

The Opiron ST-1 sensor is a wireless sensor designed to measure temperature in wet environments like refrigerators and freezers, and it is part of the IoT Opiron service, which means that is connected to the IoT platform which enables users to receive temperature alerts, visualize it in graphs and more.

SENSING

The Opiron ST-1 is based on a sealed digital temperature probe, which lets precisely measure temperatures in wet environments such as refrigerators and freezers.

The thermometer provides a 12-bit Celsius temperature, and It has an operating temperature range of -55°C to $+125^{\circ}\text{C}$ and is accurate to $\pm 0.5^{\circ}\text{C}$ over the range of -10°C to $+85^{\circ}\text{C}$.

COMMUNICATIONS

Measurements are automatically communi- cated to the Opiron IoT Platform using Wifi. Users can check the live status of their refrigerators at any time through the IoT Platform web interface. Alarms can be set, via the web based system, to inform the user of detected events.

INSTALLATION

The Opiron ST-1 has been designed to be easily installed using a fix tape to the refrigerator enclosure or even to the closest wall to the fridge. A complete instruction guide is provided with Opiron to our customers.

FEATURES

1. Continuously monitors the temperature inside fridges and refrigerators.
2. Easy to install.
3. Plug and play, no software required.
4. Alarms and alerts can be sent everywhere through emails and SMS.
5. Data access from anywhere via the Internet through the Opiron IoT platform.
6. Designed to measure in wet environments.



TECH SPECS ST-1 SENSOR

Wireless connectivity

1. WiFi 2.4 GHz, support WPA/WPA2
2. 802.11 b/g/n
3. Integrated TCP/IP protocol stack
4. +20 dBm output power in 802.11b mode

Dimensions and weight

1. 5.5 x 5.5 x 2.5 cm
2. 100 g

Temperature sensor

1. -55°C to $+125^{\circ}\text{C}$ temperature range
2. $\pm 0.5^{\circ}\text{C}$ accuracy from -10°C to $+85^{\circ}\text{C}$
3. 12 bit resolution
4. Waterproof

Power

1. 5Vdc, 1A (Power supply provided by Opiron)