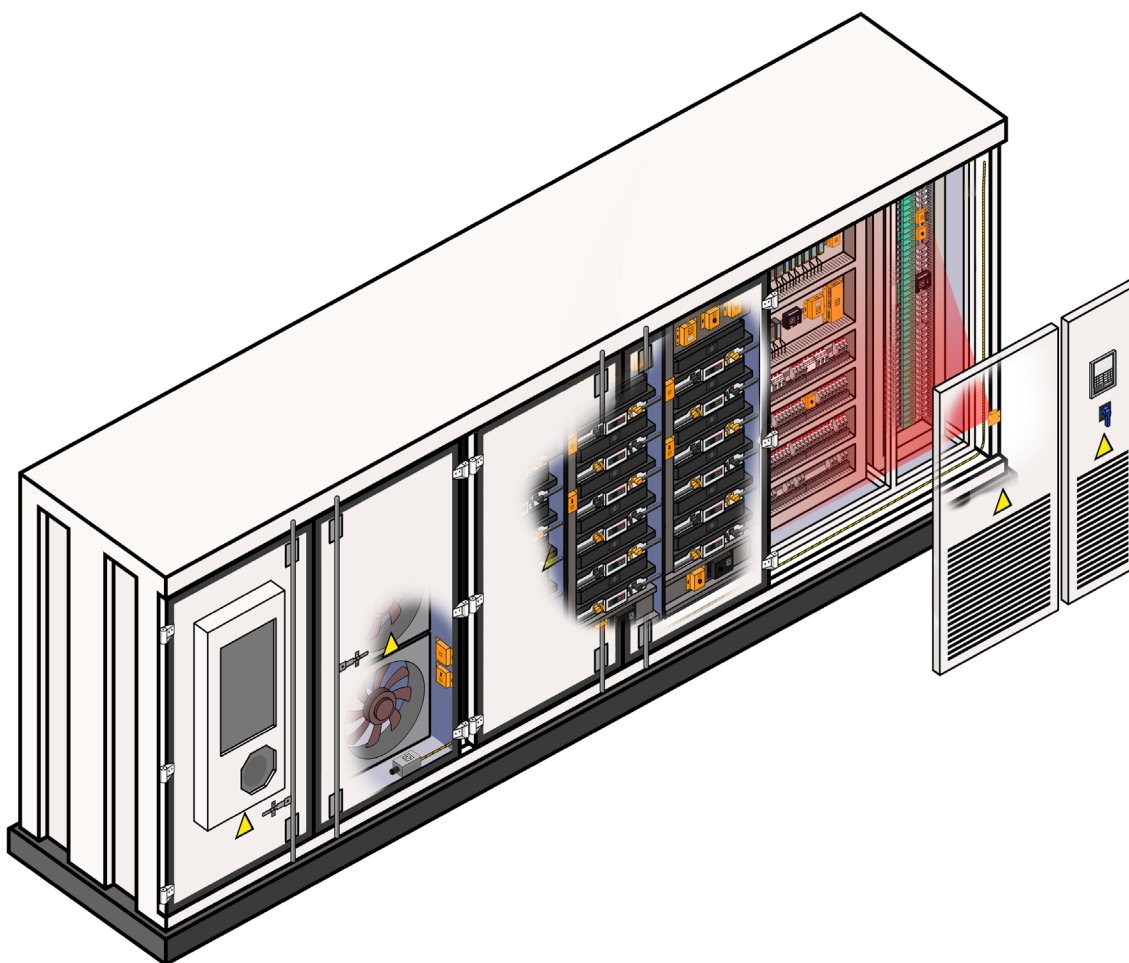


Prevent-iON™

Prevent-iON: Preventing battery fires & failures through off-gas & anomaly (abuse) detection

Prevent-iON is InfraSensing's innovative product line designed to prevent failures in energy storage systems (ESS), wind turbines, solar farms, and hydrogen applications. The solution operates in two phases. The first phase involves monitoring the environment where these renewable energy systems operate. The second phase focuses on the condition of the systems themselves: detecting gas from Li-ion batteries in ESS, monitoring switchgear conditions in wind turbines, and identifying overheating cables in solar farms using LHD technology.

Prevent-iON enhances the stability and efficiency of renewable energy by capturing excess energy during peak generation and storing it for use during low generation or high demand periods. This approach improves grid stability, balances supply and demand, and supports the integration of renewable energy into the energy mix.





Off & flammable gas sensors

H2 and VOC Gas Sensor (standard version)

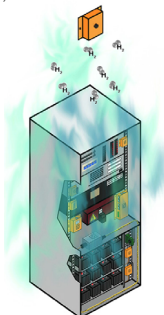
GAS-H2-VOC



H2 detection range: 0-100% LEL
H2 accuracy: $\pm 5\%$ LEL
VOC measurement output range: 0-500 VOC Index
VOC repeatability: $< \pm 5$ VOC index points or % mass volume (m.v.)
Temperature measurement range: -40°C to 125°C (-40°F to 257°F)
Temperature accuracy: $\pm 0.48^{\circ}\text{C}$ (0.86°F)
Relative humidity measurement range: 0 to 100% RH
Relative humidity accuracy: 2% RH
Response time (T90): < 30 seconds
Operating temperature range: -30°C to $+60^{\circ}\text{C}$ (-22°F to 140°F)
Humidity (operating and storage): $< 90\%$ rH (non-condensating)

Sensor housing: Steel enclosure, industrial grade

Mounting option: OU rack, DIN rail, magnetic, or wall mountable sensor



H2 and VOC Gas Sensor (RS-485 version)

R-GAS-H2-VOC

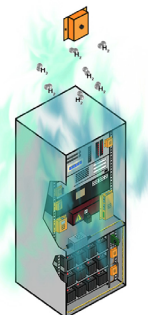


Flammable gas detection range: 0-100% LEL
Accuracy: $\pm 5\%$ LEL
Temperature measurement range: -40°C to 125°C (-40°F to 257°F)
Temperature accuracy: $\pm 0.48^{\circ}\text{C}$ (0.86°F)
Relative humidity measurement range: 0 to 100% RH
Relative humidity accuracy: 2% RH
Response time (T90): < 30 seconds

Operating temperature range: -30°C to $+60^{\circ}\text{C}$ (-22°F to 140°F)
Humidity (operating and storage): $< 90\%$ rH (non-condensating)

Sensor housing: Steel enclosure, industrial grade

Mounting option: OU rack, DIN rail, magnetic, or wall mountable sensor



VOC Gas Sensor

GAS-VOC

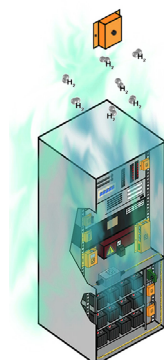


VOC measurement range: 0-500 VOC index
VOC repeatability: $< \pm 5$ VOC index points or % mass volume
Temperature measurement range: -40°C to 125°C
Temperature accuracy: 0.48°C (0.86°F)
Relative humidity measurement range: 0 to 100 % RH
Relative humidity accuracy: 2 % RH

Operating temperature range: -10°C to $+50^{\circ}\text{C}$ (14°F to $+122^{\circ}\text{F}$)
Humidity (operating and storage): 0-90% RH (non-condensating)

Sensor housing: Steel enclosure, industrial grade

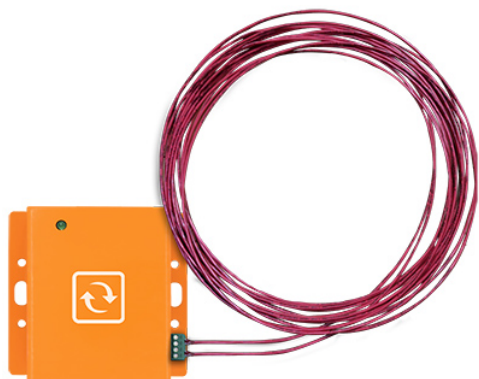
Mounting option: OU rack, DIN rail, magnetic, or wall mountable sensor





Additional Prevent-iON Sensors

Linear heat Detection Sensor



ENV-LHD 

Data output: Provides a NORMAL/ALARM detected in Base Unit
Detects the location: in meter

Operating temperature range: -40°C to +85°C (-40°F+185°F)
Humidity (operating and storage): < 90% rH (non-condensating)



Specialty Sensors

To extend our exploration of advanced monitoring solutions, we now turn to specialty sensors designed for applications outside of ServersCheck®, SwitchMon™, and Prevent-iOn™. While the previous sections covered the specific sensors integral to these product lines, this new page will focus on a diverse range of sensors tailored to other specialized environments and use cases. These sensors are engineered to meet unique operational demands and monitoring needs across various industries. We will examine the functionality, deployment, and advantages of these specialty sensors, highlighting their role in ensuring optimal performance and safety in their respective applications.

This overview aims to provide a comprehensive understanding of how these sensors contribute to effective monitoring and management in a broader array of scenarios.

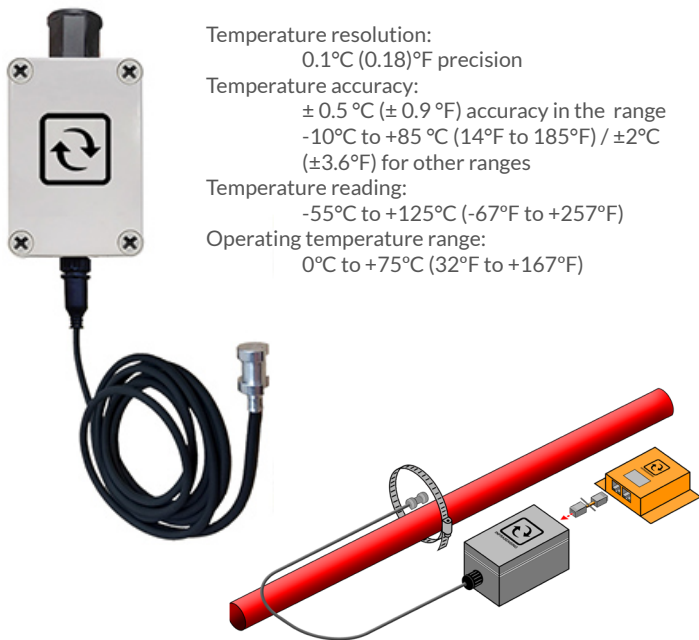


Specialty Sensors - Temperature

Industrial Surface Temperature Sensor

ENV-TSURFACE

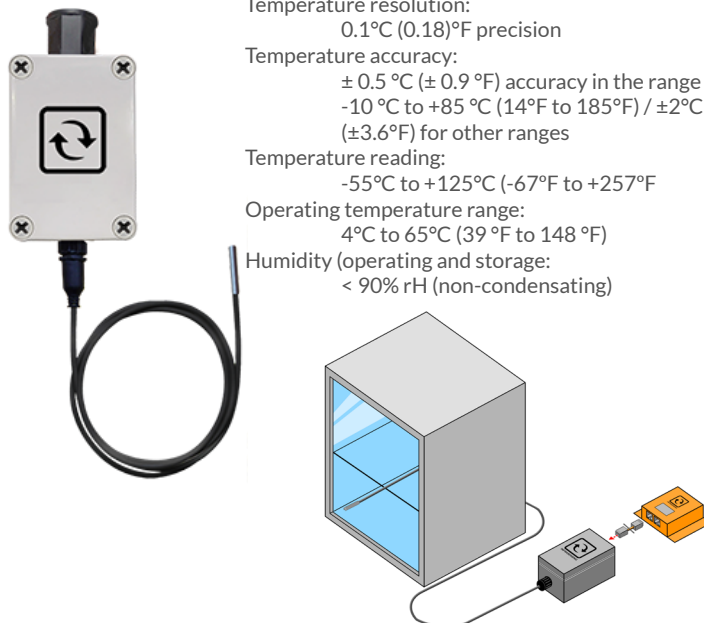
Temperature resolution:
0.1°C (0.18)°F precision
Temperature accuracy:
± 0.5 °C (± 0.9 °F) accuracy in the range
-10°C to +85 °C (14°F to 185°F) / ±2°C
(±3.6°F) for other ranges
Temperature reading:
-55°C to +125°C (-67°F to +257°F)
Operating temperature range:
0°C to +75°C (32°F to +167°F)



Steel Temperature Sensor

ENV-TSTAIN

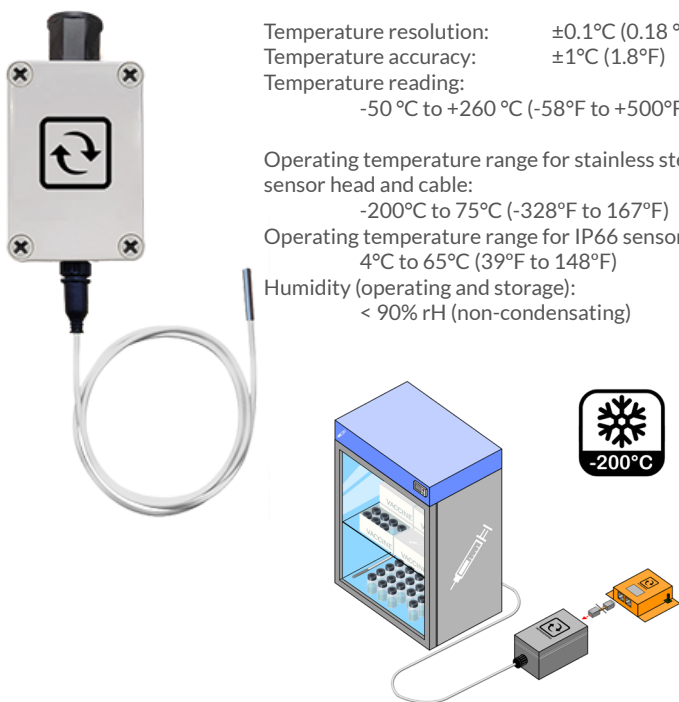
Temperature resolution:
0.1°C (0.18)°F precision
Temperature accuracy:
± 0.5 °C (± 0.9 °F) accuracy in the range
-10 °C to +85 °C (14°F to 185°F) / ±2°C
(±3.6°F) for other ranges
Temperature reading:
-55°C to +125°C (-67°F to +257°F)
Operating temperature range:
4°C to 65°C (39 °F to 148 °F)
Humidity (operating and storage):
< 90% rH (non-condensating)



Ultra Low Temperature Sensor

ENV-TULTRA

Temperature resolution: ±0.1°C (0.18 °F)
Temperature accuracy: ±1°C (1.8°F)
Temperature reading:
-50 °C to +260 °C (-58°F to +500°F)
Operating temperature range for stainless steel
sensor head and cable:
-200°C to 75°C (-328°F to 167°F)
Operating temperature range for IP66 sensor box:
4°C to 65°C (39°F to 148°F)
Humidity (operating and storage):
< 90% rH (non-condensating)





Specialty Sensors - Refrigerant Gas

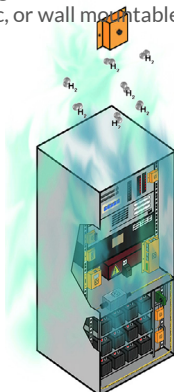
Refrigerant A1 (R410A) Gas Sensor

GAS-A1



Measurement range: 1,700 to 130,000 ppm
Accuracy: $<10,000 \text{ ppm} \pm 1,100 \text{ ppm}$
 $\geq 10,000 \text{ ppm} \pm 11\%$ of delivered concentration
Response time (T90): <20 seconds
Warm up time: 2 minutes
Calibration frequency: Calibration free
Life span: 10+ years lifetime
Operating temperature range: -40°C to 75°C (-40°F to 167°F)
Humidity (operating and storage): $< 90\%$ rH (non-condensating)

Sensor housing: Steel enclosure, industrial grade
Mounting option: OU rack, DIN rail, magnetic, or wall mountable sensor

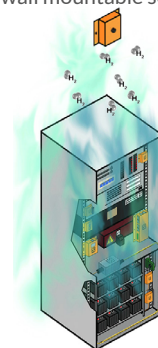


Refrigerant A2L (R32, and R454) Gas Sensor

GAS-A2L



Measurement range: R32 5 to 100% LFL
R454B 9 to 100% LFL
R454C 8 to 100% LFL
Accuracy: R32 $\pm 3\%$ LFL
R454B and R454C $\pm 5\%$ LFL
Response time (T90): <15 seconds
Warm up time: 2 minutes
Calibration frequency: Calibration free
Life span: 10+ years lifetime
Operating temperature range: -40°C to 75°C (-40°F to 167°F)
Humidity (operating and storage): $< 90\%$ rH (non-condensating)
Sensor housing: Steel enclosure, industrial grade
Mounting option: OU rack, DIN rail, magnetic, or wall mountable sensor



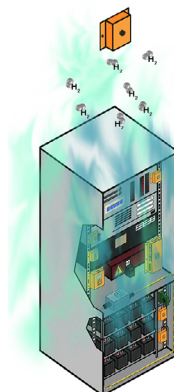
Refrigerant A3 (R290) Gas Sensor

GAS-A3



Measurement range: 5-100% LEL
Accuracy: $(5-25\% \text{ LEL}) \pm 2.5\% \text{ LEL}$
 $(>25\% \text{ LEL}) \pm 10\%$
Response time (T90): <30 seconds
Warm up time: 2 minutes
Calibration frequency: Calibration free
Life span: 10+ years lifetime
Operating temperature range: -40°C to 75°C (-40°F to 167°F)
Humidity (operating and storage): 0 to 100% rH (non-condensating)

Sensor housing: Steel enclosure, industrial grade
Mounting option: OU rack, DIN rail, magnetic, or wall mountable sensor





Specialty Sensors - Gas

Ozone (O₃) Gas Sensor

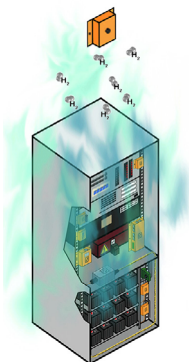
GAS-O₃



Measurement range: 0-5 ppm
Max detecting range: 50 ppm
Response time (T90): <60 s
Warm up time: 10 minutes

Operating temperature range: -20°C to +45°C (-4°F to +113°F)
Humidity (operating and storage): 15 - 90% rH (non-condensating)

Sensor housing: Steel enclosure, industrial grade
Mounting option: 0U rack, DIN rail, magnetic, or wall mountable sensor



Carbon Dioxide (CO₂-NDIR) Gas Sensor

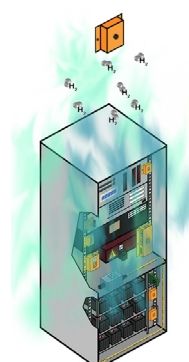
GAS-CO₂-NDIR



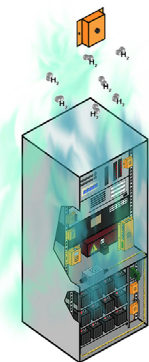
Measurement range: 0-5000 ppm
Accuracy: ±3%
Response time (T90): <3mins(180s) for 90%
Warm up time: <2mins(60s) operational; 10 mins (maximum accuracy)

Operating temperature range: -10°C to +60°C (14°F to +140°F)
Humidity (operating and storage): 0-95% rH (non-condensating)

Sensor housing: Steel enclosure, industrial grade
Mounting option: 0U rack, DIN rail, magnetic, or wall mountable sensor



Flammable Gas Sensor



GAS-FLAMMABLE



Hydrogen (H₂) accuracy: ±5% LEL
Butane (C₄H₁₀) accuracy: ±5% LEL
Propane (C₃H₈) accuracy: ±6% LEL
Methane (CH₄) accuracy: ±3% LEL
Ethane (C₂H₆) accuracy: ±5% LEL
Isobutane (CH₃) accuracy: ±5% LEL
Octane (C₈H₁₈) accuracy: ±5% LEL
Pentane (C₅H₁₂) accuracy: ±5% LEL
Propylene (C₃H₆) accuracy: ±5% LEL
Toluene (C₇H₈) accuracy: ±12% LEL
Xylene (C₈H₁₀) accuracy: ±12% LEL
Detection range: 0-100% LEL
Response time (T90): <20s
Life Span: Up to 10 years

Operating temperature range: -30°C to +60°C (-22°F to 140°F)
Humidity (operating and storage): 0 to 100%RH (non-condensating)

Sensor housing: Steel enclosure, industrial grade
Mounting option: 0U rack, DIN rail, magnetic, or wall mountable sensor



Specialty Sensors - Gas

Ammonia (NH₃) Gas Sensor

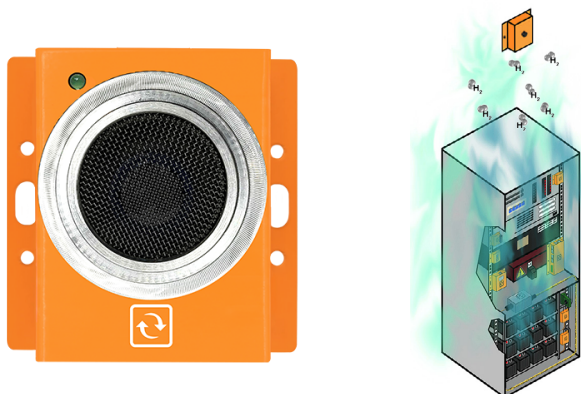
GAS-NH₃



Measurement range: 0-100 ppm
Maximum detection: 200 ppm
Response time (T₉₀): <90 s
Warm up time: 10 minutes

Operating temperature range: -10°C to +60°C (14°F to +140°F)
Humidity (operating and storage): 0-95% rH (non-condensating)

Sensor housing: Steel enclosure, industrial grade
Mounting option: OU rack, DIN rail, magnetic, or wall mountable sensor



Carbon Monoxide (CO) Gas Sensor

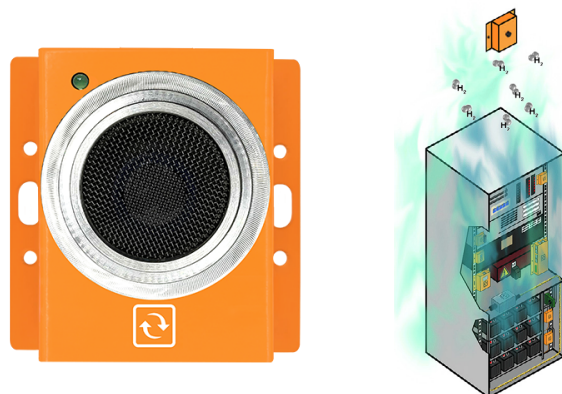
GAS-CO



Measurement range: 0-2000ppm
Max detecting range: 5000 ppm
Response time (T₉₀): <30s
Warm up time: 10 minutes

Operating temperature range: -20°C to +50°C (-4°F to +122°F)
Humidity (operating and storage): 15 - 90% rH (non-condensating)

Sensor housing: Steel enclosure, industrial grade
Mounting option: OU rack, DIN rail, magnetic, or wall mountable sensor



Chlorine (CL₂) Gas Sensor

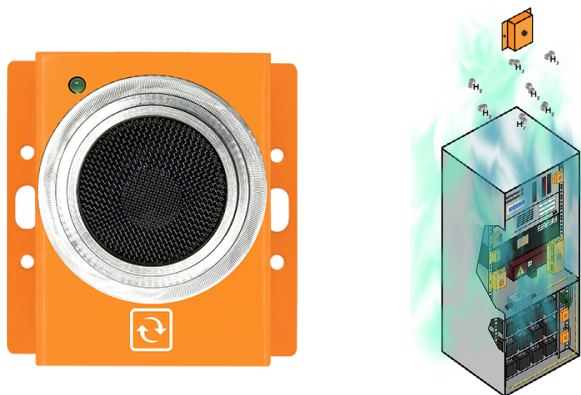
GAS-CL₂



Measurement range: 0-200ppm
Max detecting range: 100 ppm
Response time (T₉₀): <30s
Warm up time: 10 minutes

Operating temperature range: -20°C to +50°C (-4°F to +122°F)
Humidity (operating and storage): 15 - 90% rH (non-condensating)

Sensor housing: Steel enclosure, industrial grade
Mounting option: OU rack, DIN rail, magnetic, or wall mountable sensor



Hydrogen Chloride (HCL) Gas Sensor

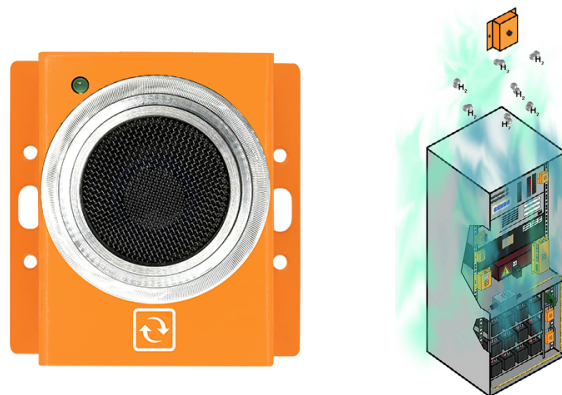
GAS-HCL



Measurement range: 0-50 ppm
Max detecting range: 100 ppm
Response time (T₉₀): ≤70 s
Warm up time: 6-48 hours

Operating temperature range: -20°C to +50°C (-4°F to +122°F)
Humidity (operating and storage): < 90% rH (non-condensating)

Sensor housing: Steel enclosure, industrial grade
Mounting option: OU rack, DIN rail, magnetic, or wall mountable sensor





Specialty Sensors - Gas

Hydrogen Fluoride (HF) Gas Sensor

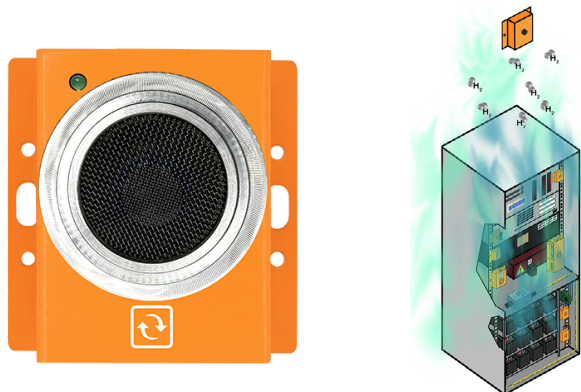
GAS-HF



Measurement range: 0-10 ppm
Max detecting range: 100 ppm
Response time (T90): <90 s
Warm up time: 10 minutes

Operating temperature range: -20°C to +50°C (-4°F to +122°F)
Humidity (operating and storage): 15 - 90% rH (non-condensating)

Sensor housing: Steel enclosure, industrial grade
Mounting option: OU rack, DIN rail, magnetic, or wall mountable sensor



Hydrogen Sulfide (H2S) Gas Sensor

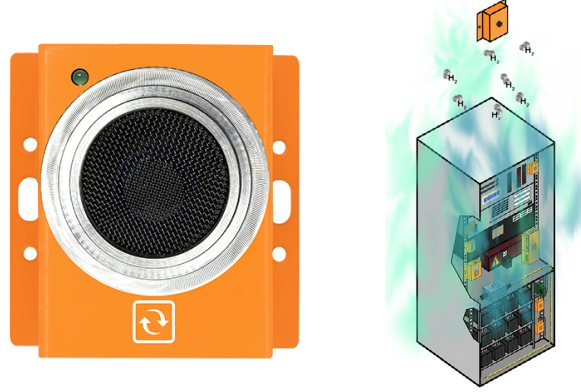
GAS-H2S



Measurement range: 0-100 ppm
Max detecting range: 500 ppm
Response time (T90): ≤20 s
Warm up time: 10 minutes

Operating temperature range: -20°C to +50°C (-4°F to +122°F)
Humidity (operating and storage): 15 - 90% rH (non-condensating)

Sensor housing: Steel enclosure, industrial grade
Mounting option: OU rack, DIN rail, magnetic, or wall mountable sensor



Nitrogen Dioxide (NO2) Gas Sensor

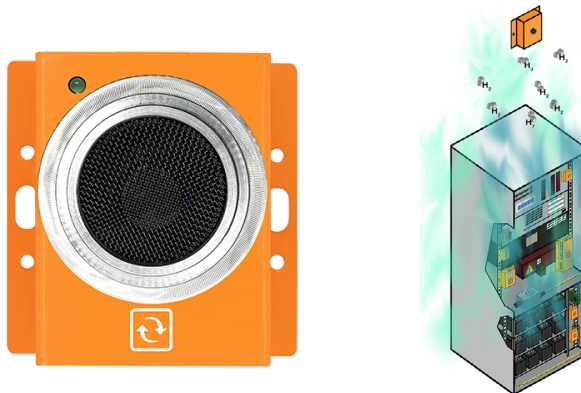
GAS-NO2



Measurement range: 0-20 ppm
Max detecting range: 250ppm
Response time (T90): ≤ 30s
Warm up time: 10 minutes

Operating temperature range: -20°C to +50°C (-4°F to +122°F)
Humidity (operating and storage): 15 - 90% rH (non-condensating)

Sensor housing: Steel enclosure, industrial grade
Mounting option: OU rack, DIN rail, magnetic, or wall mountable sensor



Oxygen (O2) Gas Sensor

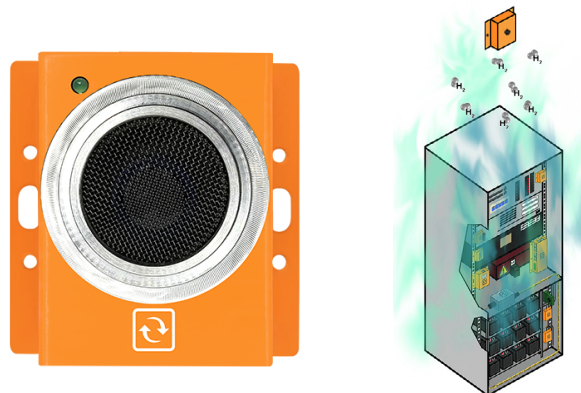
GAS-O2



Measurement range: 0-30% Vol
Max detecting concentration: 30% Vol
Response time (T90): ≤ 30s
Warm up time: 6-48 hours

Operating temperature range: -20°C to +50°C (-4°F to +122°F)
Humidity (operating and storage): 15 - 90% rH (non-condensating)

Sensor housing: Steel enclosure, industrial grade
Mounting option: OU rack, DIN rail, magnetic, or wall mountable sensor





Sulfur Dioxide (SO₂) Gas Sensor

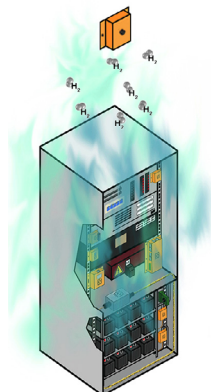
GAS-SO2



Measurement range: 0-20 ppm
Max detecting range: 150 ppm
Response time (T90): ≤45s
Warm up time: 10 minutes

Operating temperature range: -20°C to +50°C (-4°F to +122°F)
Humidity (operating and storage): 15 - 90% rH (non-condensating)

Sensor housing: Steel enclosure, industrial grade
Mounting option: 0U rack, DIN rail, magnetic, or wall mountable sensor





On-Premises Touch Appliance



MON-TOUCH2



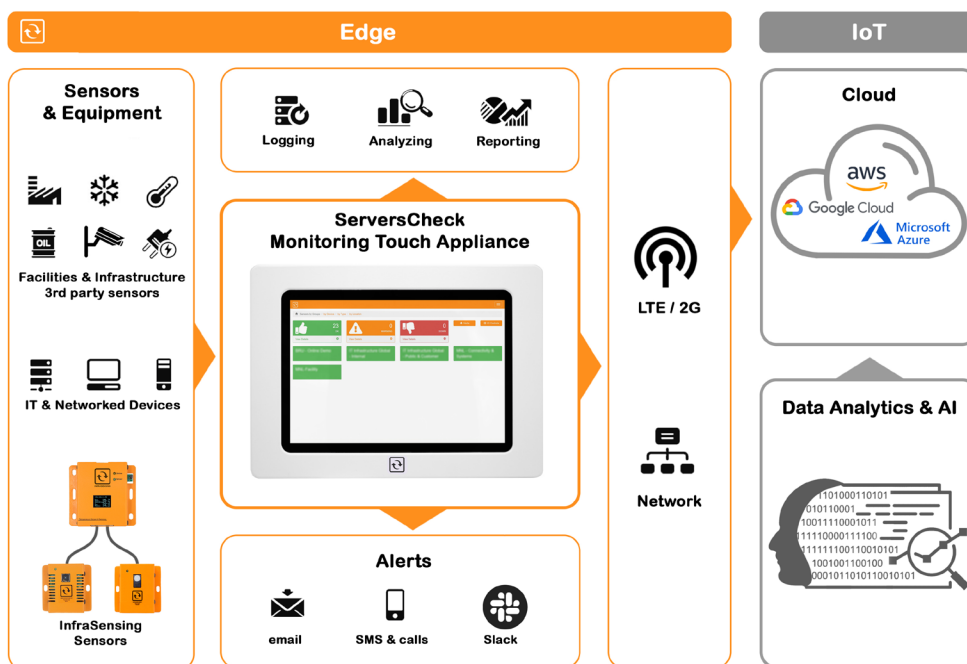
Processor (CPU):
Memory (RAM):
Default Storage:
Optional Additional Storage:
Network:
Cellular Network:
Screen:
Operating System:
Software:
Mount:
AC/DC Power Adapter:
PoE powered:
+24V or -48V input:

Intel Pentium Gold 4425Y
4GB
64GB
WiFi 2.4 & 5Ghz
10.5" touch 1920x1280
Windows 10 IoT Enterprise
ServersCheck Monitoring Software
VESA 100x100
✓
optional
optional

MON-TOUCH2-LTE



Intel Core M
8GB
128GB
up to 1 TB (via SD card)
WiFi 2.4 & 5Ghz
LTE
10.5" touch 1920x1280
Windows 10 IoT Enterprise
ServersCheck Monitoring Software
VESA 100x100
✓
optional
optional





Price Quote & Order Form

SKU	Name	Quantity
Base Unit		
BASE-IT-5	Standard Base Unit	
BASE-IND-6	Industrial Base Unit	
BASE-PWR	Power Adapter for Base Unit	
BASE-PWR-USB	USB Power Cable for Base Unit	
Add-Ons		
ADDON-LTE	LTE/3G/2G Cellular Add-On	
ADDON-WIFI	Wifi Add-On	
ADDON-POE	24v/-48v DC Power Add-On (PoE injector)	
ADDON-RTU	Modbus RTU (Slave) Add-On	
ADDON-SATELLITE	Satellite Add-On	
Expansion Hubs		
EXP-8HUB	SensorHub for Base Unit	

SKU	Name	Quantity
Monitoring Platform		
MON-TOUCH2-LTE	Monitoring Touch Appliance with LTE	
MON-TOUCH2	Monitoring Touch Appliance	

SKU	Name	Quantity
Thermal Imaging Sensor		
THIMG-XS	Thermal Imaging Sensor (extra small)	
THIMG-S	Thermal Imaging Sensor (small)	
THIMG-M	Thermal Imaging Sensor (medium)	
THIMG-L	Thermal Imaging Sensor (Large)	
THIMG-CS	Thermal Imaging Sensor	
THIMG-IRSPOT	Infrared Spot Temperature Sensor	

SKU	Name	Quantity
Temperature Sensors		
ENV-THUM	Temperature and Humidity Sensor	
ENV-TEMP	Temperature Sensor	
ENV-TSURFACE	Industrial Surface Temperature Sensor	
ENV-TSTAIN	Steel Temperature Sensor	
ENV-TULTRA	Ultra Low Temperature Sensor	
ENV-TEMP-MAGNET	Temperature Magnet Sensor	
ENV-LHD	Linear Heat Trace Sensor	

SKU	Name	Quantity
Daisy Chain Sensors		
DAISY-STARTER	Daisy Chain Sensor Start Unit	
DAISY-BOOSTER	Daisy Chain Booster	
DAISY-THUM	Daisy Chain Temp & Humidity Unit	
DAISY-TEMP	Daisy Chain Temperature Sensor Unit	
DAISY-IRSPOT	Daisy Chain IR Spot Temperature Sensor	
DAISY-TEMP-MAGNET	Daisy Chain Temperature Magnet Sensor	
DAISY-THUM-C	ISO17025 Calibrated Cylindrical Daisy Chained Temperature & Humidity Sensor	

SKU	Name	Quantity
Environmental Sensors		
ENV-NOISE	Digital sound & noise level (dbA) sensor	
ENV-AIRFLW	Digital Airflow Sensor	
ENV-AIRPRESSURE	Differential Air Pressure Sensor	
ENV-PARTICLE	Particle Sensor	
ENV-CORROSION	Atmospheric Corrosion (ACM) Sensor	
ENV-DUST	Optical Dust Particle Sensor	
ENV-AIRQUALITY	CO2, VOC, Temperature and Humidity Sensor	
ENV-LEAK OPTICAL	Optical Oil & Hydrocarbon Leak Sensor	
ENV-FLEAK-COMBO	Fuel Leak Detection Sensor	
ENV-FLEAK-5M	Fuel Leak Detection Cable	
ENV-WLEAK-LOC-COMBO5	Water Leak Location Sensor	
ENV-WLEAK-COMBO	Water Detection & Flooding Sensor	
ENV-WLEAK-5M	Water Detection & Flooding Cable	
ENV-WSPOT	Water Spot Sensor	



Price Quote & Order Form

SKU	Name	Quantity
Gas Sensors		
GAS-VOC	VOC Sensor	
GAS-H2-VOC	H2 & VOC Gas Sensor (standard ver.)	
R-GAS-H2-VOC	H2 & VOC Gas Sensor (RS485 ver.)	
GAS-O3	Ozone Gas Sensor	
GAS-SF6	Sulfur Hexafluoride Gas Sensor	
GAS-A1	Refrigerant A1 Gas Sensor	
GAS-A2L	Refrigerant A2L Gas Sensor	
GAS-A3	Refrigerant A3 Gas Sensor	
GAS-CO2-NDIR	Carbon Dioxide NDIR Gas Sensor	
GAS-FLAMMABLE	Flammable Gas Sensor	
GAS-NH3	Ammonia Gas Sensor	
GAS-CO	Carbon Monoxide Gas Sensor	
GAS-CL2	Chlorine Gas Sensor	
GAS-HCL	Hydrogen Chloride Gas Sensor	
GAS-HF	Hydrogen Fluoride Gas Sensor	
GAS-H2S	Hydrogen Sulfide Gas Sensor	
GAS-NO2	Nitrogen Dioxide Gas Sensor	
GAS-O2	Oxygen Gas Sensor	
GAS-SO2	Sulfure Dioxide Gas Sensor	

SKU	Name	Quantity
Power Monitoring Sensors		
PWR-AC-FAIL	AC Power Failure Sensor	
PWR-DC-VOLT	DC Voltage Sensor	
PWR-AC-QUAL	AC Power Quality Sensor	
PWR-AC-CUR	AC Current (Power Usage) Sensor	
PWR-FUEL	Ultrasonic Fuel Level Sensor	
PWR-GROUND	Grounding Sensor	
PWR-BAT-STRING	Battery Monitoring - Control Module	
PWR-BAT-CELL	Battery Monitoring - Battery Module	

SKU	Name	Quantity
Security Sensors		
SEC-DOOR	Door Contact Sensor	
SEC-SHOCK	Digital Shock / Vibration Sensor	
SEC-LUX	Light Sensor	
SEC-SMOKE	Smoke Sensor	
SEC-TILT	Tilt Sensor	
SEC-MOTION	Motion Sensor	
SEC-SOUND	Noise triggered security sensor	

SKU	Name	Quantity
Industrial Legacy Sensors		
IND-IO	IO-Dry Contact Sensor	
IND-0-10V	Industrial 0-10V	
IND-4-20mA	Industrial 4-20mA	



1 - FILL IN THE QUANTITIES NEEDED PER SKU ON THE PREVIOUS PAGE

2 - BILLING ADDRESS

Billing information	
Company Name :	
First & Last Name :	
Street address :	
City :	Postal (Zip) Code :
Country :	
Phone :	Email :

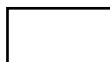
3 - SHIPPING ADDRESS

Billing information	
Company Name :	
First & Last Name :	
Street address :	
City :	Postal (Zip) Code :
Country :	
Phone :	Email :

4 - PRICE QUOTE OR ORDER



SEND ME A PRICE QUOTE



ORDER

5 - ORDER APPROVAL (leave blank for price quotes only)

Authorize your order
Signature :
First name & last name :
Job title:

6 - SEND THIS FORM

You can send this form by email to hello@infrasensing.team or by fax to +1-800-520-4393
Please allow 2-3 business days for processing your form.