

PM sensor (Sentinel Next 1S)

+ Datasheets

Sentinel NEXT 1S

Monitor environment - Use low power **Wi-Fi**

Product Number: **XTEMP-3101-0000**

Specifications

Dimensions (HxWxD)	89mm x 60mm x 20mm (3.50" x 2.36" x 0.78")
Weight	102g (3.60 Oz)
Connectors	10-pin Sensor Connector; micro USB for Charging
Battery	Integrated 1000mAh Rechargeable Li-Ion Battery
Wi-Fi Protocols	IEEE 802.11b/g/n
Wi-Fi Models Supported	Wi-Fi Direct, Infrastructure, Remote
Wi-Fi Encryption	WEP, WPA/WPA2 Personal, PEAPv0, PEAPv1, EAP-TLS
On Board Data Storage	>2 months with a Once/Minute Sampling Rate
Operating Temperature	0°C to 40°C on Charger -20°C to 60°C on Battery only
Non-operating Temperature	-30°C to 70°C
Relative Humidity	10% to 90%
Certifications	FCC, CE



Oxygen Sensor

IProbe-4400-0003

Output	I2C
Detected Gas	O2
Measurement range	0-25% Vol
Maximum Measurement limit	30% Vol
Response time	≤15 s
Repeatability (precision)	<2% of reading
Resolution	0.15% Vol



Stability (per month)	<2%
Zero drift (-20°C to 40°C)	≤0.1% Vol
Storage Temperature	-20°C to 50°C
Storage Humidity	0 to 100% Relative Humidity
Pressure range	Standard atmospheric pressure ± 10%
Anticipating using life	2 years
Dimension (L x W x H)	37 x 27 x 24.5 mm
Weight	~37g

Remote Monitoring Solution

+ Software

The software **complies with 21 CFR Part 11.**

It meets GMP standards and is used by Hospitals, Clinics, Pharma and Research Institutions.

Cloud Services

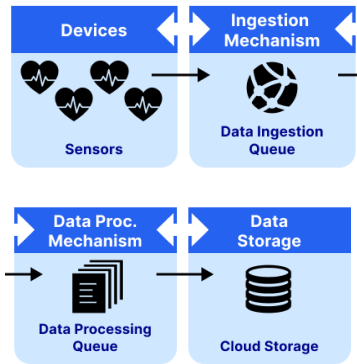
MQTT communication
IoT Ingestion Engine
Data Storage
No limits to number of sensors

Dashboard

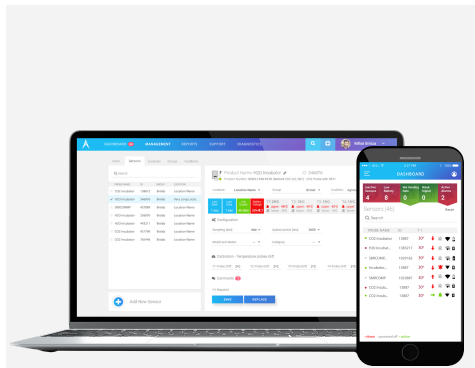
Visualize sensor
Group/Location/Asset
Alarming and Alerting
Individual & Aggregate Report

APPS

iOS and Android
Sensor Configuration Wizard
Quickview Sensor Status
Alarm Notifications



Sensors communicate to the cloud using MQTT via either using WiFi or LTE cell network. No data is lost. All sensor communications can be seen in the cloud for updating firmware, debugging and diagnostics purposes. The system can be scaled to 100,000+ sensors instantly by allocating more resources on the server. The diagram shows the data flow from the sensor to the cloud.



The dashboard sits on top of the Data storage system. It is designed to help the user set sensor parameters, visualize data through graphs and tables, aggregate reports for managers and manage alarms.

Features include:

- User management
- Sensor management
- Alarm management
- Graphs / Data (exporting)
- Sensor Diagnostics
- Admin reports
- Sensor Health
- Sensor Signing
- Manage NIST Certificates
- Alarm Statistics
- Custom Reports and Workflows



Sensor configuration Wizard is an APP to test your network to cloud connectivity, configure sensors in the field and perform advanced diagnostics in case of communication malfunction

Sentinel Next APP provides a quick view of the sensor reading, graph, health and status of the alarms. The alarms can also be acknowledged from the APP. In addition, it can be used to validate sensors in the field.