COMARK
A Fluke Company

COMARK CLOUD for RF400 wifi monitoring system

Diligence WiFi

Diligence™ RF400 Data Loggers and Comark Cloud

Flexible WiFi temperature monitoring with cloud data storage

The Professionals' Choice

Comark Diligence™ WiFi

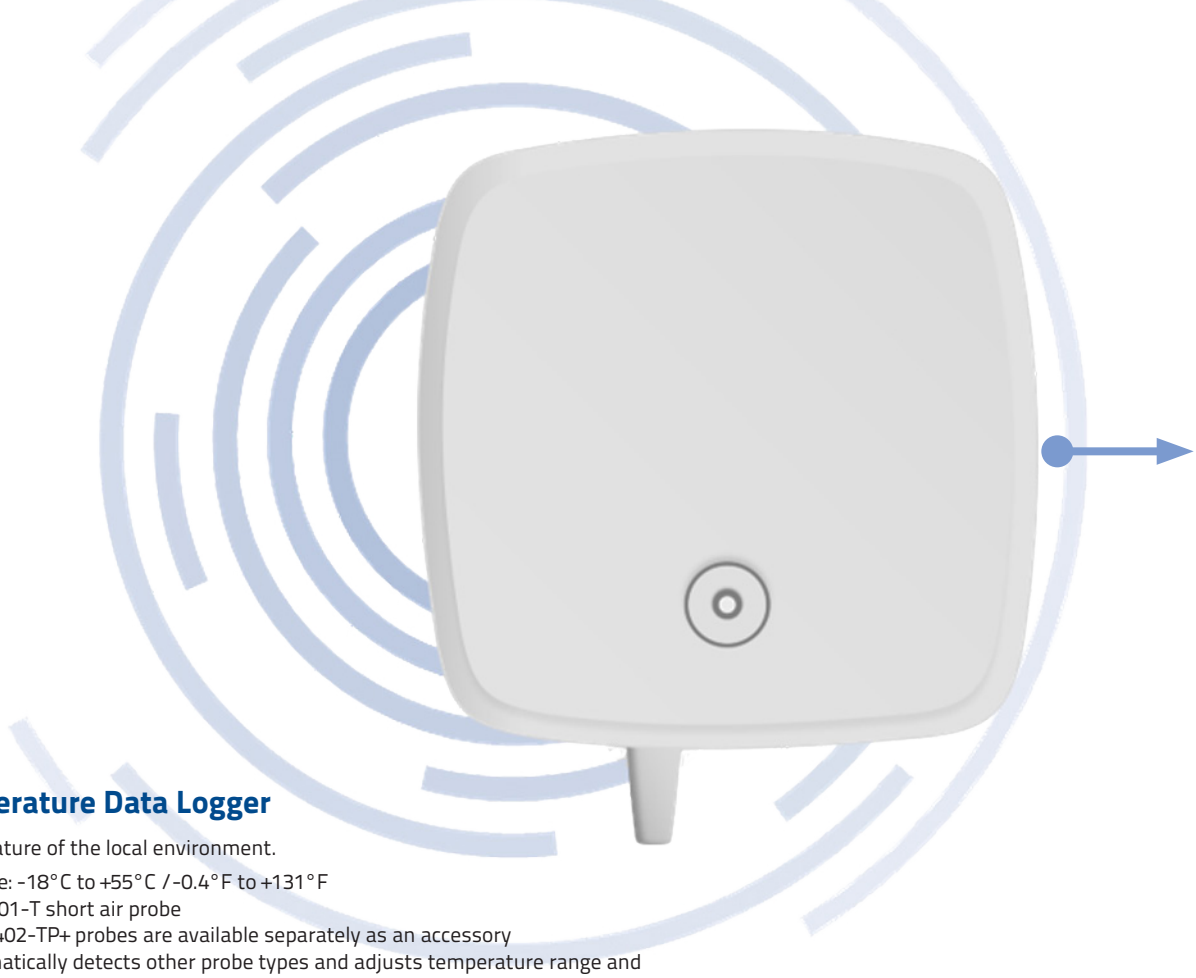
The Comark RF400 range provides ultimate flexibility in temperature measurement

Our data loggers, your WiFi

Setting up a network of Comark's RF400 data loggers couldn't be easier.

Temperature and humidity data logging is covered by four models, the RF411-T, RF412-TP and RF414-TC temperature data loggers and the RF413-TH temperature and humidity data logger.

System set up is easy using the free Comark Cloud App which is available in Android and iOS. Download the App and use to pair up an RF400 data logger in minutes over your WiFi network. As soon as the Diligence WiFi RF400 network is set up, temperature and/or humidity readings are continually collected. Data is transmitted wirelessly via your WiFi network to the Comark Cloud.



RF411-T Temperature Data Logger

Measures the temperature of the local environment.

- Temperature range: -18°C to +55°C / -0.4°F to +131°F
- Supplied with RF401-T short air probe
- RF401-TP and RF402-TP+ probes are available separately as an accessory
- Data logger automatically detects other probe types and adjusts temperature range and accuracy of measurement
- Powered using the supplied AA cells
- Batteries can be supplemented with a mains power supply, RF420 available separately
- Local Alarm Notification via Multi-colour LED and Buzzer

Configuring your RF400 data loggers is as easy as 1, 2, 3

The Intelligent Data Logger

The Comark RF411-T is an intelligent temperature data logger that is able to detect and react to the temperature probe type attached.

It is able to detect whether an RF401-T short air probe, an RF401-TP thermistor probe or an RF402-TP+ high accuracy thermistor probe is fitted and operate accordingly. With the neat fitting on the underside of the case, it is possible to attach two separate probes, each measuring different environments.

You choose your probes, attach to the data logger and measure your temperature - it really is that simple!

RF400 Temperature Probes

1

RF401-T Temperature Probe

Short air probe supplied free of charge with the RF411-T data logger.

- Temperature range:
  -18°C to +55°C / -0.4°F to +131°F
- Accuracy (full range): ±0.5°C / ±1°F
- Shown fixed in place above on RF411-T
- Available as an accessory

2

RF401-TP Temperature Probe

Barrel Probe with 3 metre long cable. Supplied free of charge with RF412-TP data logger.

- Temperature range:
  -40°C to +125°C / -40°F to +257°F
- Accuracy: ±0.8°C at -15°C to +70°C
  ±1.5°F at +5°F to +158°F
- Thermistor sensor
- Barrel probe 5mm diameter, 75mm long
- Available as an accessory

3

RF402-TP+ Temperature Probe

High Accuracy Barrel Probe with 3 metre long cable.

- Temperature range:
  -40 to +125°C / -40 to +257°F
- Accuracy: ±0.2°C at -15°C to +80°C
  ±0.4°F at +5°F to +176°F
- Thermistor sensor
- Barrel probe 5mm diameter, 75mm long
- Available as an accessory

RF400 Specialist Probes

RF400 Glycol Temperature Probe

Gycol probes acts as a damped temperature probe for use with RF411-T and RF412-TP data loggers.

- Temperature Measurement Range: -40°C to +100°C / -40°F to +212°F
- Glycol Buffer Response Time (t90*): 40 Minutes
- Glycol Buffer probe Lead length: 3 Metres
- Available as an accessory

Learn more about RF400 data logger models

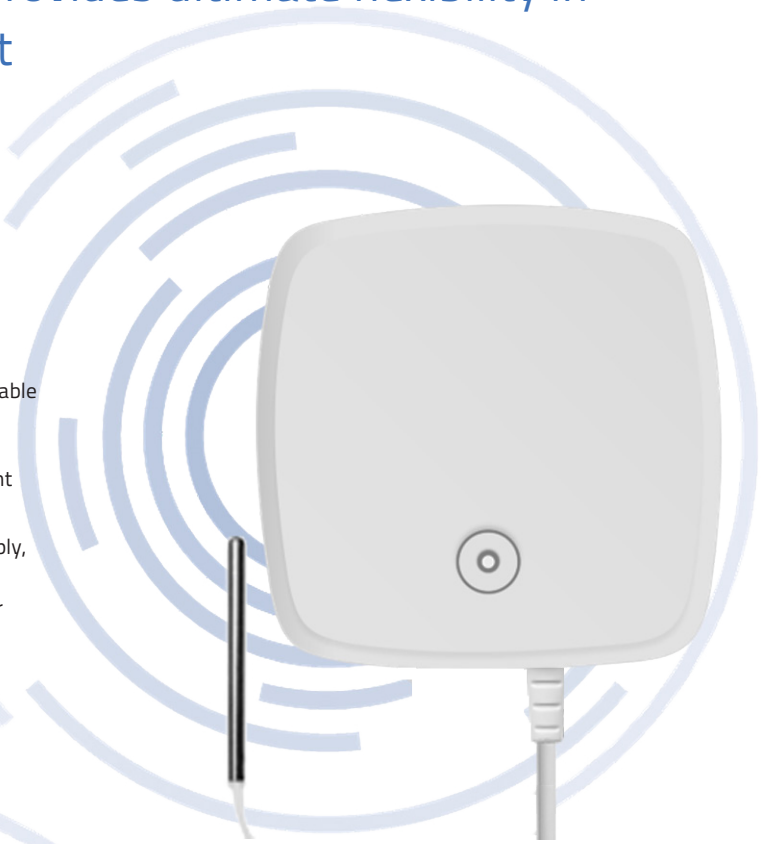
Comark Diligence™ WiFi

The Comark RF400 range provides ultimate flexibility in temperature measurement

RF412-TP Temperature Data Logger

Measures temperature with a barrel probe with 3m lead

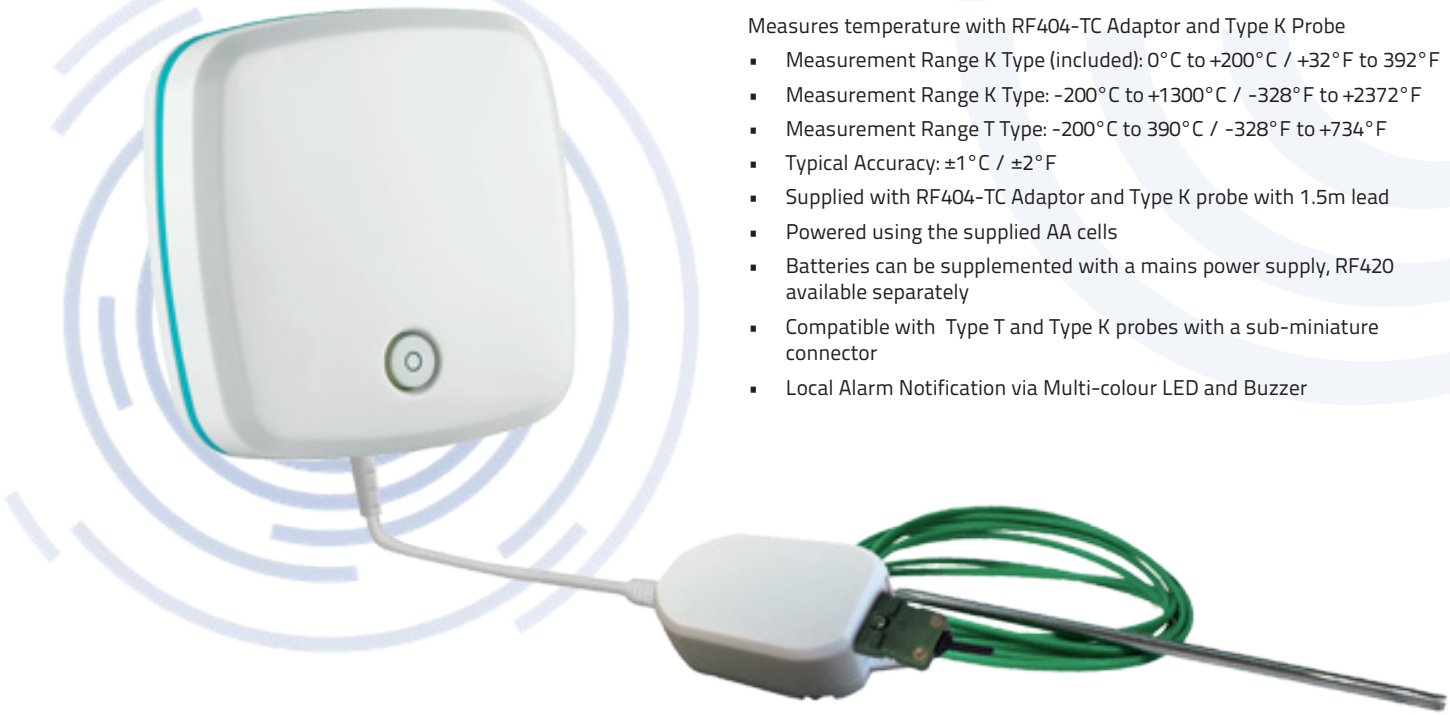
- Temperature range: -40°C to +125°C / -40°F to +257°F
- Supplied with RF401-TP barrel probe with 3m lead
- RF401-T short air probe and RF402-TP+ probes are available separately as an accessory
- Data logger automatically detects other probe types and adjusts temperature range and accuracy of measurement
- Powered using the supplied AA cells
- Batteries can be supplemented with a mains power supply, RF420 available separately
- Local Alarm Notification via Multi-colour LED and Buzzer



RF413-TH Temperature and Humidity Data Logger

Measures temperature and humidity levels in the local environment

- Temperature range: -30°C to +80°C / -22°F to +176°F
- Humidity Range: 0% RH to 100% RH
- Supplied with RF403-TH air temperature and humidity probe with 2m lead
- Powered using the supplied AA cells
- Batteries can be supplemented with a mains power supply, RF420 available separately
- Local Alarm Notification via Multi-colour LED and Buzzer



RF414-TC Temperature Data Logger

Measures temperature with RF404-TC Adaptor and Type K Probe

- Measurement Range K Type (included): 0°C to +200°C / +32°F to 392°F
- Measurement Range K Type: -200°C to +1300°C / -328°F to +2372°F
- Measurement Range T Type: -200°C to 390°C / -328°F to +734°F
- Typical Accuracy: ±1°C / ±2°F
- Supplied with RF404-TC Adaptor and Type K probe with 1.5m lead
- Powered using the supplied AA cells
- Batteries can be supplemented with a mains power supply, RF420 available separately
- Compatible with Type T and Type K probes with a sub-miniature connector
- Local Alarm Notification via Multi-colour LED and Buzzer

Note: The RF414-TC is supplied with the RF404-TC adaptor and probe unit. The adaptor can be used for a range of Type T or Type K probes manufactured by Comark Instruments. The RF414-TC data logger can be used as dual channel but an additional RF404-TC adaptor will need to be purchased.

Visibility and reporting

Access your Comark Cloud account from wherever you are in the world using any internet enabled device. This could be a PC at the office or at home, an iPad, tablet or mobile phone with a web browser.

Comark Cloud makes that task of continuously monitoring environments easier by providing automated temperature and humidity data and alerts 24 hours a day, 7 days a week.

You can even receive alerts by email and SMS text (via an email to SMS service such as Textmagic.com) which enable you take immediate action to prevent the loss of costly stock.

No more missed records, no more time consuming paper work!

Comark Diligence WiFi and Comark Cloud

Manage, monitor and report on data

Comark Cloud provides complete temperature and humidity safety data management. All your data can be accessed easily from the dashboard where you can manage and view the most important aspects of your system.

Quickview Dashboard

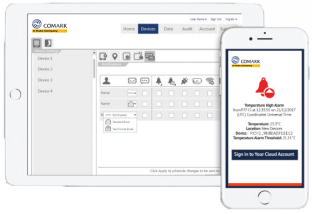
Check the most important information and review the system at a glance.

- See favourite data logger status easily
- Review recent data logger events
- View data, and clear alerts
- Quickly navigate to the detail on data loggers, stored data and events

Data Logger Management

Manage your data loggers from the management screen.

- Search by data logger location, filter by type, or use text-based search
- Quickly access and change data logger settings
- Easily acknowledge and reset alarms devices, data and events



Advanced Alarms

Never miss a critical event in your system.

- Notify multiple recipients
- Delay and repeat notifications
- Escalate ignored notification

Data Analysis and Reporting

Review and analyse your data with powerful graphing functionality:

- Compare data from multiple devices
- Compare data from different time periods
- View data summaries
- Print or export your results

Comark Cloud App

Use the Comark Cloud App to set up loggers and access data conveniently using a smartphone or tablet

- Download easily from the App Store or on Google Play.
- Monitor your data loggers on-the-go
- View all data logger data live in a range of format styles
- Receive notifications if a data logger goes into alarm mode

*Battery Life and Power Supply

Battery life is dependent on: transmission period, WiFi encryption method, WiFi encryption key rotation frequency (determined by the router/access point), signal strength between router/access point and WiFi device, presence volume and type of WiFi traffic from other devices, sample rate and operating temperature. For extended low temperature operation, below 0°C/32°F, Comark recommends the use of Energizer L91's AA cells for improved battery life

**Setup of the logger can only be completed with the use of a compatible Android or iOS Device using the new Comark Cloud App. The app is compatible with all iOS Devices and Android Devices running Android 5.0 or above with a screen resolution of at least 800*600.

Diligence WiFi RF400
Data Logger Specifications

RF400 Data Logger Specification (All models)

Battery Life*	2 years depending on frequency of transmissions
Power Supply	4 x 1.5V AA Alkaline cells (Supplied)
Operating Range	-18°C to +55°C / -0.4°F to +131°F
Logger Rate (User Configurable)	10 seconds to 12 hours
Transmission Period (User Configurable)	1 minute to 24 hours
Logger Dimensions	Height 93mm x Width 93mm x Depth 32mm
Protection Rating	IP67
Temperature Selection	°C or °F
Resolution (Temperature)	0.1°
Resolution (Humidity)	1
WiFi Setup**	Use the new Comark Cloud App for all Setup and Programming. No PC Software required.
WiFi Compliance	IEEE 802.11b/g/n compliant, supports WEP, WPA/WPA2 encryption and enterprise networks (PEAP, EAP-FAST, EAP-TTLS)

RF411-T Data Logger Specification

Temperature Measurement Range	-18°C to +55°C / -0.4°F to +131°F
Temperature Accuracy (Full range)	±0.5°C / ±1°F
Temperature Probe (Included)	RF401-T Short Air Probe

RF412-TP Data Logger Specification

Temperature Measurement Range	-40°C to +125°C / -40°F to +257°F
Resolution	0.1°
Temperature Accuracy (Full Range)	±0.8°C at -15°C to +70°C / ±1.5°F at +5°F to +158°F
Temperature Probe (Included)	RF401-TP Temperature Probe with 3m Lead

RF413-TH Data Logger Specification

Temperature Measurement Range	-30°C to +80°C / -22°F to +176°F
Temperature Accuracy (+5 to +60°C / +41°F to +140°F)	±0.3°C / ±0.6°F
Temperature Accuracy (Full range)	±0.8°C / ±1.1°F
Humidity Accuracy @25°C / 77°F (Full range)	±5.0% RH
Temperature and Humidity Probe (included)	RF403-TH Temperature and Humidity Probe with 2m Lead

RF414-TC Data Logger Specification

Temperature Measurement Range - Type K	-200°C to +1300°C / -328°F to +2372°F
Temperature Measurement Range - Type T	-200°C to +390°C / -328°F to +734°F
Typical Temperature Accuracy	±1°C / ±2°F
Thermocouple Probe Adaptor and Type K Probe Included	RF404-TC Adaptor with Type K Probe with 1.5m Lead
Included probe Accuracy	±1°C (0 to +200°C) / ±2°F (+32 to +392°F)

Contact Us

We understand there are times when our customers may need guidance on the best solution for their requirements. If you would like further information or to discuss your temperature monitoring application, please contact our customer service department who will be pleased to assist.

We are here to help so please contact us on:

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+44 (0) 207 942 0712

Email:
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Warranty Statement

Each Comark product is warranted to be free from defects in material and workmanship under normal use and service. The warranty period is one (1) year, unless otherwise stated, and the warranty period begins on the date of shipment. Temperature probes are warranted for six (6) months.

The warranty extends only to the original buyer or end-user of a Comark authorized reseller. This warranty does not cover damage resulting from normal wear and tear, abuse, misuse, accidental breakage, negligence, defects caused by modifications, repair and servicing not made or authorised by Comark Instruments, damage caused by handling, operating, storing, or using the product outside the intended uses described by our product literature. Disposable batteries are also exempt from warranty.

Warranties on dishwasher safe models apply only where the product has been used or cleaned in a commercial dishwasher. Comark Instruments products are not suitable for use or cleaning in domestic dishwashers.

Comark's warranty obligation is limited, at Comark's option, to refund of the purchase price, free of charge repair, or replacement of a defective product returned within the warranty period. Products must be returned to Comark or one of Comark's authorized service agents.

This warranty is the buyer's sole and exclusive remedy and is in lieu of all other warranties, express or implied, including but not limited to any implied warranty of fitness for a particular purpose. Comark shall not be liable for any special, indirect, incidental or consequential damages or losses, including loss of data, whether arising from breach of warranty or based on contract, tort, reliance or any other theory. Since some countries or states do not allow limitation of the term of an implied warranty, or exclusion or limitation of incidental or consequential damages, the limitations and exclusions of this warrant may not apply to every buyer.

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