Temperature Probe(s) RF Transmitter

Features

- Temperature Sensor Radio Transmitter
- Monitor in Real Time Smartphone/PC anywhere with Riot Hub
- Temperature Range:
  -55 to +125°C / -67 to-+257°F
- Accuracy +/-0.5°C (over -10 to +85°C)
- Radio Transmitter FSK/FHSS LoRa
- LoRa Upto to 6Km Range
- FM Range upto 1Km
- Auto Send Trigger Level Alerts to:
  - Local Switching RF Receiver
  - Android Smartphone via RIoT Hub
- Power 2 x AAA Battery (supplied) or
- 6 - 30Vdc Supply via Screw Terminals
- Battery Life >1Million Transmissions
- Weatherproof IP68 Enclosure



Description

Supplied ready to deploy, this Sensor measures Temperature and automatically transmits at the users preset time interval.
Used in conjunction with a RIoT hub the user can view the temperature on a Smartphone / PC via the internet anywhere in the world. Trigger levels can be set to directly activate a local RF Receiver (which provides switching relay contacts), and alert notification sent to an Android smartphone.

Ordering Information

Part Number	Description
SENW-TMP-8T1	Single Probe Temperature transmitter 868MHz
SENW-TMP-8T2	Double Probe Temperature transmitter 868MHz

RIoT RF Temperature Sensor

Application example



Technical Specification:

Dimensions 92 x 92 x 59mm

Operating Temperature: -20 to +54ºC (limited by battery)

Probe Cable Assembly

The sensor can measure upto 125°C; however, the cable is PVC jacketed which should be kept below 100°C. The Cable is waterproof with heatshrink but should not be used in saltwater or other corrosive environments

Electrical Characteristics	Min	Typical	Max	Units
Supply Voltage Battery External Supply	 2.8 5	 3 	 3.3 15	 Vdc
Operating Frequency		869.500		MHz
RF Output power			+22	dBm
Supply Current: Whilst Asleep (between taking readings) Whilst Transmitting		 5 118		 uA mA
Supply Current: Receiving Data		13		mA
RF Packet TX Transmit operation: FM LoRa Mode 7 (Longest Time)		 20 1.28		 mSecs

Battery Life

Depends on several factors;

- The time interval between RF Transmissions
- FM / FHSS LoRa Mode
- The ambient Temperature

*Battery life calculations are theoretical, actual battery life may vary

Operations	FSK	FHSS (LoRa)
1 per Min	8 months	1 month
2 per Hour	19 years*	4 months
1 per Hour	39 years*	1 year

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