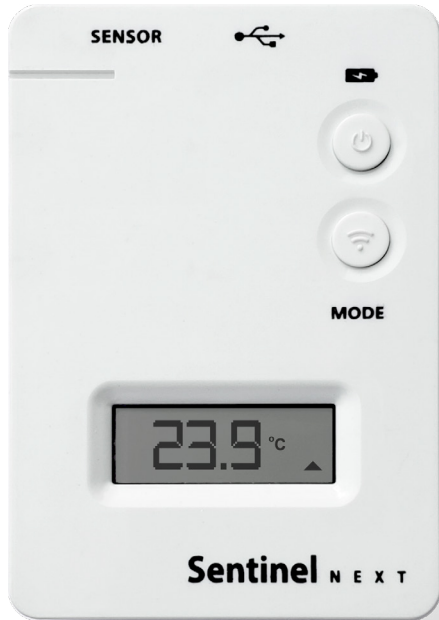


# SENTINEL NEXT 1S LTE

Monitor environment - LTE (cell)



Product Number: XTEMP-3201-0000

## Specifications

<b>Dimensions (HxWxD)</b>	89mm x 60mm x 25mm (3.50" x 2.36" x 0.98")
<b>Weight</b>	102g (3.60 Oz)
<b>Connectors</b>	10-pin Sensor Connector; micro USB for Charging
<b>Battery</b>	Integrated 1000mAh Rechargeable Li-Ion Battery
<b>LTE radio technology</b>	LTE Cat M1
<b>LTE Band</b>	12 (also supported: 1, 2, 3, 4, 5, 8, 13, 18, 19, 20, 25, 26, 28)
<b>Internal Flexible Antenna</b>	Wideband 698-3000MHz
<b>Operator</b>	T-Mobile
<b>Wi-Fi Protocols</b>	IEEE 802.11b/g/n
<b>Wi-Fi Models Supported</b>	Wi-Fi Direct, Infrastructure, Remote
<b>Wi-Fi Encryption</b>	WEP, WPA/WPA2 Personal, PEAPv0, PEAPv1, EAP-TLS
<b>On Board Data Storage</b>	>9 months with a 5minute sampling period
<b>Operating Temperature</b>	0°C to 40°C on Charger -20°C to 60°C on Battery only
<b>Non-operating Temperature</b>	-30°C to 70°C
<b>Relative Humidity</b>	10% to 90%
<b>Certifications</b>	FCC, CE

## Software to View Data

Cloud, Enterprise or App based solution available

## Contact us:

**AEGIS**  
 P.O. Box 2008  
 Warminster, PA 18974  
 Phone: Toll Free: 1-800-796-2344  
 In PA: 215-281-9180  
 Fax: +1 732 879 0248



# SENTINEL NEXT

Monitor environment - LTE (cell)



## PRO Temperature Probe (Iprobe-4000-0001)

<b>Probe Length &amp; Diameter</b>	Stainless probe: 25mm, Ø 4mm (1", Ø 0.16")
<b>Cable Length</b>	304cm (10ft)
<b>Measurement Range</b>	-30°C to +150°C (-22°F to +302°F)
<b>Accuracy</b>	±0.2°C (±0.4°F) at 25°C (77°F)
<b>Response Time (to reach 90%)</b>	In water, with stirring: <10sec
<b>Display Resolution</b>	0.1°C (0.1°F)



## RTD - Ultra Low Temperature Probe (Iprobe-4101-0001)

<b>Probe Length &amp; Diameter</b>	Stainless probe: 25mm, Ø 4mm (1", Ø 0.16")
<b>Cable Length</b>	183cm (6ft)
<b>Measurement Range</b>	-200°C to +150°C (-328°F to +302°F)
<b>Accuracy</b>	±0.2°C (±0.4°F) at 25°C (77°F)
<b>Response Time (to reach 90%)</b>	In water, with stirring: <10sec
<b>Display Resolution</b>	0.1°C (0.1°F)
<b>Optional DI (Digital Input)</b>	dry contact available



## Temperature and Relative Humidity Connector (Iprobe-4000-0004)

<b>Temperature Measurement Range</b>	-40°C to +125°C (-40°F to +257°F)
<b>Accuracy</b>	±0.3°C (±0.5°F)
<b>Relative Humidity Range</b>	0 to +100% RH
<b>Response Time (to reach 66%)</b>	5 to 30sec for T; 8sec for RH
<b>Display Resolution</b>	0.1°C (0.1°F)

# SENTINEL NEXT

Monitor environment - LTE (cell)



## RTD Temperature Probe with Dry Contact (IPROBE-4101-0004)

<b>Probe Length &amp; Diameter</b>	Stainless probe: 25mm, Ø 4mm (1", Ø 0.16")
<b>Cable Length</b>	183cm (6ft)
<b>Measurement Range</b>	-200°C to +150°C (-328°F to +302°F)
<b>Accuracy</b>	±0.2°C (±0.4°F) at 25°C (77°F)
<b>Response Time (to reach 90%)</b>	In water, with stirring: <10sec
<b>Display Resolution</b>	0.1°C (0.1°F)
<b>Optional DI (Digital Input)</b>	dry contact available

## Door Contact

<b>Circuit type</b>	Open loop
<b>Operation gap</b>	½"(13mm)
<b>Color</b>	White
<b>Terminals</b>	Screw-type
<b>Mounting Tabs</b>	Yes
<b>Case</b>	High-impact ABS plastic
<b>Contacts</b>	Deactivated rhodium on gold under-plating
<b>Contact rating</b>	0.1A@100VDC (max) 1.0A@10VDC (max) 10W (max)
<b>Temperature</b>	-15°~160°F (-25°~70°C)
<b>Switch cycles</b>	50 Million (0.1mA@5VDC)
<b>Switch Dimensions</b>	21/2"x9/16"x1/2" (63.5x14x13mm)
<b>Magnet Dimensions</b>	21/2"x1/2"x1/2" (63.5x13x13mm)
<b>Magnet Type</b>	Ferrite

# SENTINEL NEXT

## Monitor environment - LTE (cell)



### Large Range CO<sub>2</sub> Probe (0-30%)

(Iprobe-4400-0002)

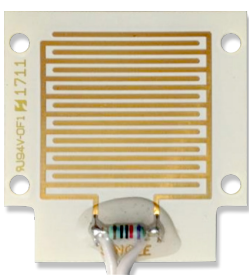
<b>Probe Dimensions</b>	7.6cm x 9.5cm x 3.8cm (3" x 3.75" x 1.5")
<b>Cable Length</b>	100cm (~39")
<b>Operating Principle</b>	Non-dispersive infrared (NDIR)
<b>Measurement range CO<sub>2</sub></b>	0 to 30% <sub>vol</sub> (CO <sub>2</sub> )
<b>Measurement RH</b>	0 to 100% (non-condensing)
<b>Measurement range °C</b>	-40 to 60 °C
<b>Accuracy</b>	± 0,25 <sub>vol</sub> ± 3% of reading
<b>Operation temperature range</b>	0 to 50 °C
<b>Operation humidity range</b>	0 to 95% RH (non-condensing)
<b>Display Resolution</b>	0.1°C (0.1°F)



### Ambient CO<sub>2</sub> Probe

(Iprobe-4400-0001)

<b>Probe Dimensions</b>	7.6cm x 9.5cm x 3.8cm (3" x 3.75" x 1.5")
<b>Cable Length</b>	100cm (~39")
<b>Operating Principle</b>	Non-dispersive infrared (NDIR)
<b>Measurement range CO<sub>2</sub></b>	0 to 5000 ppm (CO <sub>2</sub> )
<b>Measurement RH</b>	0 to 100% (non-condensing)
<b>Measurement range °C</b>	0 to 50 °C
<b>Accuracy</b>	± 30ppm ± 3% of reading
<b>Operation temperature range</b>	0 to 50 °C
<b>Operation humidity range</b>	0 to 80% RH (non-condensing)
<b>Display Resolution</b>	0.1°C (0.1°F)



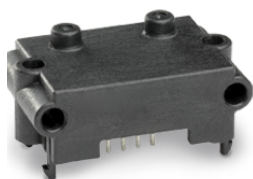
### Water (Leak) detection Probe

(Iprobe-4200-0001)

<b>Impedance range</b>	0Ω to 2MΩ (Lower limit theoretical)
<b>Accuracy</b>	1.8V
<b>Maximum Current</b>	<0.18mA
<b>Response Time (to reach 66%)</b>	10ms

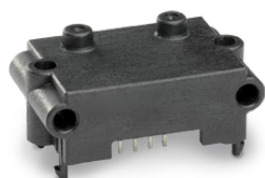
# SENTINEL NEXT

Monitor environment - LTE (cell)



## Differential Pressure, +/- 125 Pa (XTEMP-4000-0020)

<b>Output</b>	I <sup>2</sup> C
<b>Pneumatic Connection</b>	Manifold or Tube
<b>Pressure range (bidirectional)</b>	125 Pa 0.5" H2O
<b>Accuracy of measured value</b>	3%
<b>Lowest detectable pressure</b>	< 0.01 Pa
<b>Measurement speed</b>	0.5 ms
<b>Calibrated for</b>	Air, N2
<b>Gas compatibility</b>	Air, inert gases



## Differential Pressure, , +/- 500 Pa (XTEMP-4000-0021)

<b>Output</b>	I <sup>2</sup> C
<b>Pneumatic Connection</b>	Manifold or Tube
<b>Pressure range (bidirectional)</b>	500 Pa 2" H2O
<b>Accuracy of measured value</b>	3%
<b>Lowest detectable pressure</b>	< 0.02 Pa
<b>Measurement speed</b>	0.5 ms
<b>Calibrated for</b>	Air, N2
<b>Gas compatibility</b>	Air, inert gases



## Miscellaneous

Recommended Buffer Solutions  
Glycol, Glass Beads, IceClear PGX. Specify buffer solution on order.

**NIST** or **NIST-ILAC** Certification available

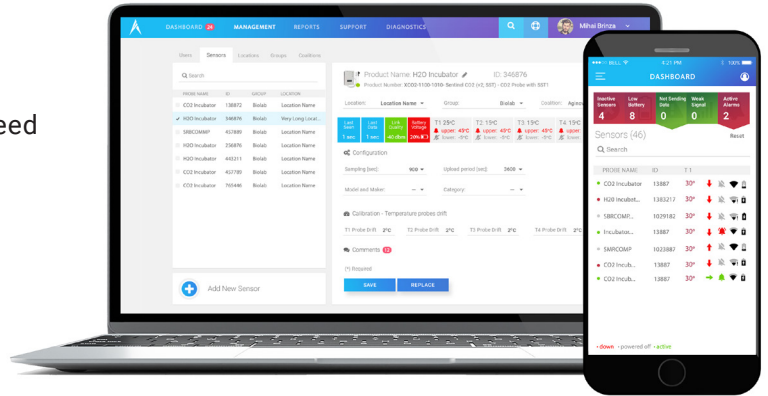
IceClear PGX for -30C to +90C  
Wax beads for < -30C

# SENTINEL NEXT IoT Portal



The Sentinel Next App provides all the tools you need to monitor your important assets on the go.

- Sensor Configuration Wizard
- Push notification alarms
- Sensor signing
- Graphs/Data
- Sensor Health



Inactive Sensors	Low Battery	Not Sending Data	Weak Signal	Low Uptime	Active Alarms
47/156	20/156	47/156	19/156	47/156	23/156

Probe	T1	T2	Health
CompartmentT	74.93	N/A	🟢🔊📶🔋
202032 -20 freezer	-5.10	N/A	🟢🔊📶🔋
AUG115Room	74.50	N/A	🟢🔊📶🔋
ContactorCoilA temp	73.80	N/A	🟢🔊📶🔋
ContactorCoilB Temp	74.53	N/A	🟢🔊📶🔋
HAG1 -80, 3-271, 202..	-121.04	N/A	🟢🔊📶🔋
HAG2 -20, 3-221, 202..	N/A	N/A	🟢🔊📶🔋
ICprobe_Mason_906	72.55	N/A	🟢🔊📶🔋
Mason_Pro_113	58.64	N/A	🟢🔊📶🔋
Mason_Pro_T	74.48	N/A	🟢🔊📶🔋
New1 -80, 3-291, 202..	-98.05	N/A	🟢🔊📶🔋
Sensor_00200002	72.91	N/A	🟢🔊📶🔋
Sensor_00200003	74.26	N/A	🟢🔊📶🔋

**Product: 202032 -20 freezer - ID: 00202032**

Product Number: External Pro Probe - XTEMP\_2000\_0001  
 Location: Buck Default L Group: Buck Default G Coalition: Buck Default C

Last Seen: 0h2m | Last Data: 0h2m | Link Quality: -76 dBm | Battery Voltage: 4.00 V

temp1: -5.10 °F -114.00 °F  
17.00 °F

**Graph** | Data | Map | Open Alarms | Closed Alarms | Reports | Health

Type: temp1 °F | Date: Last 100 | From: dd/mm/yyyy | To: dd/mm/yyyy | Show datapoints:  | Show battery & signal:

Upper threshold (17°F) | Lower threshold (-114°F)

10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00

## IoT Cloud Services

Your data is stored on the Argus Labs Cloud

IoT Cloud-monitoring service designed for the scientific, business and technology needs of the Pharmaceutical, Blood Bank, Biotech, Hospitals, Pharmacy and Life Sciences industries. The solution is 21 CFR Part 11 compliant.

- Evaluation of our sensors
- Low to large number of sensors
- Setups which require web access
- Monitoring 10+ types of sensors
- New asset tracking feature (call us)

## Contact us:

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 In PA: 215-281-9180  
 Fax: +1 732 879 0248

## SENSOR PRODUCT LIST

Ref ID	Name		Probe ID	Range	Notes
SNT-X/RTD-X	Sentinel Next 1S base unit		XTEMP-3101-0000	No Probes	Base WiFi communication unit
SNT-X/RTD-X	Sentinel Next 1S LTE base unit		XTEMP-3201-0000	No Probes	LTE communication unit
Probe-SNT-X-1	PRO Temperature Probe System, single	✓	IProbe-4000-0001	-30°C to +150°C	Single temperature adaptor + 1m probe
Probe-SNT-X-2	PRO Temperature Probe System, dual		IProbe-4000-0010	-30°C to +150°C	Dual temperature adaptor + 1m probe
Probe-RTD-X-1	RTD, Single Adaptor + 6ft Probe	✓	IProbe-4101-0001	-198°C to +150°C	Single Ultra Low Temp system
Probe-RTD-X-2	RTD, Dual Adaptor + 6ft Probe		IProbe-4102-0001	-198°C to +150°C	Dual Ultra low Temp System
Probe-RTD-X-1-A	RTD, Single Adaptor Only	✓	IProbe-4101-0001-A	No Probes	Standard Audio Jack on Adaptor for Probe
Probe-RTD-X-2-A	RTD, Dual Adaptor Only		IProbe-4102-0001-A	No Probes	Standard Audio Jack on Adaptor for Probe
Probe-RTD-X-1-DC-A	RTD, Single Adaptor + Dry Contact	✓	IProbe-4101-0002-A	No Probes	Standard Audio Jack on Adaptor for Probe
Probe-RTD-X-2-DC-A	RTD, Dual Adaptor + Dry Contact		IProbe-4102-0002-A	No Probes	Standard Audio Jack on Adaptor for Probe
Probe-RTD-X-6-P	RTD Probe only, 6ft	✓	IProbe-4100-000-6-P	-198°C to +150°C	Probe length 6ft
Probe-RTD-X-10-P	RTD Probe only, 10ft	✓	IProbe-4100-000-10-P	-198°C to +150°C	Probe length 10ft
Probe-RTD-X-1-DC	RTD Probe only with, single Dry Contact	✓	IProbe-4101-0002	-198°C to +150°C with dry contact	Specify Dry Contact when ordering
Probe-RTD-X-2-DC	RTD Probe only with, dual Dry Contact		IProbe-4102-0002	-198°C to +150°C with dry contact	Specify Dry Contact when ordering
Probe-DC-X-1	Single Dry Contact only		IProbe-4300-0001	No Probes	Specify Dry Contact when ordering
Probe-DC-X-2	Dual Dry Contact only		IProbe-4300-0002	No Probes	Specify Dry Contact when ordering
Probe-SHT	T/RH Connector: Temp & RH		IProbe-4000-0004-1	0°C to +40°C 0 to +100% RH	RH is relative Humidity
Probe-SHT+	T/RH Probe: Temp & RH		IProbe-4000-0004-2	-40°C to +125°C 0 to +100% RH	Recommended for use: 10C to 30C
Probe-SNT-X-2-SHT	"PRO Temperature probe, dual with T/RH connector"		IProbe-4000-0011	T probes: -30°C to +150°C T/RH connector: 0°C to +40°C"	2 Temp Probes with T/RH connector; RH is 0 to +100%
Probe-SNT-X-CO2-PLUS	Large Range CO2 Probe with T/RH		IProbe-4400-0002	0-30% CO2 0 to 100% RH 0°C to 50°C"	
Probe-SNT-X-CO2-Amb	Ambient CO2 Probe with T/RH		IProbe-4400-0001	0 to 5000 ppm (CO2) 0 to 100% RH 0°C to 50°C	
Probe-SNT-X-WET	Water (Leak) detection Probe		IProbe-4200-0001	0Ω to 2MΩ	
Probe-DPS-X-125	Differential Pressure, +/- 125 Pa		IProbe-4000-0020	125 Pa (0.5 in. H2O)	Manifold or Tube; Calibrated for Air, N2
Probe-DPS-X-500	Differential Pressure, , +/- 500 Pa		IProbe-4000-0021	500 Pa (2 in. H2O)	Manifold or Tube; Calibrated for Air, N2

\* Alternative Snap Calibration Adaptor and Probes available

## SNAP CALIBRATION PARTS: Adaptors and Probe Tips

Ref ID	Name	Probe ID	Range	Notes
Probe-RTD-X-1-A-M	"RTD Single Adaptor with 1m Cable and Premium connector"	IProbe-4101-0003-A	No Probes	Probe tip with connector order separately
Probe-RTD-X-1-DC-A-M	"RTD Single Adaptor + Dry contact with 1m Cable and Premium connector"	IProbe-4101-0002-M	No Probes	Probe tip with connector order separately
Probe-RTD-X-1-A-H	"RTD Single Adaptor with 1m Cable and Standard connector"	IProbe-4101-0003-H	No Probes	Probe tip with connector order separately
Probe-RTD-X-1-DC-A-H	"RTD Single Adaptor + Dry contact with 1m Cable and Standard connector"	IProbe-4101-0004-H	No Probes	Probe tip with connector order separately
Probe-RTD-P-M	"RTD Probe tip only with 1m Cable and Premium connector"	IProbe-4101-0002-P	-198°C to +150°C	"Use with IProbe-4101-0003-A or IProbe-4101-0002-M"
Probe-RTD-P-H	"RTD Probe tip only with 1m Cable and Standard connector"	IProbe-4101-0003-HP	-198°C to +150°C	"Use with IProbe-4101-0003-H or IProbe-4101-0004-H"
Probe-SNT-X-1-A-M	"PRO Single Adaptor with 1m Cable and Premium connector"	IProbe-4000-0001-C	No Probes	Probe tip with connector order separately
Probe-SNT-X-1-DC-A-M	"PRO Dual Adaptor with 1m Cable and Premium connector"	IProbe-4000-0010-D	No Probes	Probe tip with connector order separately
Probe-SNT-X-1-A-K	"PRO Single Adaptor with 1m Cable and Standard connector"	IProbe-4000-0001-K	No Probes	Probe tip with connector order separately
Probe-SNT-X-1-DC-A-K	"PRO Dual Adaptor with 1m Cable and Standard connector"	IProbe-4000-0010-KD	No Probes	Probe tip with connector order separately
Probe-SNT-P-1-M	"PRO Single Probe tip with 1m Cable and Premium connector"	IProbe-4000-0001-P	-30°C to +150°C	"Use with IProbe-4000-0001-C or IProbe-4000-0010-D"
Probe-SNT-P-4-M	"PRO Single Probe tip with 4m Cable and Premium connector"	IProbe-4000-0001-P2-0	-30°C to +150°C	"Use with IProbe-4000-0001-C or IProbe-4000-0010-D"
Probe-SNT-P-1-K	"PRO Single Probe tip with 1m Cable and Standard connector"	IProbe-4000-0001-KP	-30°C to +150°C	"Use with IProbe-4000-0001-K or IProbe-4000-0010-KD"
Probe-SNT-P-4-K	"PRO Single Probe tip with 4m Cable and Standard connector"	IProbe-4000-0001-P2-K	-30°C to +150°C	"Use with IProbe-4000-0001-K or IProbe-4000-0010-KD"

## OTHER ACCESSORIES

Name	Ref ID	Probe ID	Notes
Door contact	Door-Alarm	HW-DOOR-CONTACT	Use with Dry contact
Glycol bottle	Gly-bot	XACCES-1000-0001	IceClear PGX for temperatures > -30C; Wax beads for temperatures < -30C
Wall charging kit	HW-PWR-WALL-US	HW-PWR-WALL-US	EU wall plug available on request