

## Indoor Ambient Temperature Node

- ▶ **Low Power Wireless Sensor Node.**
- ▶ **Compatible with The Things Network LoRaWAN**
- ▶ **±0.5°C accuracy 0.1°C resolution**
- ▶ **Long battery life.**



### Overview

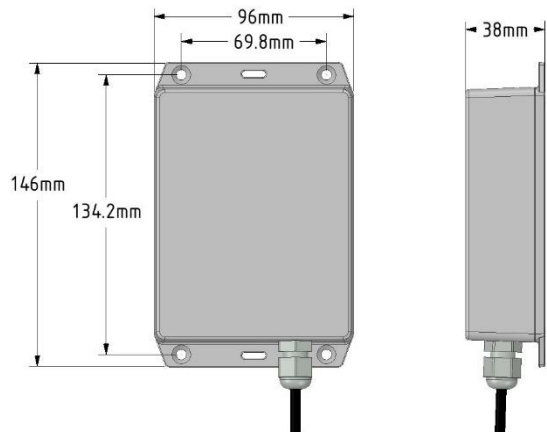
The rpr-IoT-AT01 is a battery powered ambient temperature sensor node that communicates using long range radio compatible with LoRaWAN and the Things Network.

Data is stored on The RPR WeatherFile.com cloud for long-term storage and access. Readings can also be accessed by or sent in real time to your IoT dashboard of choice.

### Applications

The rpr-IoT-AT01 has a wide range of applications where ambient temperature must be monitored.

- ✓ Building energy management
- ✓ Goods storage
- ✓ Warehousing
- ✓ Working conditions
- ✓ Food Production
- ✓ Personnel safety and comfort
- ✓ Education and research projects
- ✓ Sports halls
- ✓ Museums
- ✓ Agriculture and Horticulture



### RPR Products

Richard Paul Russell Ltd offers a range of IoT systems, weather instrumentation and data loggers. Please contact us for more information.

### Contact Us

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## Specification

<b>Physical</b>	
Enclosure dimensions including flanges but excluding sensor	146mm x 96mm x 38mm
Mounting holes	4 off 3.5mm dia. Countersunk, 134.2mm x 69.8mm
Mounting slots	2 off 11.5mm x 3mm slot, 134.2mm spacing
Flange thickness	3 mm
Enclosure material	ABS Plastic, Light Gray
Enclosure flammability rating	UL94 V-0
Weight	180g
<b>Temperature Sensor</b>	
Sensor type	DS18B20 digital
Sensor Accuracy	±0.5°C Accuracy from -10°C to +85°C ±1°C Accuracy from -30°C to +100°C
Resolution	0.1°C
Sensor temperature range	-55°C to +125°C
Sensor Identification	Each sensor has a unique 64-bit serial code
Time constant	TBD
Sample rate	1 per second to 1 per 12 hours
<b>Wireless/network Connectivity</b>	
Frequency band	863-870 MHz
LoRa Channel	EU868
Networking Protocol	LoRaWAN, Class A
Aerial	Internal Meandering Monopole circuit board mounted
Uplink Message Interval	Selectable between 1 minute and 1 day
Range	Up to 10km Line of sight dependent on environment
<b>Power</b>	
Battery type	A size Lithium Thionyl Chloride (LiSOCl <sub>2</sub> )
Nominal Battery Capacity	4000mAh
Nominal Battery Voltage	3.6V
<b>Environmental</b>	
Temperature range	Operating: -10°C to +60°C, Storage: -40°C to +70°C
Relative Humidity	0% to 100% (non-condensing)
Enclosure protection	IP54
Compliance	UKCA, CE

The manufacturer reserves the right to amend the specification and therefore the information in this document may be subject to change.