



# LoRa®TEMP' IoT Wireless LoRa® Temperature Sensors

## With Long-Range Communication and Extended Battery Life

The LoRa®Temp' sensors measure temperature and transmit the readings to the secure JRI Cloud via a private network or using the **LoRaWAN** network operated by a network operator member of the LoRa Alliance™, if available.

If set thresholds are exceeded, alerts are issued immediately.

Data can be viewed and managed via the easy-to-use and intuitive web based JRI-MySirius interface.



- Measure, record, and send out alert notifications spontaneously
- Mounting hole & mounting bracket for easy installation
- User-replaceable long lasting battery
- 868MHz / 915MHz

### LoRa®TEMP'

#### Temperature Indicator

for monitoring temperature of short-term food storage facilities



## The LoRa®TEMP'+ Range

### LoRa®TEMP'+

#### Temperature Sensor with internal probe



for the monitoring of all temperature sensitive products during storage

### LoRa®TEMP'+ ES

#### Temperature Sensor with external probe



Can be used with all types of external PT100 temperature probes in

Cold Rooms, Freezers, Incubators, ...

### LoRa®TEMP'+ T2 and T2i

#### High Accuracy Temperature Sensor

specially adapted to areas storing products for which temperature stability is critical (better measurement accuracy)

Also available in an Incubator version



### LoRa®TEMP'+ T4

#### Temperature Sensor

specially designed for monitoring hot water systems



# Technical Features

	LoRa®Temp'	LoRa®Temp'+	LoRa®Temp'+ ES	LoRa®Temp'+ T2/T2i	LoRa®Temp'+ T4
Interface	1 LED 1 Push-button				
Measurement Range	-30°C to +70°C	-35°C to +85°C	Depending on the probe	-50°C to +88°C	-40°C to +85°C
Accuracy	±0.5°C from 0°C to +25°C ±1°C from -20°C to 0°C and +25°C to 70°C ±2°C from -30°C to -20°C	±0.5°C from -20°C to +30°C and ±0.8°C over remaining range	Depending on the probe	<u>Standard:</u> ±0.3°C from -20°C to +30°C and ±0.5°C over remaining range <u>Incubator:</u> ±0.2°C from 30°C à 50°C ±0.5°C over remaining range	±0.3°C on a copper pipe ±0.5°C on a CPVC pipe
Memory	100 data points	10 000 data points	10 000 data points	10 000 data points	10 000 data points
LoRa Frequency Bands	868 MHz / 915 MHz				
Transmission Distance	Up to 16 km (open field)				
Sensor	Internal Class A PT100	Internal Class A PT100	External PT100	External PT100	External PT100
Operating Conditions	-30°C to +70°C	-35°C to +85°C	-30°C to +70°C	-30°C to +70°C	-30°C to +70°C
Resolution	0.01°C				
Transmission Interval	from 1 hour to 24 hours	from 1 min. to 24 hours	from 1 min. to 24 hours	from 1 min. to 24 hours	from 1 min. to 24 hours
Logging Interval	from 30 min. to 24 hours	from 1 min. to 24 hours	from 1 min. to 24 hours	from 1 min. to 24 hours	from 1 min. to 24 hours
Response Time	~10 min.	~10 min.	Depending on the probe	~2 min.	~2 min.
Protection	IP65	IP65	IP40	IP65	IP65
Housing	Translucent white ABS - Food contact				
Dimensions & Weight	65x65x28 mm ~100g				
Power Supply & Battery Life	An A size replaceable lithium battery 7-year battery life (logging interval: 2h, transmission interval: 6h)	An A size replaceable lithium battery 6-year battery life (logging interval: 15min, transmission interval: 60min)	An A size replaceable lithium battery 5-year battery life (logging interval: 15min, transmission interval: 60min)	An A size replaceable lithium battery 5-year battery life (logging interval: 15min, transmission interval: 60min)	An A size replaceable lithium battery 5-year battery life (logging interval: 15min, transmission interval: 60min)
Compliance with	CE, ROHS, FCC, EN 300 320, EN 13485	CE, ROHS, FCC, EN 300 320, EN 12830	CE, ROHS, FCC, EN 300 320	CE, ROHS, FCC, EN 300 320, EN 12830	CE, ROHS, FCC, EN 300 320
Associated Metrology	Factory calibration				
Standard Calibration Points		-30°C / +0°C / +40°C	-40°C / 0°C / +40°C	Standard: -40°C / 0°C / +40°C Incubator: -36°C / 38°C / +50°C	+55°C

## Part Numbers

Models	Part Number
LoRa®Temp' 868 MHz	12483
LoRa®Temp' 915 MHz	12484
LoRa®Temp'+ 868 MHz, -50+88°C (without battery)	13219
LoRa®Temp'+ 868 MHz, -50+88°C (with battery)	13219 A
LoRa®Temp'+ 915 MHz, -50+88°C (without battery)	13220
LoRa®Temp'+ ES 868 MHz PT100, -50+88°C (without battery)	13221
LoRa®Temp'+ ES 868 MHz PT100, -50+88°C (with battery)	13221 A
LoRa®Temp'+ ES 915 MHz, PT100, -50+88°C (without battery)	13222
LoRa®Temp'+ T2 868 MHz, PT100, 3m flat cable, -50+88°C (without battery)	13223
LoRa®Temp'+ T2 868 MHz, PT100, 3m flat cable, -50+88°C (with battery)	13223 A
LoRa®Temp'+ T2 Incubator 868 MHz, PT100, 3m flat cable, -50+88°C (without battery)	13223 I
LoRa®Temp'+ T2 Incubator 868 MHz, PT100, 3m flat cable, -50+88°C (with battery)	13223 IA
LoRa®Temp'+ T2 915MHz, PT100, 3m flat cable, -50+88°C (without battery)	13224
LoRa®Temp'+ T2 Incubator 915MHz, PT100, 3m flat cable, -50+88°C (without battery)	13224 I
LoRa®Temp'+ T4 868 MHz, PT100, 2m cable, -40+85°C (without battery)	13226
LoRa®Temp'+ T4 868 MHz, PT100, 2m cable, -40+85°C (with battery)	13226 A
LoRa®Temp'+ T4 915 MHz, PT100, 2m cable, -40+85°C (without battery)	13227

## Sensors

Probes for LoRa®Temp'+ ES	Part number
PT100 moulded probe, Class A, 3m 3-wire flat cable, -50+105°C, Ø5X20, Binder connector	09520 02
PT100 moulded probe, Class A, 8m 3-wire flat cable, -50+105°C, Ø5X20, Binder connector	10540
PT100, Class A, 0.4m 3-wire flat cable, -50+105°C, Ø5X20, Binder connector	13206

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