



ns

3 VDC using power supply) *
 0.7 µA (RTC sleep), 570 µA (MCU idle),
 5.5 mA (radio RX mode), 22.6 mA (radio

Operating temperature range (board circuitry and battery)		-40°C to +85°C
Included battery	Max temperature range	-40° to +85°C
	Capacity	1500 mAh
Optional solar feature	Solar panel	5VDC/30mA (53mm x 30mm)
	Charging temperature range	0° to 45°C
	Max temperature range	-20° to 60°C
	Included rechargeable battery	600 mAh/>2000 charge cycles (80% of initial capacity)
	Solar efficiency	Optimized for high and low-light operation **
RTD temperature range (RTD and cable only)		-50°C to +370°C
Accuracy @ 0°C		+/- 3.3°C Standard (+/- 0.5°C Calibrated) ***
Dissipation constant		2mW/°C
Thermal time constant		15 sec max
Integrated memory		Up to 512 sensor messages
Wireless range		1,200+ ft non-line-of-sight
Security		Encrypt-RF® (256-bit key exchange and AES-128 CTR)
Weight		4.7 ounces
Enclosure rating		NEMA 1, 2, 4, 4x, 12 and 13 rated, sealed and weather proof
UL rating		UL Listed to UL508-4x specifications (File E194432)
Certifications	 	900 MHz product; FCC ID: ZTL-G2SC1 and IC: 9794A-G2SC1. 868 and 433 MHz product tested and found to comply with: EN 300 220-2 V3.1.1 (2017-02), EN 300 220-2 V3.1.1 (2017-02) and EN 60950

* Hardware cannot withstand negative voltage. Please take care when connecting a power device.
 ** Light present 25% of day yields 125% of operating power to support 10-minute heartbeats.
 *** See RTD accuracy chart on last page.

RTD Accuracy		
Temperature (°C)	Accuracy (±°C)	
	Uncalibrated	Calibrated
- 50°C	3.55	0.75
- 30°C	3.45	0.65
- 10°C	3.35	0.55
0°C	3.30	0.50
10°C	3.35	0.55
30°C	3.45	0.65
50°C	3.55	0.75
70°C	3.65	0.85
90°C	3.75	0.95
110°C	3.85	1.05
130°C	3.95	1.15
150°C	4.05	1.25
170°C	4.15	1.35
190°C	4.25	1.45
210°C	4.35	1.55
230°C	4.45	1.65
250°C	4.55	1.75
270°C	4.65	1.85
290°C	4.75	1.95
310°C	4.85	2.05
330°C	4.95	2.15
350°C	5.05	2.25
370°C	5.15	2.35

Commercial Grade Sensors

Sense IoT commercial grade sensors are designed for applications in ordinary environments (normal room temperature, humidity and atmospheric pressure). Do not use these sensors under the following conditions as these factors can deteriorate the product characteristics and cause failures and burnout.

- Corrosive gas or deoxidizing gas: chlorine gas, hydrogen sulfide gas, ammonia gas, sulfuric acid gas, nitric oxides gas, etc.
- Volatile or flammable gas
- Dusty conditions
- Low-pressure or high-pressure environments
- Wet or excessively humid locations
- Places with salt water, oils chemical liquids or organic solvents
- Where there are excessively strong vibrations
- Other places where similar hazardous conditions exist

Use these products within the specified temperature range. Higher temperature may cause deterioration of the characteristics or the material quality.

Industrial Grade Sensors | Type 1, 2, 4, 4X, 12 and 13 NEMA Rated Enclosure

Sense IoT Industrial sensors are enclosed in reliable, weatherproof NEMA-rated enclosures. Our NEMA-rated enclosures are constructed for both indoor or outdoor use and protect the sensor circuitry against the ingress of solid foreign objects like dust as well as the damaging effects of water (rain, sleet, snow, splashing water, and hose-directed water).

- Safe from falling dirt
- Protects against wind-blown dust
- Protects against rain, sleet, snow, splashing water, and hose-directed water
- Increased level of corrosion resistance
- Will remain undamaged by ice formation on the enclosure

sense^{IoT}

For more information about our products or to place an order, please contact our sales department at 03 8640 0123.

Visit us on the web at www.senseiot.com.au.

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