SCADASIREN™

WIRELESS MULTI SENSOR MONITOR WITH VISION

Industrial Wireless Flowmeter with Integrated Multimedia Vision Technology

Flow, Level, Water Quality, Pressure, Weather . . . .

AC , DC or Solar Power Kits

Rugged Design with Clear View Window and LCD

Cellular or WiFi Wireless Connectivity

SCADASiren® — Vision-Powered Monitoring You Can Trust.

The **SCADASiren®** is a rugged, wall-mounted **monitoring system** designed for precision and reliability. With a bright LCD display and integrated **flow totalizer**, it delivers real-time insights for critical environmental and infrastructure applications.

Seamless SCADA integration supports **4-20 mA**, **RS-485**, serial, and analog outputs, while optional **USB data collection** simplifies onsite access. Automated uploads to the secure **BlueLive® Cloud** or FTP keep your data instantly available for analysis.

An **integrated vision platform** connects directly to high-resolution cameras, capturing synchronized images with sensor data. Receive **instant alarms** with critical readings **and visual evidence**, enabling faster decisions and smarter responses.

SPECIFICATION

Enclosure:	10 x 8 x 4in (HxWxD), wall mount, fiberglass reinforced polyester, gray, single-door, (2) twist-lock latches, SAR acrylic window.
Data Storage	Internal Storage - 2.5 yr@15 min Sample Rate USB - over 20 years
Total Images	Internal Memory 500 (640x480) Images, USB over one million, Storage changes with image resolution”
Output:	RS485, Sampler Pulse, LCD
Power:	Logger: 3.3 V, Internal: 12 V, External: Max 16 V
Operating Temp.	-40 to 60ºC (-40 to 140ºF)
Connectors:	Spring Load Compression Fit
Power:	Internal 12 V AC / DC Power Supply
Sample Rate:	User Defined, 1 to 60 minutes
Software:	Field-Siren Windows GUI, Cloud Programmable
Protocol:	Compressed Binary
Wireless:	World Wide Cellular: 4G LTE and WiFi
Data Transfer:	Blue-Live® - DropBox® - GoogleDrive® - FTP

Monitor With Vision®

Integrated Multi-Modal Vision Platform

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5MP LOW LIGHT VISION CAMERA SENSOR

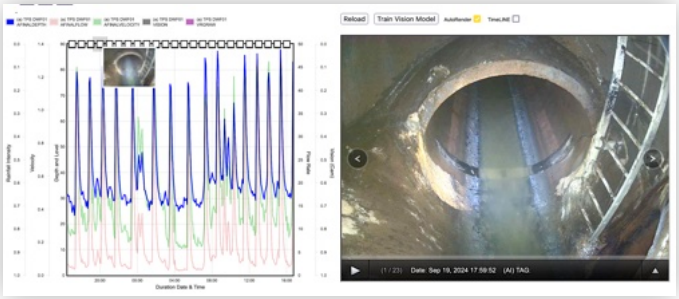
- 5MP Low Light CCD Camera, with Bright LED
- Rugged Enclosure
- Maximum 5MP resolution
- Bult-in Compression
- Easy to use mounting bracket

Monitor With Vision®

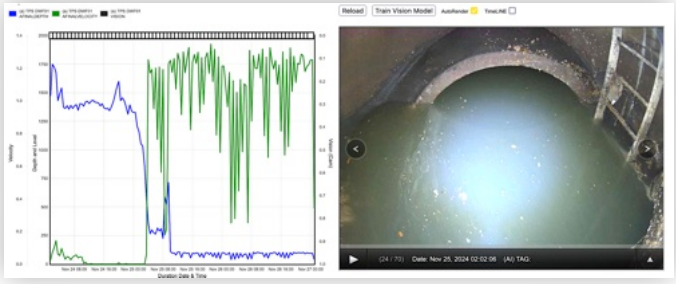
The **Blue Siren 5MP High-Output LED Camera Sensor** is a powerful, high-resolution imaging solution designed for a wide range of applications, including **sewer inspection, grease clog detection, inflow and infiltration (I&I) monitoring, storm grate surveillance, and camera-based infrastructure security**.

With **automated image capture and seamless data transmission**, the sensor can store and send images directly to any server or web-based platform. Sensor readings are **automatically time-synced with image data**, enabling precise correlation between visual and environmental conditions for deeper analysis and enhanced decision-making.

Timelapse Movie Viewer with (Ai)



View data and images side by side using our unique time lapse viewer. Easily correlate dry vs wet weather flows or train image model to detect anomalies



Technical Specifications:

Pixel Resolution :	2592×1944 (5MP), 2048×1536 (3MP), 1920×1080 (2MP), 1600×1200, 1280×960 (1MP), 1024×768 (.7MP), 800×600 (.5MP), 640x480
Sensor:	1/2.8” CMOS
Baud Rate:	115200bps (default), 19200bps, 38400bps, 57600bps, optional
Angle of View (FOV):	60 degree (default), 120/90/45/30/15/8 degree Optional
Focal Length:	3.6mm (default), 2.8mm/6mm/8mm/ 12mm/ 16mm/25mm Optional
Minimum Illumination:	0.01LUX
Operating Temperature:	-4°F-140°F
Sample Rate:	Minimum 1 minute
Auto Gain Control:	Automatic
Exposure:	Automatic

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DUAL WAVE FLOW (AV)

ULTRASONIC DOPPLER AREA VELOCITY SENSOR

- Fully Submersible
- Dual-Wave Doppler Technology
- Averaging Algorithms Applied
- Doppler frequency is proportional to the speed of water in mm/s.m/s and ft/s

Technical Specifications:

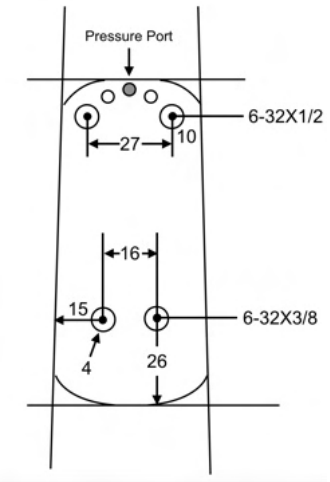
Depth:	30ft (10m) 15 PSI or 10ft (3m) 5 PSI
Accuracy:	+/- 2% Laminar Flow
Input Voltage:	6-16V DC
Warmup Time:	2 seconds minimum
Resolution:	1 mm/s
Range:	0 to +10m/s optional Reverse
Cable:	7.62m (25ft) Standard
Response Time:	4 digital samples/second
Serial Output:	UART - TTL, RS485, Hz
Transmission:	500 KHz
Depth Output:	0 - 5V
Depth Accuracy:	5PSI (+-) 1mm or 15PSI (+-) 2mm
Burst Height:	> 100ft (15PSI)
Redundancy:	Multiple Sensors can be used simultaneously using Dual Wave technology without cross talk

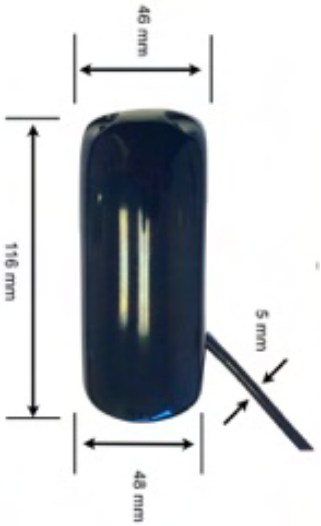
Dual-Wave Area-Velocity Sensor

The **Blue Siren Dual-Wave Acoustic Velocity (AV) Sensor** leverages **Doppler-based acoustic technology** to deliver precise velocity measurements in flow monitoring applications. This advanced AV sensor integrates **high-sensitivity pressure-depth and velocity sensors**, ensuring accurate and reliable data acquisition.

All electronics, including an **internal water temperature sensor**, are fully encapsulated within the sensor housing for enhanced durability and environmental protection. The sensor outputs **velocity via a serial digital data stream**, while **depth is transmitted through an analog 0-5V signal**, ensuring compatibility with various data acquisition systems.

Its **Dual-Wave Technology** employs **dual transmitters**, saturating the flow stream with a higher density of acoustic signals, thereby expanding the measurement range and enhancing the acoustic profile for superior velocity measurement.





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PHN DEPTH

PRESSURE DEPTH SENSOR

Product Specification Sheet

- Stainless Steel Transducer Element
- Vortex Shedding Hydrostatic Shield
- Use in Static and Flowing Conditons
- Waterproof, Impact Resistant Urethane Construction
- Streamline Design Minimizes Fouling

Technical Specifications:

Dimensions:	5” X 1.25” X 1”
Construction:	316L Stainless Steel Material
Diaphram:	Tantalum or optional Titanium
ENV Rating:	Fully Submersible
Power:	Sensor Input: 5V DC
Transducer:	19mm Diameter
Gauge:	Absolute
Pressure Ranges:	5 PSI or 15 PSI
Resolution	5 PSI = 1mm 15 PSI = 2mm
Range:	5PSI = 10ft (3m) 15PSI = 30ft (9.14m)
Cable	Vented 5 conductor, 6mm Diameter
Overpressure	1.5 times Full Scale
Linearity:	+-0.15 FS
Temperature:	-40 to 125 C

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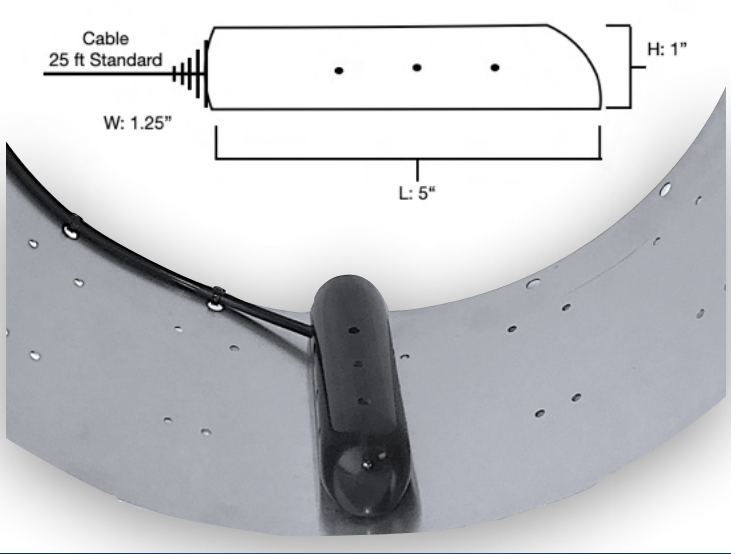
PHN15 / PHN05 Pressure Depth Sensor

Easily monitor water depth in flowing and static conditions. PHN technology mitigates the pressure vortex caused by velocity and accurately measures the depth of water in any condition. This sensor is designed to work in a multitude of installations such as pipes, weirs, stilling wells, streams, ponds, and lakes.

In addition to the hermetically sealed stainless steel transducer, the PHN is further encapsulated using inert materials, making this a great solution for industrial and wastewater applications.

Combined with the SOLOSiren®, this low-power, fast response depth sensor makes this an ideal compact, mid to long term monitoring deployment option.

Available in both 5 and 15 PSI variants, accurately monitor a wide range of depths from a low 0.04 in (1mm) to maximum 30 ft (9.14m).



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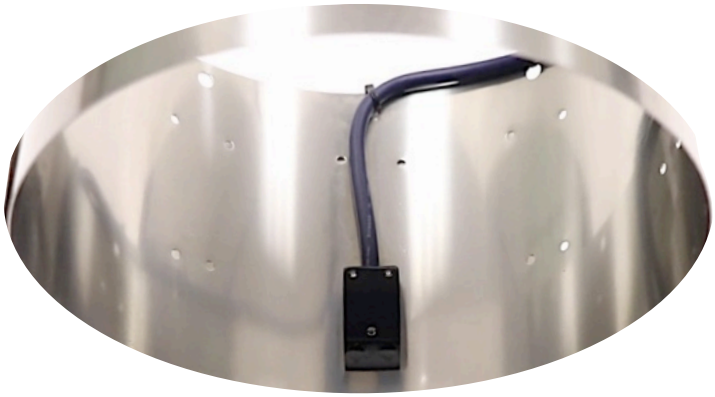
MICRO-VELOCITY

Single Wave Micro-Sized Ultrasonic Doppler Velocity

- Measure Velocity in 0.5 inches of Flow Depth
- Single-Wave Doppler Technology
- Averaging Algorithms Applied
- Doppler Frequency is Proportional to the Speed of Water



Low Profile Micro-Velocity Sensor used for measuring velocity in fast / low depth

MICRO-Velocity Sensor

The Blue Siren Single-Wave Micro Velocity sensor uses the Doppler effect to measure the speed of fluid using acoustic technology.

This sensor is ideal for measuring micro flow rates in pipes flowing 0.4 inches or higher.

All electronics are encapsulated and submersible.

Accurate Dual Wave Ultrasonic Level is used to measure flow depth inside the pipe.

Great alternative for capturing low flow rates when most other solutions require at least 1.5 inches for flow depth or higher.

Micro - Velocity Sensor

Accuracy:	+/- 2% Laminar Flow
Input Voltage:	6-16V DC
Warmup Time:	2 seconds minimum
Resolution:	1 mm/s or 1 Hz/sec
Range:	0 to +10m/s (-6m/s optional)
Cable:	7.62m (25ft) Standard up to 300 ft
Response Time:	4 digital samples/second (Dependent on Average Algorithm)
Serial Output:	UART - TTL, RS485, Hz
Baud Rate:	Serial Communications 4800, Low Baud rate for Longer Cable Communications
Redundancy:	Digital cross correlated oscillation allows for multiple sensors to be used simultaneously
Dimensions:	0.6in X 1.7in X 1in

Measure Flow Velocity in Less Than 1 Inch of Flow

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Industrial Long Range Ultrasonic Level Sensor Product Specification Sheet

- Measure Overflow Depths Manholes and CSO Chambers
- Pre-Calibrated for Water Level Detection
- Long Range Measurement from 8 inches to 20 ft
- Submersible Design
- Smart Signal vs Level Detection and Correction when used with Blue Siren Loggers.

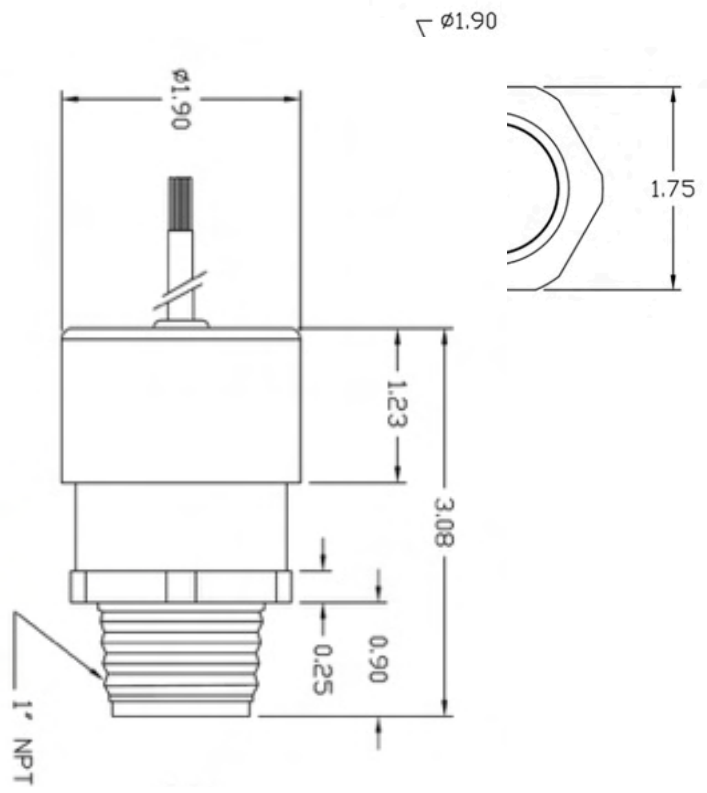
Accurately measure from 8 inches (200mm) up to 20ft (6m). Great for ponds, lakes, and manhole monitoring.

Digital output with signal strength information allows the monitor to determine if a reading is good or not. Smart digital processing allows for the elimination of unwanted data commonly associated with non-contact sensors.

All sensors provide precision measurement for wastewater and water flow with non-uniform surfaces by incorporating state-of-the-art transducer technology and processing algorithms.

Technical Specifications:

Body Material:	Rugged PVC
Accuracy:	+/- 0.1% Measurement Accuracy
Beam Angle:	8º Conical
Operating Voltage:	12V DC
Temp. Compensation	Yes
Resolution:	11 Bit
Range:	Dead-Band: 8in (200mm) Maximum Range: 20ft (6m)
Response Time:	60 mS
Sampling Rate:	10 Samples Per Second
Temperature Range:	-40ºC to 70ºC
Relative Humidity:	0 to 95%, non-condensing
Enclosure Rating:	IP68
Range Accuracy:	0.01in (0.25 mm) Measuring Resolution



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Industrial Short Range Ultrasonic Level Sensor Product Specification Sheet

- Measure Low Flow Depths in Pipes
- Pre-Calibrated for Water Level Detection
- Near Zero Dead Band (1” to 5’) Range
- Submersible Design
- Smart Signal vs Level Detection and Correction when used with Blue Siren Loggers.

Technical Specifications:

Body Material:	Rugged PVC Construction
Accuracy:	+/- 0.1% of Target Range
Beam Angle:	50º Conical
Operating Voltage:	12V DC
Temp. Compensation	Yes
Range:	1 inch (25mm) to 5 feet (1.5m)
Target Detection:	Dead-Band: 1 in (25mm) Maximum Range: 5 ft (1.5m)
Response Time:	60 mS
Sampling Rate:	0.1Hz to 20Hz in 0.1Hz increments Factory Default: 10Hz
Temperature Range ºC:	-40ºC to 70ºC
Relative Humidity:	0 to 95%, non-condensing
Enclosure Rating:	IP68

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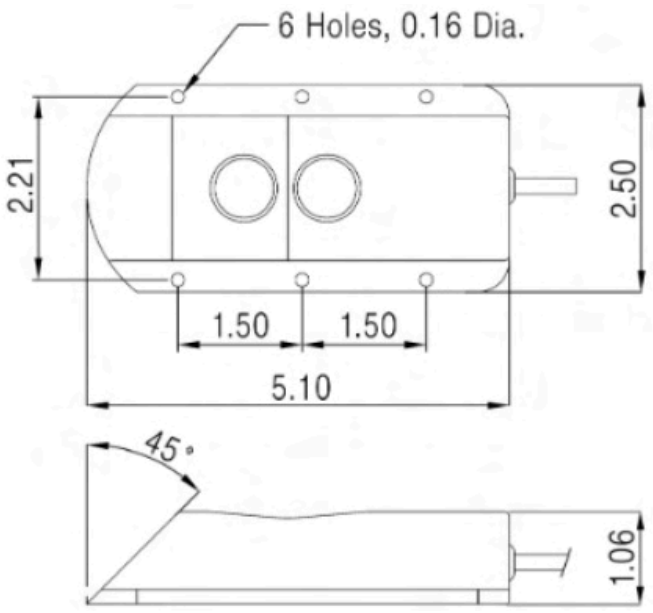
Measure Low Flow and other Level In Pipes and Constricted Spaces

High-Resolution, Submersible, In-Pipe Ultrasonic Level complete with 25ft cable. Great for measuring low flow depth that require a true resolution and accuracy of 1mm.

Low profile ultrasonic transmitter modules are optimized to provide continuous non-contact distance measurement of fluids in constrained working zones for application ranges from 1 inch (25 mm) to 5 feet (1.5 m).

All sensors provide precision measurement for wastewater and water flow with non-uniform surfaces by incorporating state-of-the-art dual-transducer ultrasonic technology and processing algorithms.



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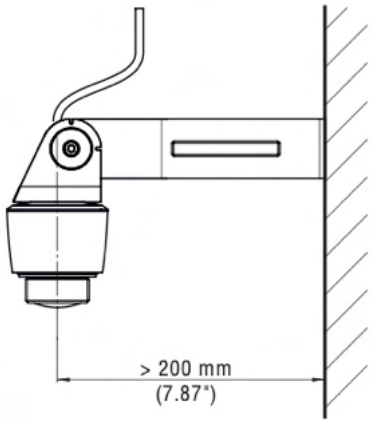
LR50 RADAR LEVEL

Product Specification Sheet

Monitor with Vision®



- 80 GHz technology
- 50ft Long range Accuracy with Resolution 1 mm
- Zero (0) Dead Band
- Rugged PVDF Material
- Fast Response Time Saves Battery Life

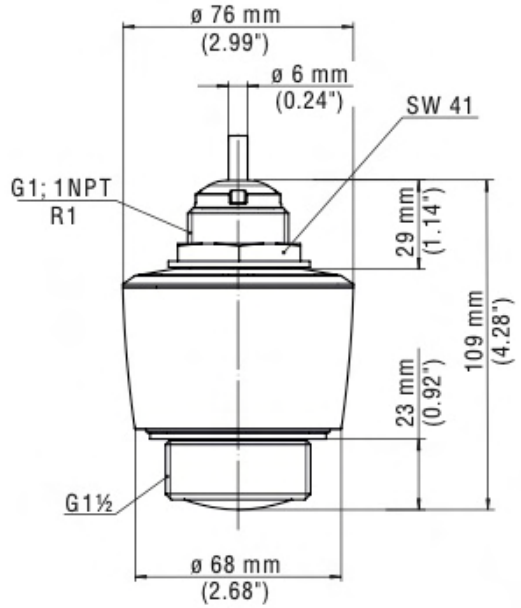
Dimensions:	Diam. 3” X 4.28”
Range:	0 to 15m ~ 50ft
Accuracy:	2 mm ~ 0.07 in
ENV Rating:	IP66/IP68 (3 bar) acc. to IEC 60529, Type 6P acc. to UL 50
Beam Angle:	8°
Transducer:	Radar
Material:	PVDF
Response Time:	~ 3 seconds
W-band:	80 GHz technology
Resolution:	1mm (0.039in)
Blocking Distance:	0 mm (0 in)
SetUp	Bluetooth
Temperature:	-40 to 80 C
Certifications:	ATEX/IEC/c-FM-us/c-CSA-us; gas, intrinsic safety, Zone 0, 0/1, 1, 2 (Class I Division 1, 2) + Dust, intrinsic safety, Zone 20, 20/21, 21, 22 (Class II, III Division 1, 2)

LR50 RADAR LEVEL

Designed for use in water and wastewater applications, the LR50 radar sensor is our number one choice for non-contact level measurement. 80GHz radar technology is more reliable than conventional ultrasonic and leads to a more maintenance free operation.

Easily installed on a bracket, the LR50 can be mounted in manholes, pump stations, wet wells, bridges and other open channel level applications.

Long Range sensing technology will measure up to 50ft with a 0.07” accuracy.



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BLUE SIREN®
Monitor with Vision®

OEM RADAR VELOCITY
PULSAR NON-CONTACTING VELOCITY SENSOR

ATEX Zone 1 or Zone 0

Industry Standard Reliability

Averaging Algorithms Applied

Low Power, Ideal for Remote Monitoring

OEM RADAR VELOCITY

Blue Siren designed an intrinsically safe circuit that can be used with industry standard sensors including the reliable Pulsar MicroFlow-i non-contact radar velocity sensor.

Measuring velocity using a non-contact method is a complex analytical challenge that has only become feasible with the advent of faster processors available to instrumentation designers. Pulsar Measurement employs a technique known as Refracted Spread Spectrum Analysis (RSSA). In the MicroFlow-i product, a pulse is emitted at the liquid surface, generating reflections across the entire channel width. A single transducer can handle channels up to 1.5 meters (4.9 feet) wide, while multiple transducers work in unison for broader applications. The RSSA algorithms process and integrate the received signals, then segment them for real-time analysis and velocity calculation.

Technical Specifications:

Sensor Body Dimensions:	90 mm x 140 mm (3.54 in x 5.51 in)
Weight:	1 kg (2.2 lbs)
Sensor Body Material	Valox 357
Maximum Separation:	Up to 1,000 m (3,280 ft)
Operating Temperature	-20 °C to +60 °C (-4 °F to +140 °F)
Velocity Range:	0.3 m/s to 6 m/s (0.98 ft/s to 19.7 ft/s)
Optimum Installation:	Install and an angle of 45° in line with the flow. More information is available in the manual.
Current Consumption	3.8-22mA
Enclosure Protection:	IP68
Radar:	K-Band (ISM)
ATEX Approval:	Ex II 1 G D, Ex ia IIC T4 Ga, Ex ia IIIC T135°C Da (Directive 2014/34/EU)

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BLUE SIREN®
Monitor with Vision®

DIGITAL ALARM SWITCH Real Time High Level Alarm and Vision Trigger

- Leak Proof
- Shock Proof
- Impact Resistant
- Resistant To Sewage And Wastewater Applications
- Operating Temperature Range Of 32ºF to 170ºF

High Level Alarm

Easily monitor and send alarms when water levels reach a critical point. The internal switch activates as the float rises 1” or 5º above horizontal.

Leak-proof operation makes this sensor optimal for monitoring water and wastewater applications.

Mini and Standard sizes are available.

Technical Specifications:

Body Material Exterior:	Durable PolyPropylene
Body Material Interior:	Solid Polyurethane Foam
Actuation Point:	1” Above/Below Horizontal
Operating Voltage:	10 AMP - 120V AC 3 AMP - 240V AC
Cable Material:	Chlorinated Poly Ethylene
Temperature Range:	32ºF to 170ºF
Cord Weight:	1.22lbs

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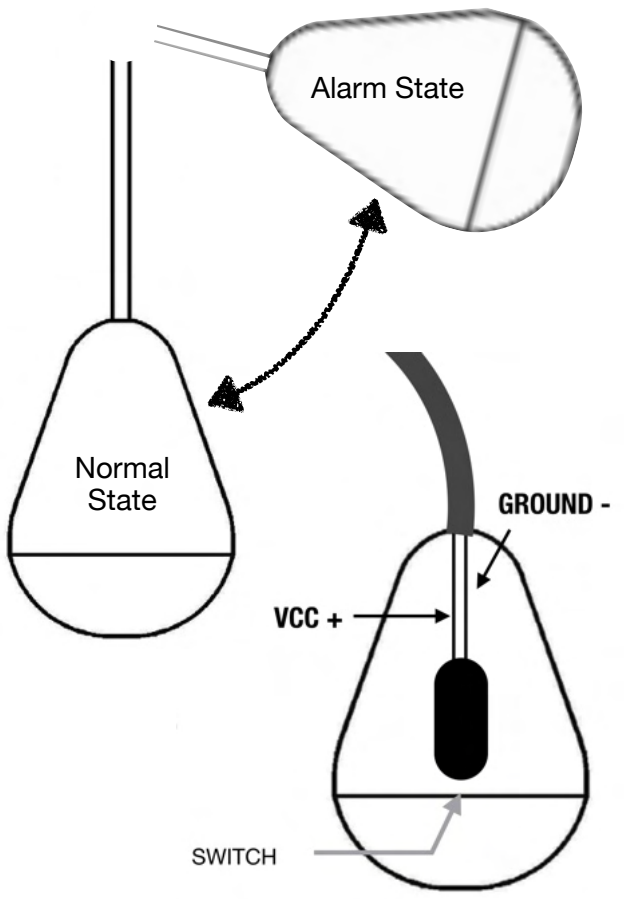

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Multi-Parameter Optical
COD-TOC-BOD-TURBIDITY-TEMPERATURE SENSOR

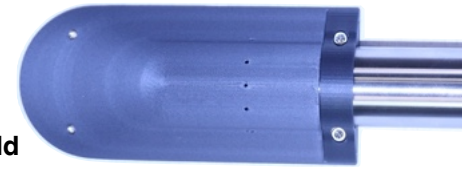
Blue Siren COD/BOD/TOC/Turbidity/Temperature Sensor
Next-Generation Dual-Light Technology for Precision Water Monitoring

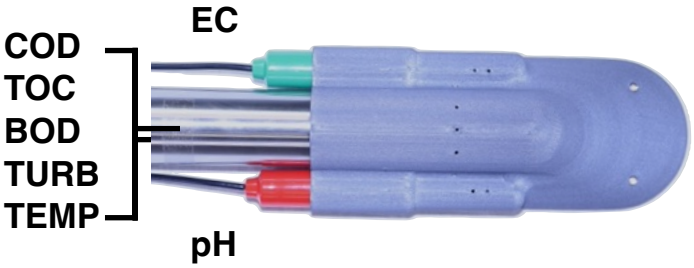
The Blue Siren COD Sensor delivers reliable, real-time water quality insights using advanced dual-light technology for unmatched measurement accuracy.

- **UV Light Source**: Detects organic compound absorption to calculate Chemical Oxygen Demand (COD) with high precision.
- **Reference Light Source**: Continuously monitors turbidity, compensating for clarity variations that affect accuracy.
- **Optical Path Compensation**: Intelligent algorithms automatically adjust for signal loss and particle interference, ensuring stable and dependable results.

Built for industrial, municipal, and environmental applications, this sensor provides consistent, high-precision monitoring of COD, BOD, TOC, turbidity, and temperature—empowering operators to make confident, data-driven decisions.

Install Sensor in Foul and Storm Sewers using Protective Hydrostatic Shield





Direct Flow Installation using Multi parameter Hydrostatic Shield

Measuring Principle	Dual wavelength ultraviolet absorption method
Measurement Parameters	**COD**, **Turbidity**, **BOD**, **TOC**
Measuring Range	**COD**: 0～200 mg/L, 0～500 mg/L (equiv. KHP), 0～1500 mg/L (equiv. KHP)
	Turbidity: 0～1000 NTU, 0～2000 NTU
	BOD: 0～100 mg/L, 0～650 mg/L
	TOC: 0～150 mg/L, 0～450 mg/L
COD Accuracy	±5%
COD Resolution	0.1 mg/L
Turbidity Accuracy	±5%
Turbidity Resolution	0.1 NTU
BOD Accuracy	±5%
BOD Resolution	0.1 mg/L
TOC Accuracy	±5%
TOC Resolution	0.1 mg/L
Calibration	2-point calibration
Signal Output	RS-485 (Modbus/RTU)
Power Supply	12～24V DC
Power Consumption	0.3W @ 12V
Storage Temperature	-5～65°C
Working Conditions	0～50°C, ＜0.2 MPa
Protection Rating	IP68
Installation	Submersible
Cable Length	5m cable
Shell Material	Stainless Steel 316L

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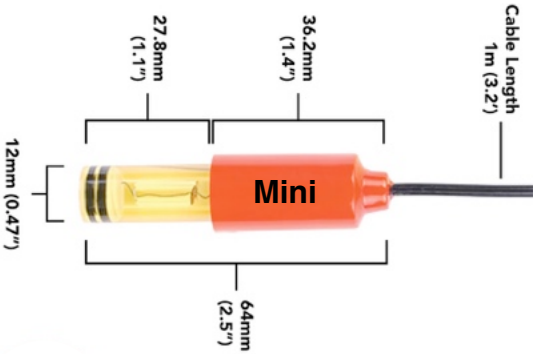
Hydrogen Potential pH Sensor

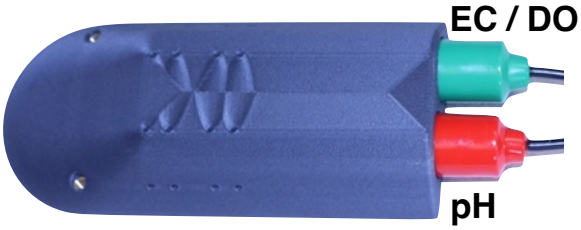
- Single Sensor Deployment
- Sonde Multiparameter Deployment
- Direct Flow Stream with Hydrostatic Shiled
- Combo Flow with DO, EC, pH

The **Blue Siren Industrial Digital Water pH Sensor** delivers accurate pH measurement in demanding environments, from acid and alkali solutions to industrial chemical processes. With RS485 Modbus/RTU output, it integrates easily with monitoring and control systems for continuous online measurement. A dual high-impedance amplifier ensures fast response and strong resistance to interference, providing stable, reliable data.

Its **patented long-life probe** uses a pressurized reference system for over 20 months of consistent performance—far exceeding standard electrodes. Designed for durability, it features a 3/4-inch NPT mounting thread, separable probe and display, and full IP68 waterproof protection, making it a rugged, low-maintenance choice for industrial applications.



Mini pH, small lab grade, submersible sensor for small hard to reach areas.



Dual Sensor, Option, Combine pH with EC or DO for a flow ready, Dual Water Quality Solution

Install Single Sensor in Sonde Cradle for Multi Parameter Applications

Install Sensor in Foul and Storm Sewers using Protective Hydrostatic Shield

Direct Flow Installation using Multi parameter Hydrostatic Shield

Technical Specifications:

Measuring range	0~14.00pH；0~135°C
Resolution	0.01PH；0.1 °C
Accuracy	0.01PH+1Digit；0.1°C +1Digit
Electrode	0.05cm-1 sanitary grade electrode,1/2″ thread
Current output	Isolated protection 4-20mA signal output
Cable length	10m or others(5~30m)
Working conditions	temperature : 0~50°c; Humidity : ≤85%RH

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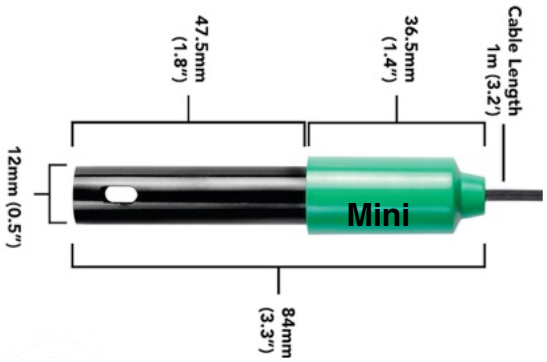
Electrical Conductivity EC Sensor



Mini EC, small lab grade, submersible sensor for small hard to reach areas.

- Single Sensor Deployment
- Sonde Multiparameter Deployment
- Direct Flow Stream with Hydrostatic Shiled
- Combo Flow with DO, EC, pH

The **Blue Siren Industrial Electrical Conductivity Sensor** is built for precise, dependable measurement in harsh industrial environments, including acid, alkali, and salt solutions, as well as complex chemical processes. Engineered for continuous online monitoring, it delivers stable, accurate results with rapid response times and strong resistance to electrical interference.

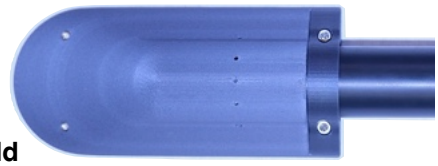
Its rugged design, crafted from high-quality materials, ensures durability even under the toughest conditions. With standard threaded connections, installation is simple and secure for both pipelines and tanks. Built for long-term performance, the sensor provides reliable conductivity monitoring that industries can trust.

Technical Specifications:

Measurement Range and Resolution	0-50,000 uS/cm
Accuracy	±1.0%F.S.
Operating temperature	0~65°C
Working pressure	<0.6MPa
Power Supply	12VDC~24VDC ±10%
Output Mode	Rs485(Modbus/RTU)
Wetted material	PP(default)/PPS/PVC/PP(customizable)
Installation	3/4 “NPT thread, immersion mounting
Cable Length	5m, other length can be customized
Temperature compensation	Automatic temperature compensation
Calibration method	Two-point calibration
Power	<0.5W
Degree of protection	IP68

Install Single Sensor in Sonde Cradle for Multi Parameter Applications

Install Sensor in Foul and Storm Sewers using Protective Hydrostatic Shield



Direct Flow Installation using Multi parameter Hydrostatic Shield

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Dissolved Oxygen DO Sensor

- Single Sensor Deployment
- Sonde Multiparameter Deployment
- Direct Flow Stream with Hydrostatic Shiled
- Combo Flow with DO, EC, pH

Technical Specifications:

Measurement Range	DO: 0–20 mg/L (0–20 ppm, 0–200%) Temperature: 0–45°C
Accuracy	DO: ±3% of measured value Temperature: ±0.5°C
Pressure Range	≤0.3 MPa
Calibration	Air automated calibration, sample calibration
Main Material	Body: SUS316L + PVC (freshwater), Titanium alloy (marine) O-ring: fluorine rubber; Cable: PVC
Power Supply	AC: 100–240VAC (50/60Hz) DC: 9–36VDC (12–24VDC recommended)
Output	2 × 4–20mA outputs 3 × relay outputs (programmable)
Communication Protocol	RS485 Modbus RTU (customizable)
Storage Temperature	-15 to 65°C
Measuring Temperature	0 to 45°C
Dimensions	Sensor: Ø55 mm × L 342 mm Transmitter: 142 × 142 × 162 mm (L×W×H)
Weight	Sensor: 1.85 kg Transmitter: 1.35 kg
Protective Rate	Sensor: IP68 / NEMA 6P Transmitter: IP65 / NEMA 4X
Cable Length	Standard: 5 m (extendable to 100 m)
Notes	Embedded temperature sensor included

The Blue Siren Optical Dissolved Oxygen Sensor delivers precise and stable readings using advanced fluorescence technology. A blue LED excites a specialized sensing surface, and the resulting signal reveals oxygen levels with high accuracy.

To ensure consistent performance in real-world conditions, the sensor includes built-in temperature and pressure compensation. This allows it to provide reliable dissolved oxygen measurements across a wide range of environments.

Install Single Sensor in Sonde Cradle for Multi Parameter Applications

Install Sensor in Foul and Storm Sewers using Protective Hydrostatic Shield

EC
DO
pH

Direct Flow Installation using Multi parameter Hydrostatic Shield

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Turbidity Sensor

Built in Wiper Cleans Optical Lens Before Every Reading

Hydrostatic Shield Protects Sensor and Allows for Installation in Flowing Conditions

- Single Sensor Deployment
- Sonde Multiparameter Deployment
- Direct Flow Stream with Hydrostatic Shiled
- Combo Flow with DO, EC, pH

The **Blue Siren Industrial Water Turbidity Sensor** is engineered for accuracy and reliability in demanding water quality monitoring applications. Using advanced optical technology, it measures turbidity across a wide **0–3000 NTU range**, with an **embedded temperature sensor** that provides real-time compensation for stable, dependable readings. Its robust design ensures consistent performance in both industrial and environmental settings.

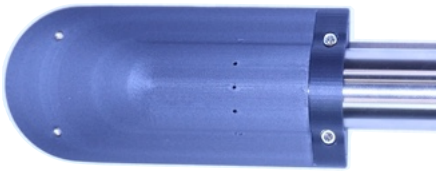
Fully integrated into the **Blue Siren product network**, this sensor operates on a **12–24V DC power supply** and comes equipped with a **5-meter cable** for flexible installation. Whether in water treatment plants, process industries, or environmental monitoring projects, it delivers the precision, durability, and seamless compatibility required for long-term operation.

Technical Specifications:

Measurement Range	Optical method
Working Principle	0-20.00NTU, 0-200.0NTU, 0-4000.0NTU
Measuring Range	±3% FS
Accuracy	0~50°C, 0~2Bar
Working Temperature	316 stainless steel
Material	12~24VDC
Power Supply	3/4" NPT Thread
Connection	RS485 Modbus RTU & 4-20mA
Signal Output	2-point calibration
Calibration	IP68
Protection	5m cable
Cable Length	

Install Single Sensor in Sonde Cradle for Multi Parameter Applications

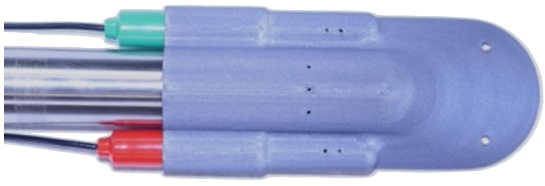
Install Sensor in Foul and Storm Sewers using Protective Hydrostatic Shield



EC

TURB.

pH



Direct Flow Installation using Multi parameter Hydrostatic Shield

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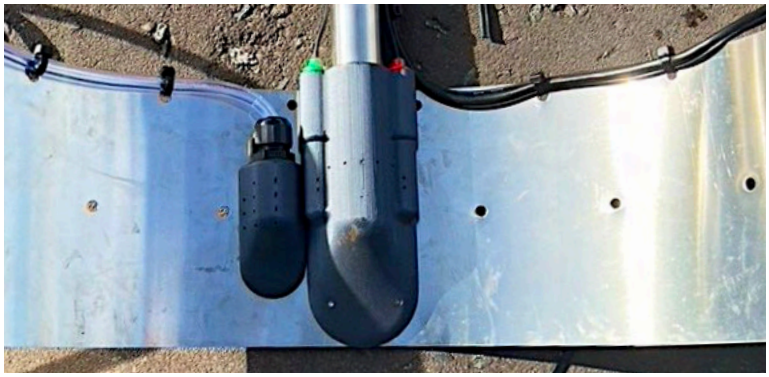
Ammonia Nitrogen NH3 / NH4 Sensor

- Single Sensor Deployment
- Sonde Multiparameter Deployment
- Direct Flow Stream with Hydrostatic Shiled
- Combo Flow with DO, EC, pH

Combined NH3 Sensor with Sampler Intake for Trade Waste, Industrial Monitoring project



The **Blue Siren Ammonia & Ammonium Sensor** delivers accurate, real-time monitoring of ammonia (NH_3) and ammonium (NH_4^+), essential for managing water quality in industrial and environmental applications. While ammonium supports biological processes, high levels can trigger algae growth and, through nitrification, lead to nitrate (NO_3^-) formation that reduces dissolved oxygen in aquatic systems.

In water, ammonia appears as toxic non-ionic NH_3 and the less harmful NH_4^+ ion. Their balance depends on pH and temperature, with NH_3 becoming more dominant at higher pH and colder conditions. By precisely measuring these dynamics, the Blue Siren Sensor helps protect aquatic life and maintain healthy water systems.

Technical Specifications:

Measuring range	0~10.00mg/L(0~100.00mg/L)
Resolution	±0.5°C
Accuracy	±10% or ±1mg/L
Current output	Isolated protection RS485 signal output
Cable length	5 meters, other lengths can be customized
Temperature	0~40°C
Working conditions	temperature : 0~50°c; Humidity : ≤85%RH

Install Single Sensor in Sonde Cradle for Multi Parameter Applications

Install Sensor in Foul and Storm Sewers using Protective Hydrostatic Shield

EC

NH3

DO

Direct Flow Installation using Multi parameter Hydrostatic Shield

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BLUE SIREN®
Monitor with Vision®

SAMPLER

WATER QUALITY SAMPLER

- Wireless Portable Water Quality and Flowmeter with Integrated Multimedia Vision Technology and Sampler
- DualWave Ultrasonic Doppler Flow Sensor Included
- Multi-parameter Water Sensors
- User Replaceable Internal 12V Battery Supply
- Solar Panel or AC Power Options

ECOSiren[AQUA]™

The ECOSiren® AQUA is a multi-sensor autonomous wireless monitoring platform designed to work in harsh sewer environments, delivering data to your desk every time. The built-in multi-media platform allows direct connection of our optional vision camera taking simultaneous pictures that correlate directly with sensor readings. Receive alarm emails with images showing the event details and severity.

Control Modes:	Parasteltic Pump
Enclosure:	IP68 Impact Proof Plastic
Data Storage	Internal Storage - 2.5 yr@15 min Sample Rate
Total Images	Internal Memory 500 (640x480) Images
Power:	Dual 12V Ex Battery Packs 8 Duracell PROCELL (D) Batteries per Pack User replaceable
StorageTemp.	-40 to 60ºC (-40 to 140ºF)
Multi-Sensor Support:	Water Quality Flow Level Sampler Vision

Get Your Sample Every Time

Built in Sampler Automatically Takes Grab Samples

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LAB GRADE
Rain Gauge Sensor
Product Specification Sheet

- Meets National Weather Service Specifications
- Transmits Data Up To 300ft
- Single or Dual Reed Switch
- Self Emptying
- Insect/Debris Screen Provided

Self Emptying Rain-Gauge

Large 8” Diameter collector bucket meets NWS specifications for statistical accuracy. Every gauge is factory calibrated and tested for 1/100” increment measurements.

This specific gauge set todays rainfall monitoring standard with the original tipping bucket patent obtained in 1974.

Body Material:	Aluminum
Transducer:	Tipping Bucket
Transducer Material:	Specially Formulated Plastic For Low Surface Tension
Switch:	Single or Dual - Dry Reed Switch
Output:	Less Than 0.1 Second Switch Closure
Capacity:	6 - 24V DC
Certifications:	Meets National Weather Service Statistical Accuracy
Capacity:	Self Emptying
Resolution:	0.01 in 0.25 mm 0.2 mm 0.1 mm
Accuracy:	1% at 0.5 in/hr
Cable:	30ft Standard

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Economical Rain Gauge Sensor Product Specification Sheet

- Meets National Weather Service Specifications
- Transmits Data Up To 300ft
- Capable Of Connecting Up To 3 Rain Gauge Sensors
- Self Emptying
- Insect/Debris Screen Provided

Technical Specifications:

Body Material:	High Impact Polypropylene, UV Inhibited
Transducer:	Tipping Bucket
Transducer Material:	Specially Formulated Plastic For Low Surface Tension
Switch:	Dry Reed Switch
Output:	Less Than 0.1 Second Switch Closure
Capacity:	6 - 24V DC
Certifications:	Meets National Weather Service Statistical Accuracy
Capacity:	Self Emptying
Resolution:	0.01 in 0.25 mm 0.2 mm 0.1 mm
Accuracy:	1% at 0.5 in/hr
Cable:	50ft Standard

Self Emptying Rain-Gauge

Large 8” Diameter collector bucket meets NWS specifications for statistical accuracy. Every gauge is factory calibrated and tested for 1/100” increment measurements.

This specific gauge set todays rainfall monitoring standard with the original tipping bucket patent obtained in 1974.

Lab Grade Rain-gauges also available

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Wind Speed Sensor
Product Specification Sheet

- Accurate 1mph Speed Resolution
- Can Measure Windspeed from 0mph to 175mph
- Able To Withstand Extreme Weather
- High Resolution Compass
- 1° Direction Resolution

Wind Speed

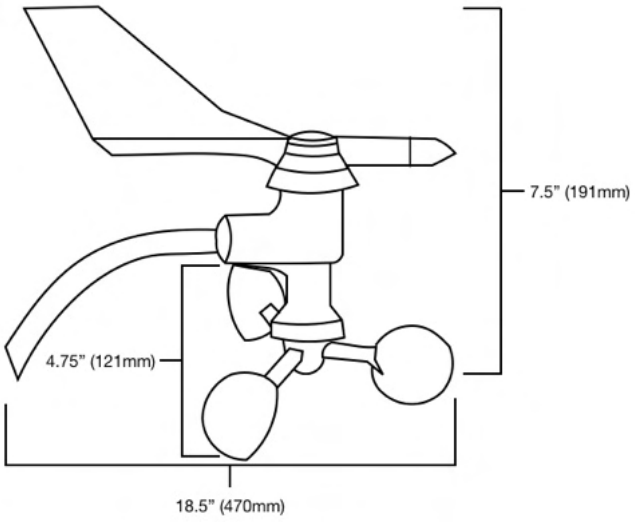
Accurately measure the speed and direction of wind using this wind sensor. Designed to withstand hurricane-force winds of maximum 175mph and also sensitive enough to detect a light breeze of 1mph.

The wind gauge can handle extreme cold and heat making it ideal for weather applications.

Pole Mount hardware included with sensor

Technical Specifications:

Weight:	2 lbs. 15 oz. (1.332 kg)
Dimensions:	18.5” long x 7.5” high x 4.75” wide (470mm x 191mm x 121mm)
Body Material:	Wind Vane and Control Head: UV-Resistant ABS Wind Cups: Polycarbonate Anemometer Arm: Black-Anodized Aluminum
Connector:	Modular Connector
Accuracy:	Wind Speed: +/- 5% Wind Direction: +/- 7%
Resolution:	Wind Speed: 1mph (1 knot, 0.1 m/s, 1 km/hr) Wind Direction: 1° (0° to 355°), 22.5° between compass points
Range:	Wind Speed: 0-175 mph (150 knots, 78 m/s, 280 km/hr) Wind Direction: 0°-355° or 16 Compass Points
Cable:	12.2 meters (40 Ft)
Operating Temp:	-40°C to 65°C (-40°F to 149°F)



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H2S GAS

HYDROGEN SULFIDE SENSOR

Product Specification Sheet

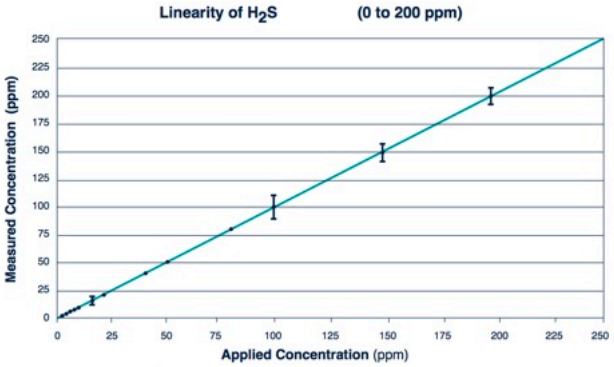
- 3-electrode electrochemical technology
- High Humidity Operating Range
- Wide Measurement Range from 0 to 200 ppm
- Optional Protective Submergence Shield
- Electronics fully Encapsulated

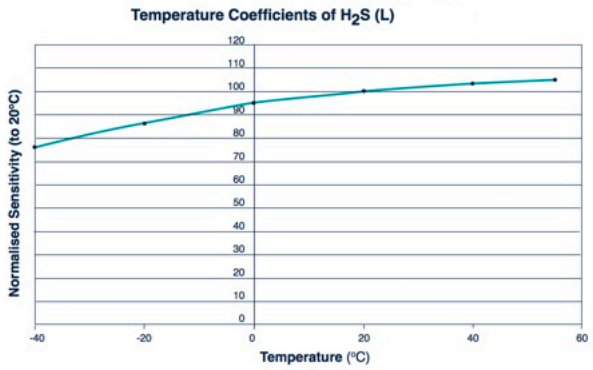
Technical Specifications:

Gas Detected:	Hydrogen Sulfide
Range:	0-100 ppm
Resolution:	1 ppm
Operating Life	2 Yrs in Air
Temperature:	Continuous: 15% - 90% RH
Transducer:	3-electrode electrochemical
Response:	10 seconds
Repeatability:	<+- 5%
Linearity:	<+- 5%
Gas Entry:	Diffusion
Calibration:	Test Gas Cap
Encapsulation:	Urethane, Epoxy

Hydrogen sulfide Sensor

Easily monitor hydrogen sulfide using any of the Blue Siren product lines. Data is automatically collected, stored and sent wirelessly to the cloud for analysis and alarming. Designed to work in relatively high humidly areas this sensor is ideal for sewer and underground locations. Built in signal processing allows for highly accurate readings. Protective caps allow for moderate submergence protection.





BLUE SIREN®
Monitor with Vision®

Thermistor-200

200S Thermistor String Over 650 ft (200 m)

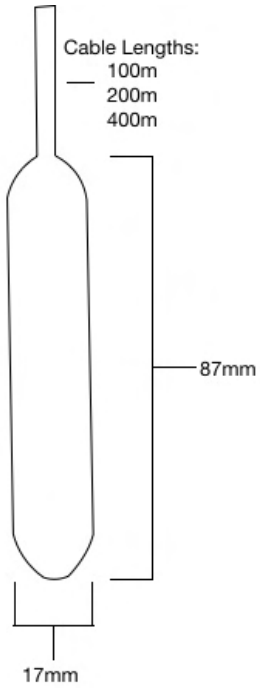
- 4G Wireless Transmitter
- 200 Addressable Thermistor Sensors
- 2 Million Temperature Samples
- Field-Siren™ Software Included
- Ultra Low Power Applications

Monitor Temperature Wirelessly

The Blue Siren® Thermistor String was designed to be installed in sewers to detect areas where base inflow is entering the pipe. Identification of the sewers thermal gradient will allow you to determine cracks, illegal connections and areas where you may want to focus a camera.

Combine the Thermistor String with a flow sensors and measure the magnitude of Inflow and Infiltration entering the system.

Sensor:	Up to 200 Addressable Thermistor Inputs
	Embedded Encapsulated IP68 Temperature Sensor
Resolution:	16 Bit High Resolution
Length Options:	10m, 50m, 100m, 200m, 400m Custom Lengths also available
Cable Width:	5mm
Accuracy	±0.5°C Accuracy from -10°C to +85°C
Connectors:	Waterproof IP68
Enclosure:	IP67 Waterproof
Range:	-55°C to +125°C (-67°F to +257°F)
Resolution	greater than 0.05 °C



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WATERWAI™

Wireless Cloud Delivery and MultiModal Data Analysis

View and Analyze Real Time Data

Automatic Data Management

Radar Rainfall and Prediction

Manage Large Networks

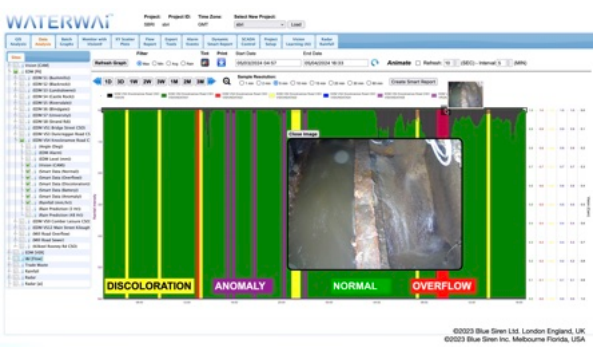
Alarm Management and Ground Truthing

MULTIMODAL ENVIRONMENTAL ANALYTICS

WaterWAI is a cutting-edge, cloud-hosted multimodal data management system that seamlessly integrates environmental sensor data with images, video, and other media for unparalleled ground-truth validation. Designed for scientists and analysts, it unifies geospatial and time-series data with visual evidence, enhancing accuracy and contextual depth in environmental monitoring. WaterWAI's advanced GIS engine supports predictive heat-maps, real-time overlays, and in-depth analytics, including I&I (Inflow & Infiltration) assessments and IDF (Intensity-Duration-Frequency) modeling. With dynamic visualizations—scatter plots, line graphs, and spatial models—alongside intuitive data export and smart reporting, WaterWAI transforms fragmented datasets into cohesive, actionable insights. Powered by high-availability cloud infrastructure, it ensures rapid, AI-enhanced analysis, making environmental intelligence more intuitive, verifiable, and predictive than ever.

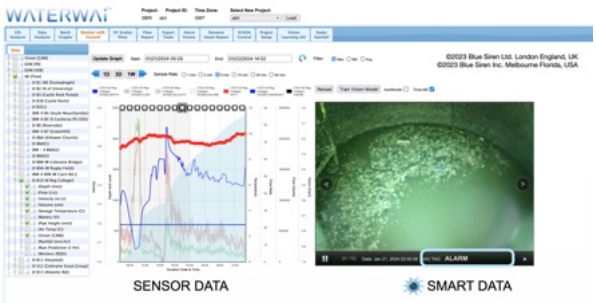
ACTIVE GIS with HEAT-MAP MODELING

SMART (Ai) DATA TAGS . . Turn Images into Data



MULTIMODAL DATA ANALYTICS

TIMELAPSE MOVIE VIEWER



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