# PRODUCT CATALOGUE



Simply smart monitoring Anywhere. Everywhere.

**JANUARY 2022** 



# SensorGateway



#### BASE-WIRED @

Display OLED Web Server: HTTP

Security: Built-in Firewall

Built-In Alerting: email, SNMP Traps, SMS, call

Protocols: SNMP v1,v2,v3
Modbus TCP
XML, JSON

Optional MQTT, Modbus RTU

Network: IPv4 at 10/100 Mbps External Probes: 2 optional probes PoE: IEEE 802.3af

Power Adapter: 12V DC

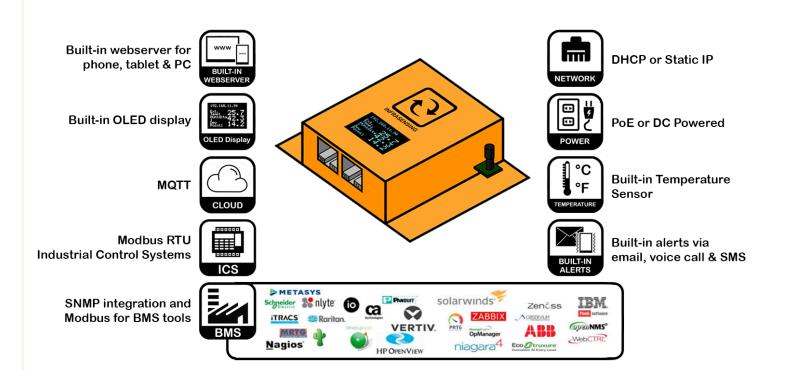
Operating Conditions

Temperature:  $0^{\circ}\text{C to }75^{\circ}\text{C} / 32^{\circ}\text{F to }167^{\circ}\text{F}$ Humidity:  $<90^{\circ}\text{RH (non-codensating)}$ 

**Embedded Temperature Sensor** 

Resolution: Accuracy: 0.1°C / 0.18°F

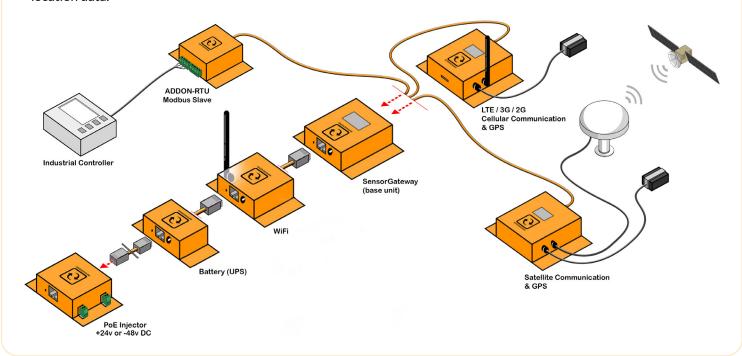
± 1°C (± 2°F) over 0°C to +75°C / 32°F to 167°F





The Sensorgateway, 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 🖎

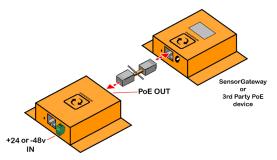
Power In: Power Out: PoE:

Temperature Operating Range: AddOn Housing Dimension:

AddOn Housing Material:

# **POE+** 24v or -48v DC

48v DC (max 22W)
IEEE 802.3at Mode B
10/100 Mbps network speed
0°C to +75°C (32°F to +167°F)
60 mm x 80 mm x 20 mm
(2.75" x 3.74" x 0.78")
metal





# Wifi Add-On



#### ADDON-WIFI 🖎

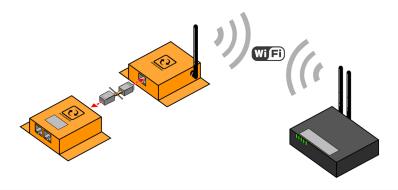
Wifi Frequency: 2.4 GHz Wifi Standards: 802.11 b/g/n

Temperature Operating Range: 0°C to +75°C (32°F to +167°F) **Housing Dimensions:** 70 mm (2.75") x 95 mm (3.74") x

20 mm (0.78")

Housing Material:

metal



# LTE/3G/2G Cellular Add-On



#### ADDON-LTE 🖎

SensorGateway (BASE-WIRED) Power Source: Power Usage: 2800 mW

LTE FDD:

B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/

B20/B25/B26/B28 B38/B39/B40/B41

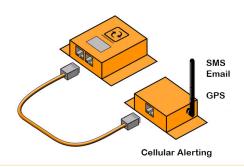
LTE TDD: B1/B2/B4/B5/B6/B8/B19 WCDMA:

GSM: B2/B3/B5/B8 SIM: Micro SIM Optional Positioning: **GPS** 

Wireless Module: Quectel wireless module embedded Operating temperature range: -40°C to +85°C (-40°F to +185F) Operating humidity range: < 90% rH (non-condensating)

Dimensions: 95 mm (3.7") x 84 mm (3.3") x 27 mm (1.0")

Weight: 0.24 kgs (0.53lbs.)





# Satellite Add-On

# SATELLITE ADD-ON

### ADDON-SATELLITE 🖎

Frequency: Latency: Position:

Satellite Network: Regulatory Approval:

Temperature Operating Range:

Connection: Power:

1616 to 1626.5 MHz <20 secs GPS, GALILEO Iridium

FCC, CE, IC, RED, ANATEL, AUSTRALIA -40°C to +85°C (-40°F to +185F)

Connects to a sensor port of the base unit or expansion hub

Powered by the base unit



# 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.

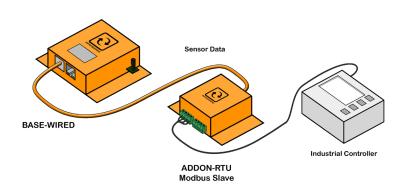
Temperature Operating Range: -40°C to +85

Connection: Power:

-40°C to +85°C (-40°F to +185F)

Connects to a sensor port of the base unit or expansion hub

Powered by the base unit







# Sensorhub for SensorGateway



#### EXP-8HUB 😄

Expansion ports for external sensor probes: 8
Dry contact input ports: 4

Dry contact input ports: 4

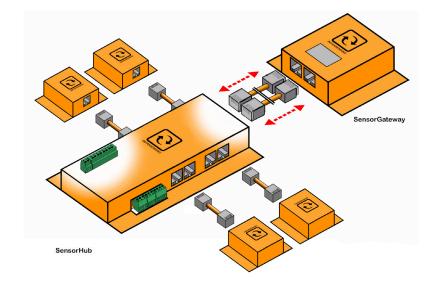
Dry contact output ports: 2 (digital sink 100mA)

Relay outputs: 2 (400VAC/150VDC and 200VA/192W)

Auxillary supply: maximum current capacity of 500mA at 9 to 12 VDC

Power consumption: 650 milliWatts

Dimensions: 165 mm (6.5") x 95 mm (3.7") x 22 mm (0.8")



One Expansion Hub or any Extension modules may be used per Sensorgateway (base unit)



# Wireless Hub & Nodes



### EXP-LWHUB 😄

Communication protocol:
Max distance with line of sight:
Regulatory approval:
Multiple frequencies for different regions:
Sensor nodes per wireless but:

Sensor nodes per wireless hub:
Wireless hubs per base unit:
Operational temperature:

OU rack mountable DIN Rail mountable with optional DIN Clips metal steel enclosure

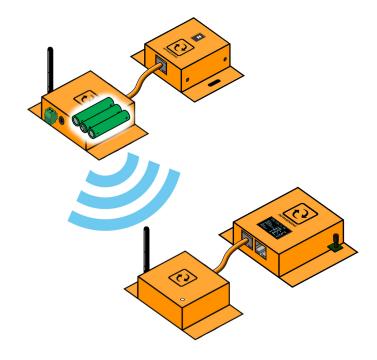
LoRa point to point 2km or 1.2 miles FCC, CE EU868, US916 20

-40° to +85°C(-40° to +185F)



#### NODE-LW-1P

Continuous power: Battery power: Sensors support wireless node: 12v DC, 24v DC, 5v (USB-C) 3x AAA batteries - user changeable



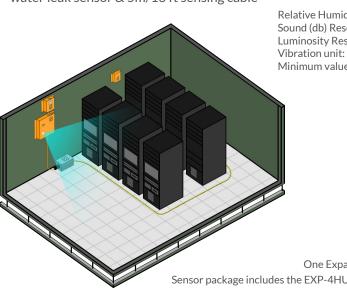


# Multi-Sensor & Hub





- temperature
- humidity
- dew point
- shock
- sound
- motion - power failure
- luminosity (light in Lux)
- smoke sensor
- water leak sensor & 5m/16 ft sensing cable





### EXP-4HUB 🔘

Expansion ports for external sensor probes:4 digital and 1 analog sensor

Dry contact input ports:

Dry contact output ports:

Auxillary supply:

Power consumption: Dimensions:

Housing:

Operating temperature range:

Specifications of on board sensors:

Temperature Resolution:

Temperature Accuracy:

Readings in Celsius or Fahrenheit

Relative Humidity Measurement Range:

Relative Humidity Accuracy:

Relative Humidity Long Term Stability:

Sound (db) Resolution: Luminosity Resolution:

Minimum value:

4 (digital sink 100mA)

maximum current capacity of 500mA at 9 to 12 VDC

650 milliWatts

160mm (6.3") x 165mm (6.5") x 60mm (2.4")

Orange metal casing with one LED status indicators 0°C to +75°C (32°F to +167°F) in PoE mode

0.1°C (0.18)°F precision

± 0.5°C (± 0.9 °F) over 0°C to +60°C

0 to 100 % RH

Relative Humidity Resolution or precision: 0.1% RH and 1% RH

 $\pm$  2 % RH between 10 % RH to 90 % RH and  $\pm$  4 % RH

below 10 % RH and above 90 % RH

< 1 % RH/year

1 db precision

0.5 Lux precision

G force 1G

One Expansion Hub or any Extension modules may be used per Sensorgateway (base unit) Sensor package includes the EXP-4HUB, Smoke sensor (via dry contacts) and water leak sensor with leak sensing cable



# **Temperature Sensors**

# Thermal Image Camera Sensor





**Image Resolution ENV-THIMG-XS** Part Number **Object Temperature** Thermal Image Size 768 pts **Temperature Reporting** Horizontal Field of View

Vertical Field of View 75° Accuracy ±1°C

-40°C to 300°C (16 x 12 pixels) min & max temp 110° (wide)

Small **ENV-THIMG-S** -40°C to 300°C 768 pts (32 x 24 pixels) min & max temp 110° (wide) 75°

±1°C

Medium **ENV-THIMG-M** 0°C to 120°C 4800 pts (80 x 60 pixels) min & max temp 51° (narrow) 63° ±5°C

Large **ENV-THIMG-L** 0°C to 120°C 9600 pts (160 x 120 pixels) min & max temp 56° (narrow) 71° ±5°C

# (L) large - 9600 points (M) medium - 4800 points (S) small - 768 points (XS) extra small - 192 points SensorGateway

# Temperature & Humidity Sensor



#### ENV-THUM 🖎

**Temperature Specs** 

0.1°C/0.18°F Resolution:  $0^{\circ}$  to  $70^{\circ}$  C /  $14^{\circ}$ F to  $185^{\circ}$ F Range: Accuracy  $\pm 0.5$ °C from 0°C to +60°C

± 1°F from 14°F to 185°F

**Humidity Specs** 

0.1% RH Resolution: 0% to 100% RH Range:

± 2% between 10% and 90%RH Accuracy: ± 4% < 10% and > 90% RH

### **Temperature Sensor**



#### ENV-TEMP 💿

Resolution: Range: Accuracy

0.1°C/0.18°F 0°-70°C / 14°F to 185°F  $\pm 0.5$ °C from -10°C to +85°C ± 1°F from 14°F to 185°F

# **Infrared Spot** Temperature Sensor



#### **ENV-IRSPOT**

Resolution: Range: Accuracy

0.1°C / 0.18°F 0°-70°C / 14°F to 185°F  $\pm 0.5$ °C from -10°C to +85°C ± 1°F from 14°F to 185°F



# **Temperature Sensors**

# Stainless Steel Temperature Sensor

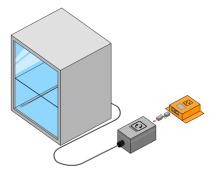


### ENV-TSTAIN 🖎

Resolution: Range: Accuracy

0.1°C/0.18°F

-55°C to +125°C / 14°F to 185°F  $\pm 0.5$ °C from -10°C to +85°C ± 1°F from 14°F to 185°F



# Industrial Surface Temperature Sensor

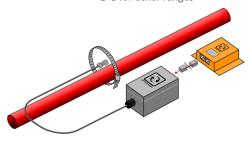


### **ENV-TSURFACE**

0.1°C/0.18°F Resolution:

-55°C to +125°C (-67°F to +257°F) Reading: Accuracy  $\pm~0.5$ °C (+/- 0.9 °F) from 0°C to +85°C

± 1°C for other ranges



# Ultra Low Temperature Sensor



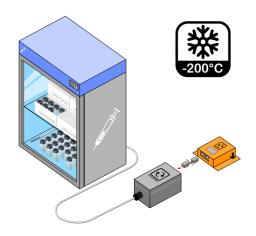
### ENV-TULTRA 😊

SensorGateway (BASE-WIRED) Power Source:

Power Usage 60 mW

Readings: Celsius or Fahrenheit Temperature Precision: ±0.1°C (0.18)°F Temperature Accuracy: ±1°C (1.8°F)

-196°C to +75°C (-320°F to +167°F) Temperature Reading:



# **Daisy Chain Sensors**

±0.5°C (+/- 0.9 °F) from -10°C to +85°C / 14°F to 185°F

# Daisy Chain Temperature (Humidity) Sensor



**DAISY STARTER** 

**3** 



DAISY-TEMP DAISY-THUM

0

Temperature Resolution: Temperature Accuracy: Temperature Reading: Readings in Celsius or

Fahrenheit

Certified SensorGateway operating temperature range: Operating humidity range:

Dimensions: Housing:

-55°C to +125°C (-67°F to +257°F) 0°C to +75°C (32°F to +167°F)

0.1°C (0.18)°F precision

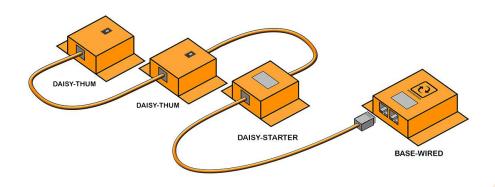
in PoE mode < 90% rH (non-condensating)

74 mm (2.9") x 66 mm (2.59") x 22 mm (0.8")

Orange metal case with status led

**OU** Rack mountable

Maximum of 1x DAISY-STARTER and 20x DAISY-TEMP (or 20x DAISY-THUM) per SensorGateway



# Daisy Chain Infrared Spot Temperature Sensor



DAISY-STARTER 🗪

Temperature object measurement range: Temperature Accuracy:

Field Of View (FOV):

Distance: Readings:

Certified Operating temperature range: Operating humidity range:

Dimensions:

Housing:

-70°C to +380°C (-94°F to +716°F) in PoE mode +/- 1°C from 0°C to +65°C / 32°F to 149°F

Can detect IR heat from up to approximately 30m/90ft

Celsius or Fahrenheit

-40°C to +125°C (-40°F to +257°F) in PoE mode

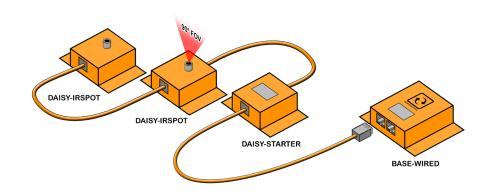
< 90% rH (non-condensating) 74 mm (2.9") x 66 mm (2.59") x 22 mm (0.8")

Orange metal case with status led

OU Rack mountable or Wall mountable

 ${\it Maximum\,of\,1x\,DAISY-STARTER\,sensor\,and\,20x\,DAISY-IRSPOT\,per\,SensorGateway}$ 







# **Other Environmental Sensors**

# **Optical Dust Particle Sensor**

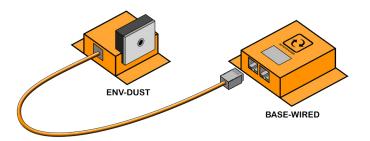


### ENV-DUST 💿



Method Range: Particle size: Sensitivity:

Optical IR dust sensing 600 μg/m<sup>3</sup> PM2.5 and PM10  $100 \, \mu g/m^3$ 



Not suitable for deployment in high risk areas. For increased accuracy, consider deploying multiple sensors.

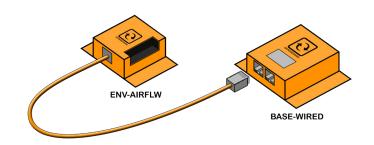
# **Digital Airflow Sensor**



### ENV-AIRFLW 🖎

Resolution:  $0.1 \, \text{m/s}$ 0 m/s to 3 m/s Range: Accuracy: ± 5%

Units: meters per second



# Differential Air Pressure Sensor



### ENV-AIRPRESSURE 🗪



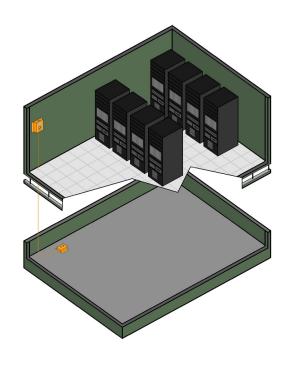
Dimensions: Housing:

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

70mm (2.7") x 88mm (3.4") x 22mm (0.8") Orange metal casing with one LED status indicators

Digital air pressure meter

- Accuracy: 0.5 Pa
- Air Pressure Range: -500 to + 500 Pa
- Flow polling rate: min 1 second





# **Other Environmental Sensors**

### Indoor Air Quality Sensor

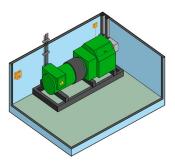


#### ENV-TVOC 🖎

Operating temperature range: Operating humidity range: Sensing range:

0 to 50°C

5 to 95% rH (non-condensating) 450 - 2000 ppm CO2 equivalents 125 - 600 ppb TVOC equivalents

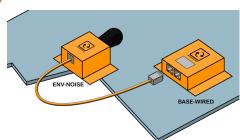


# Digital sound & noise level (dbA) sensor



#### **ENV-NOISE** 🗪

30 - 120dB Range: Accuracy: ±0.5 dB



### Particle Sensor



### **ENV-PARTICLE**



Power source:

Power usage:

Mass concentration range: Particle detection size range:

Mass concentration:

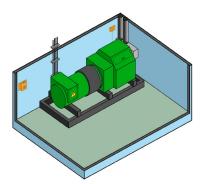
Number concentration: Mass concentration resolution:

Mass concentration precision:

PM1 and PM2.5:

PM4 and PM10:





Lower limit detection:

Lifetime:

Acoustic emission level:

Long term acoustic emission level drift:

Sampling interval:

SensorGateway (BASE-WIRED) 156 mW

 $0 - 1000 \, \mu g/m^3$ 

PM1.0, PM2.5, PM4 and PM10

PM0.5, PM1.0, PM2.5, PM4 and PM10

 $1 \, \mu g/m^3$ 

 $\pm 10\,\mu g/m^3 \mathbin{@} 0$  to  $100\,\mu g/m^3$ 

±10 % @ 100 to 1000 µg/m<sup>3</sup>

 $\pm 25 \,\mu g/m^3 @ 0 to 100 \,\mu g/m^3$ 

±25 % @ 100 to 1000 µg/m<sup>3</sup>

 $\pm 1.25 \, \mu g/m3 @ 0 \text{ to } 100 \, \mu g/m^3$ ±1.25 % @ 100 to 1000 μg/m<sup>3</sup>

10 years operating continuously 24hrs/day

25dB(A) @ 0.2m

+0.5dB(A)/year @ 0.2m

 $1 \pm 0.04s$ 





### **Digital Gas Sensors**

#### ENV-GAS-XXXX 🔾

This sensor is designed for detecting the presence and level of specific gas concentrations in critical facilities.

A sensor is assembled and programmed to detect one of the 21 different gas types we support: C2H4, CH2O, CH3SH, CH4, CL2, CLO2, CO, CO2, ETO, H2, H2S, HCL, HCN, HF, NH3, NO, NO2, O2, O3. PH3. SO2. R134a

no pc required for the ServersCheck to operate once configured - measures gas in particles per million (ppm)

- compact plug & play sensor.
- designed for indoor use.
- steel enclosure.
- industrial grade.
- Ou rack, DIN rail or wall mountable sensor.
- plugs into the base unit.
- powered by the base unit.
- alerts via SNMP Traps, email or SMS.
- wired or optionally wireless.
- integrates over IP using Modbus TCP, SNMP, XML, JSON.
- optional RS-485 version available to integrate with your own gateway or controller.

Measurement units: ppm (particles per million)

#### Available gas type sensors:

Ammonia	NH3	0-5,000 ppm
Carbon Dioxide	CO2	300-10,000 ppm
Carbon Monoxide	CO	0-1,000 ppm
Chlorine	CL2	0-100 ppm
Chlorine Dioxide	CLO2	0-50 ppm
Ethylene	C2H4	0-100 ppm
Ethylene Oxide	ETO	0-500 ppm
Formaldehyde	CH2O	0-10 ppm
Hydrogen (0-100% LEL)	H2	0-40,000 ppm
Hydrogen Chloride	HCL	0-50 ppm
Hydrogen Cyanide	HCN	0-50 ppm
Hydrogen Fluoride	HF	0-10 ppm
Hydrogen Sulfide	H2S	0-200 ppm
Methane & LNG	CH4	300-10,000 ppm
Methyl Mercaptan	CH3SH	0-10 ppm
Nitric Oxide	NO	0-250 ppm
Nitric Dioxide	NO2	0-300 ppm
Oxygen	O2	0-25 % VOL
Ozone	O3	0-20 ppm
Phosphine	PH3	0-1,000 ppm
Propane	CH3SH	300-10,000 ppm
Sulphur Dioxide	SO2	0-200 ppm

# Carbon Dioxide (CO2) Sensor

### ENV-GAS-CO2 ©



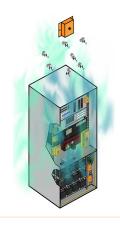
SensorGateway (BASE-WIRED) Power source

6000 CO2 ppm Output sensitivity 0-5% vol Range Accuracy ±5%

Operating temperature range -20°C to 60°C (-4°F to +140°F) Operating Humidity 0% to 95% rH (non-condensating) Dimensions 71.5 mm (2.8") x 68 mm (2.7") x 23 mm (0.9")

0.12kg (0.26 lbs.) Weight





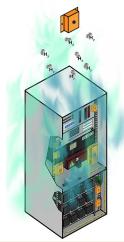
### Carbon Monoxide (CO) Sensor

#### ENV-GAS-CO 🗪

Power source: Measurement Range: Max detecting concentration: Output sensitivity: Resolution ratio: Repeatability: Accuracy:

SensorGateway (BASE-WIRED) 0-1000ppm 2000ppm 0.070±0.015 µA/ppm 0.5ppm <2% output value ±5%









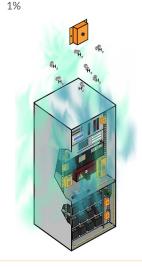
### Hydrogen (H2) Sensor

#### ENV-GAS-H2 🗪

Operating temperature range: Operating humidity range: Hydrogen Level: Resolution:

Accuracy: Precision: 0°C to +75°C (32°F to +167°F) < 90% rH (non-condensating) 0 to 25% LEL 100 ppm (parts per million) ±1%





# Hydrogen Chloride (HCL) Sensor

#### ENV-GAS-HCL 😊

Power source: Measurement range: Max detecting concentration:

Output sensitivity: Resolution ratio: Repeatability:

Operating temperature range: Operating Humidity:

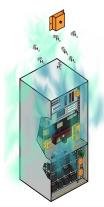
Dimensions:

SensorGateway (BASE-WIRED)

0-20 ppm 200 ppm  $0.8-0.4 \,\mu\text{A/ppm}$ 0.1 ppm <2 % output value

-20°C to +50°C (89.6°F to +210.2°F) 0% to 90% rH (non-condensating) 71.5 mm (2.8") x 68 mm (2.7") x 23 mm (0.9")





### Hydrogen Flouride (HF) Sensor

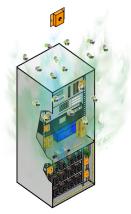
#### ENV-GAS-HF

Operating temperature range: Operating humidity range: Hydrogen Level: Resolution: Accuracy:

Precision:



0°C to +75°C (32°F to +167°F) < 90% rH (non-condensating) 0 to 25% LEL 100 ppm (parts per million) ±1% 1%



# Hydrogen Sulfide (H2s) Sensor

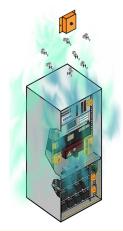
### ENV-GAS-H2S 🖎

Power source: Measurement Range: Max detecting concentration: Output sensitivity:

Resolution ratio: Repeatability:



SensorGateway (BASE-WIRED) 0-100 ppm 500 ppm  $0.8-0.15 \,\mu\text{A/ppm}$ 0.1 ppm <2% output value







# Oxygen (O2) Sensor

# ENV-GAS-O2 🗪

Power source: SensorGateway (BASE-WIRED)

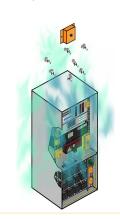
Measurement range: 0-25%Vol 30% Vol Max detecting concentration:

Output sensitivity: 0.1-0.3 mA (In air) Repeatability: <2% output value Operating temperature range: -20°C to +50°C (89.6°F to +210.2°F)

Operating humidity: 0% to 99% rH (non-condensating) 71.5 mm (2.8") x 68 mm (2.7") x 23 mm (0.9") Dimensions:

Weight: 0.12kg (0.26 lbs.)





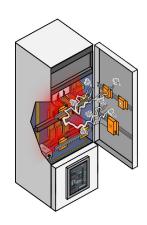
# Ozone (O3) Sensor

#### ENV-GAS-O3 🗪

Operating temperature range: 0°C to +75°C (32°F to +167°F) Operating humidity range: < 90% rH (non-condensating) Maximum Detection: 40,000 H2 ppm (=100% LEL) Resolution: 0.02 ppm (parts per million)

- Lab calibrated against ozone reference gas





# Radon (Rn) Sensor

#### ENV-GAS-RADON 🖎

Power Source: SensorGateway (BASE-WIRED)

17 cph @ 100 Bq/m3 Sensitivity: Range: 1 - 1,000,000 Bq/m<sup>3</sup>

Accuracy: ±10%

±10% at 370 Bq/m3 Precision:

Operating temperature range: 0°C to 60°C (32°F to +140°F) 0% to 90% rH (non-condensating) Operating Humidity:

Dimensions: 71.5 mm (2.8") x 68 mm (2.7") x 23 mm (0.9")

Weight: 0.12kg (0.26 lbs.)







# **Liquid Leak Sensors**

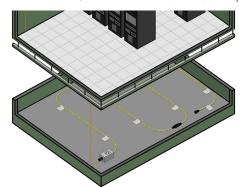
# Water Leak and Flooding Sensor



#### ENV-WLEAK-COMBO-5M

Drv / Wet Cable length: 5m / 17ft

Cable can be extended to 200m (660ft) Provides a WET/DRY indication in SensorGateway



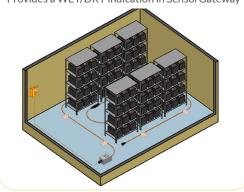
### **Acid Battery Leak Sensor**



### ENV-BLEAK-COMBO 📀

Result: Dry / Wet Cable length: 6m / 20ft

Cable can be extended to 100ft (30m) Provides a WET/DRY indication in SensorGateway

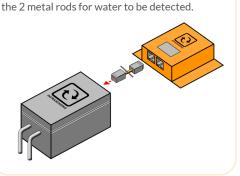


### Water Spot Sensor



Result: Dry/Wet

This sensor requires a small level of water to be present to create the electrical field between



# Industrial Water Leak Location Sensor



#### ENV-WLEAK-LOC-COMBO5 @

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

Operating humidity range: < 90% rH (non-condensating)

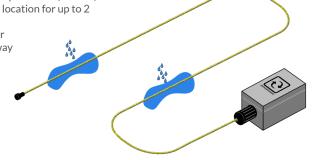
Sensor Housing Dimensions: 65mm (2.5") x 95mm (3.74") x 55mm (2.16")

Sensor Housing Material: IP 68 plastic housing Water Leak Detection Cable:

5m/17ft reusable water sensitive cable.

Detects leaks along its cable with an accuracy of up to 30cm (12 inch). Can detect multiple leaks at the same time, with location for up to 2 sequential leaks

Cable can be extended to 50m (150ft) per sensor Provides a WET/DRY indication in SensorGateway





# **Liquid Leak Sensors**

# **Fuel Leak Detection Sensor**



### ENV-FLEAK-COMBO 😊

Operating temperature range:  $0^{\circ}$ C to +75 $^{\circ}$ C (32 $^{\circ}$ F to +167 $^{\circ}$ F) in PoE mode

Operating humidity range: < 90% rH (non-condensating)

Sensor Housing Dimensions: 65mm (2.5") x 95mm (3.74") x 55mm (2.16")

Sensor Housing Material: IP 65 plastic housing

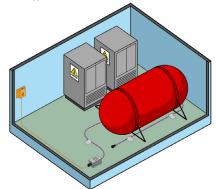
Fuel Leak Detection Cable: 4.5 meters / 14ft cable (single use only)

Cable can be extended to 30m (100ft)

Cable cannot be reused after detection and should be replace

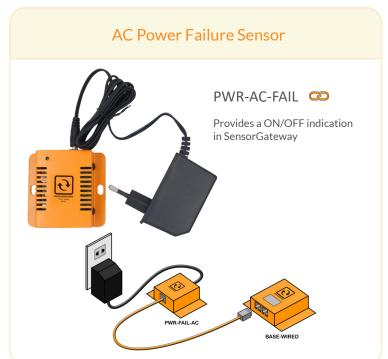
 $Provides\ a\ WET/DRY\ indication\ in\ Sensor Gateway$ 

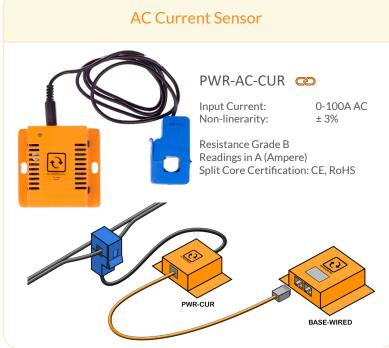
Fuel Type	Fuel Type Typical response time at 20°C (68°F)	
#1 diesel fuel	60 minutes	
#2 diesel fuel	120 minutes	
Gasoline	12 minutes	
JP5 jet fuel	70 minutes	
JP8 jet fuel	50 minutes	
Jet-A jet fuel	50 minutes	





# **AC Single Phase Sensors**

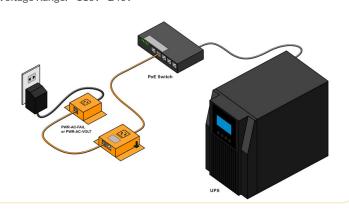








SensorGateway Measures the voltage of the socket Voltage Range: 110v - 240v



# **Power Quality Sensor**



PWR-AC-QUAL 🖎

Voltage:
Operating Humidity Range:

Dimensions:
Housing:

Housing: 0U Rack & DIN Rail mountable 100-240V AC Single Phase < 90% rH (non-condensating)

 $135 \text{ mm} (5.32") \times 100 \text{ mm} (3.94") \times 40 \text{ mm} (1.58")$ Orange metal case with status OLED display



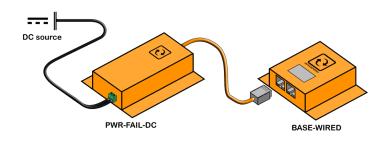
# **DC Power Sensors**





### PWR-DC-FAIL 🖎

Provides a ON/OFF indication in SensorGateway



# DC Power Voltage Sensor



### PWR-DC-VOLT 😊

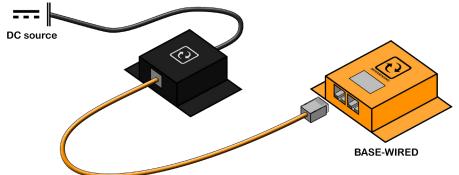
Input Current: 0-300A DC
Non-linerarity: +/- 3%
Voltage Range: 0-56V DC
Current Accuracy: 1A

Readings in A (Ampere), V, W & kWh Split Core Certification: CE, RoHS

Operating humidity range: < 90% rH (non-condensating)
Dimensions: 74 mm x 66 mm x 22 mm
(2.9" x 2.59" x 0.8")

Housing: Orange plastic case with status led

0U Rack & DIN Rail mountable





# Low Voltage DC Power Meter



### PWR-DC-METER 🝩

Power Source: Power Usage: Input Current: Voltage: Accuracy: Readings in: Standards:

Operating temperature range: Operating humidity range: Dimensions: Weight:

SensorGateway (BASE-WIRED)

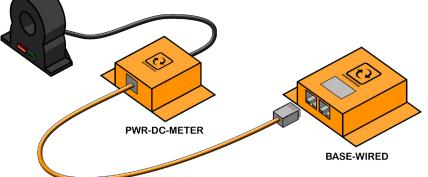
1000 mW 0 - 400A 0 - 100V DC +/- 1%

A (Ampere), V, W & kWh CE EN61000-6-4/2006 + A1 2011; EN64000-6-2/2005; EN61010-1/2010

-15°C to +65°C (5°F to +149°F) < 90% rH (non-condensating)

89.1 mm (3.5") x 99.25 mm (3.9") x 28.5 mm (1.12")

0.57 kgs (1.26 lbs.)





# **Battery Monitoring**

# Battery Monitoring System (BMS)

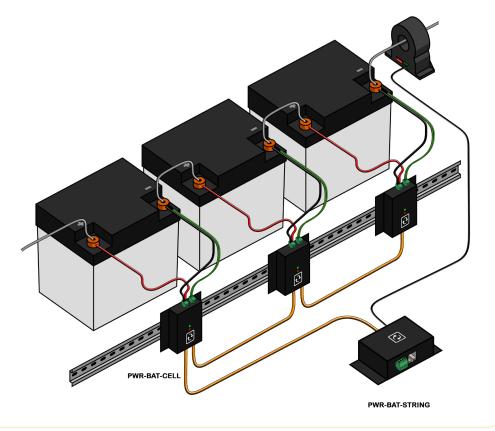


# PWR-BAT-STRING 🖎

#### PWR-BAT-CELL 💿

- for 2V, 6V or 12V batteries with M8 terminal connector.
- measures temperature, voltage & impedance of individual batteries
- measures battery string voltage and total impedance
- measures battery string charge and discharge current
- monitor for gas leaks from battery cells (HF, H2, CO, CO2) indicating possible thermal runaways.
- plugs into the base unit.
- powered by the base unit for up to 30 batteries. For more additional  $12 \nu\,\text{PSU}$  required.
- alerts via SNMP Traps, email, SMS or voice calls.
- wired or optionally wireless.
- integrates via Modbus TCP, SNMP, JSON with other systems through the base unit.
- optional MQTT version available to connect it to a cloud of your choice.
- optional PWR-BAT-STRING RS485 version available to directly connect the BMS to your Industrial Control Systems without needing the base unit.







# **Ultrasonic Fuel Level Sensor**



#### PWR-FUEL 🖎

Sensor Temperature Operating Range: 4°C to 65°C (39F to 148F)
Measurement method: Acoustic sonic measurement

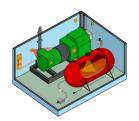
Tank depth: 0-2000 mm (6.5 ft)

Accuracy Distance: 0-2000 mm (6.5 ft) at 2 mm accuracy

Mounting: SAE 5 stud mounting pattern with gasket, seal and screws (top mount only)

Environmental temperature: 4-65 deg C Chemical resistance: Petrol, diesel

Tank type style: Metal and plastic with non linear capacity



# **Ground Monitoring**



#### PWR-GROUND 🖎

Operating temperature range: Operating humidity range: Dimensions:

Housing:

i lousilig.

Monitors up to 3 different ground systems

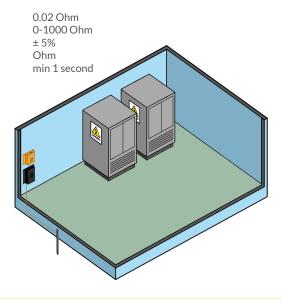
Resolution:

Range:

Accuracy:

Units:

Contact polling rate: Requires use of fuse cables  $0^{\circ}\text{C}$  to +75°C (32°F to +167°F) in PoE mode < 90% rH (non-condensating) 70mm (2.7") x 88mm (3.4") x 22mm (0.8") Orange metal casing with LED status indicators





# **Security Sensors**

# **Light Sensor**

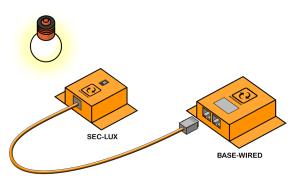


### SEC-LUX 🖎

Resolution: 1 Lux

Range: 0 to 65000 Lux

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



# Digital Shock / Vibration Sensor

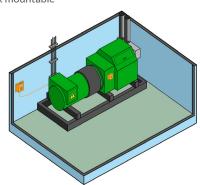


### SEC-SHOCK 🖎

Vibration unit: G force ±2G Nominal value: 1G Sensor sensitivity: 0.18G

Dimensions:  $74mm (2.9") \times 66mm (2.59") \times 22mm (0.8")$ Housing: Orange metal case with status led

OU Rack mountable

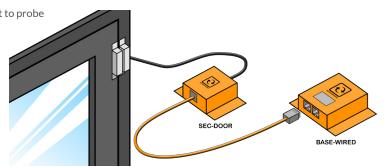


# **Door Contact Sensor**



### SEC-DOOR 🖎

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





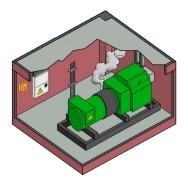
# **Security Sensors**

### **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



### **Motion Sensor**



#### SEC-MOTION ©

Radiated RF immunity: Conducted RF immunity: Static immunity: Transient immunity:

 $\begin{array}{ll} \mbox{Transient immunity:} & 2.4 \mbox{ kV} @ 1.2 \mbox{ joules} \\ \mbox{Walk detection speed:} & 0.5 \mbox{/s to } 10 \mbox{/s to } 3 \mbox{ m/s)} \\ \mbox{Coverage angle (wall/wall lens):} & 100 \mbox{ maximum} \\ \end{array}$ 

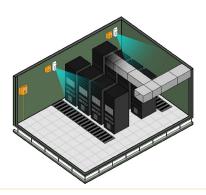
Coverage angle (wall/wall lens): Vertical adjustment: Mounting heights:

+2 to -5 7' to 10.5' / 2

7' to 10.5' / 2.1m to 3.2m (nominal 7.5' / 2.3m)

20 V/m with 80% AM over range, 27MHz to 1.0GHz

10V with 80% AM over range 150kHz to 80MHz

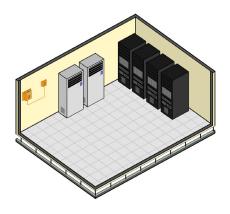


# Sound & Noise Level Sensor



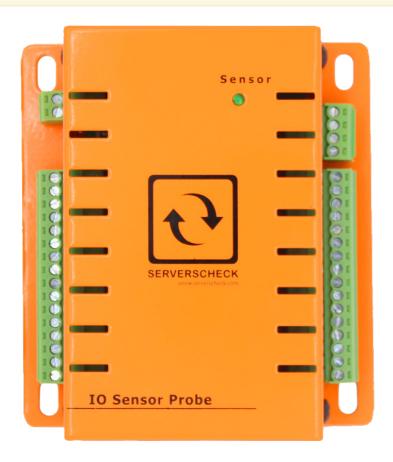
### SEC-SOUND @

Resolution: Range: Accuracy: 0.01db 10 to 90db 1 dB





# **IO** - Dry Contact Sensor

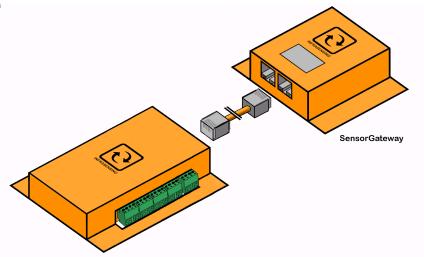


### IND-IO 💿

2x 8 dry contact inputs 4 dry contact outputs

12 VDC power out to power attached devices: Contact polling rate:

max 7 min 1



Requires the SensorGateway v4 or higher to operate • max 1 (one) IO Sensor Probe per SensorGateway



# **On-Premises Touch Appliance**



#### MON-TOUCH2

WiFi 2.4 & 5Ghz



Processor (CPU): Intel Pentium Gold 4425Y

Memory (RAM): 4GB Default Storage: 64GB

Optional Additional Storage:

Network: Cellular Network:

Screen: 10.5" touch 1920x1280
Operating System: Windows 10 IoT Enterprise

Software: ServersCheck Monitoring Software

Mount: VESA 100x100

AC/DC Power Adapter:

PoE powered: optional +24V or -48V input: optional

#### MON-TOUCH2-LTE

0

Intel Core M 8GB 128GB up to 1 TB (via SD card)

WiFi 2.4 & 5Ghz

VVIFI 2.4 & 3GI

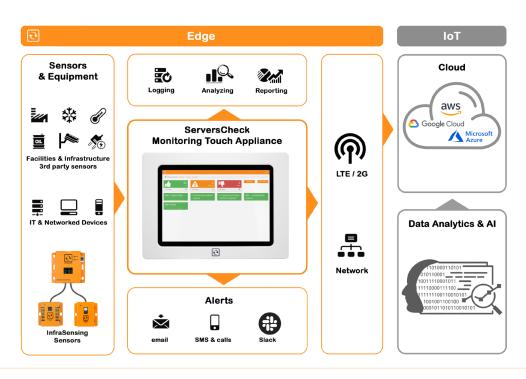
LIE

10.5" touch 1920x1280 Windows 10 IoT Enterprise ServersCheck Monitoring Software

VESA 100x100

**V** 

optional optional





# **Monitoring Platform**

# **On-Premises Appliance**



### MON-APPLIANCE 🗪

Processor (CPU): Intel Quad Core Atom Z8350

Memory (RAM): 4GB Default Storage: 64GB

Optional Additional Storage: up to 1 TB (via SD card)
Network: GB Ethernet & WiFi

Screen: HDMI

Operating System: Windows 10 IoT Enterprise

Software: ServersCheck Monitoring Software

Mount: rack & DIN rail

AC/DC Power Adapter: ✓

PoE powered: optional +24V or -48V input: optional

