



RTD LoRaWAN Converter



The RTD LoRaWAN Converter is an industrial-grade device designed to interface with RTD temperature probes (e.g., PT100/PT1000) and transmit accurate temperature measurements over a LoRaWAN® network. This device enables seamless integration of analog RTD sensors into wireless IoT systems for remote monitoring and control applications.

1. RTD Probe Integration:

Accepts input from RTD temperature sensors to measure ambient or process temperatures with high accuracy.

2. LoRaWAN® Communication:

Periodically transmits temperature data via LoRaWAN, supporting long-range, low-power wireless connectivity to centralized gateways or cloud platforms.

3. Digital Output Control:

Includes a configurable digital output (e.g., relay control) that can be triggered based on temperature thresholds or conditions. This allows for direct control of external devices such as alarms, cooling/heating systems, or actuators.

Key Features at a glance:



Standard LoRaWAN Connectivity



Support Class A and Class C operations



AES128 bit End to End Encryption



Personal Support for your Implementation

Application Areas:



Cold Chain Monitoring



Process Monitoring



Predictive Maintenance



Asset monitoring

For more information please visit <http://www.uniconvergetech.in> or email us at sales@uniconvergetech.in



Specifications	
Input Power	9 – 24 VDC
Power Consumption	Less than 1 W @ 12 VDC
Protections	Reverse Polarity, Overvoltage (+/- 35 VDC), Short Circuit, Transient Voltage, TVS/ESD
Connector	5mm pitch screw terminal blocks
Enclosure	Metal Enclosure
Installation Type	Plug and Play
Warranty	12 Months from date of installation

Wire Connectivity	
Connectivity Supported	LoRaWAN
Probe Type	3 Wire RTD Probe
Digital Output	Single Channel Output

Wireless Transmitter	
Antenna	2 dB
Antenna Wire Length	3 meters
Frequency band	BW: 125kHz; 868MHz (865.00~867.00)
Modulation	LoRa Modulation
Activation	OTAA/ABP
Data Rate	Standard lorawan DR0-DR5
Max Power	20dBm
Range Of Communication	Around 3 Km at clear Line of sight



Specifications	
RTD Sensor Input	2-wire / 3-wire RTD (PT100/PT1000 configurable)
Temperature Range	Based on RTD type (e.g., PT100: -200°C to +850°C)
Resolution	0.1°C
Accuracy	±0.2°C to ±0.5°C (sensor dependent)
Digital Output	1 × DO (programmable alarm/event)
Modes	Heating / Cooling with programmable thresholds
Communication	LoRaWAN Class A/C (1.0.x / 1.1 compliant)

Environment	
Operating Temperature	0 to 65°C
Storage Temperature	-10 to 70°C
Operating Humidity	5 – 95% RH(non-condensing)

Mounting	
Built Architecture	Modular
Mounting	DIN Rail Mountable, Wall Mountable, Stack Mountable
Installation	Plug and Play Device

ORDERING INFORMATION	
Product Name	Product Code
RTD LoRaWAN Converter	XXXX