NEW!

COMARK
A Fluke Company

Wireless Monitoring for the

Food Industry

Temperature & Multi-Parameter

20822-7 | October 2022

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What We Offer

The global food industry is a fast paced and complex environment, that is heavily regulated to ensure that food that is produced, or sold throughout the supply chain, is safe for consumption.

Safeguards must be in place along the supply chain, from farming and fishing, through to food production, distribution and eventual sale to the end customer, through retail, catering and food service outlets.

Critical Monitoring

Collect automated temperature and humidity measurements in critical areas like refrigerators, freezers, walk-in coolers and frozen storage areas.

Regulatory Compliance

Stay compliant with the latest FDA, FSIS or CDC regulations without the stress associated with manual record-keeping and audit processes.

Data Integrity

Robust data storage of your measurement data to ensure that complete records are not only error-free, but also maintained in accordance with any regulatory requirements applicable to the food industry.

Fully Scalable Solutions

Easy to scale as and when additional devices are required. Start small and expand to cover even multiple sites using the same platform. Add adaptors to increase the channels on your transmitter.

Easy Installation

Quick and easy self-install with no site survey so easy to onboard and get up and running. Rely on our full support every step of the way.

Flexible Power Options

Position your transmitters wherever they are needed with the convenience of battery power that lasts up to one year or add mains power.

The Professionals' Choice

What We Offer

Investing in the most current technology can help your business run more efficiently while also reducing the risk of human error when taking these time-consuming manual checks.

Safeguard valuable inventory

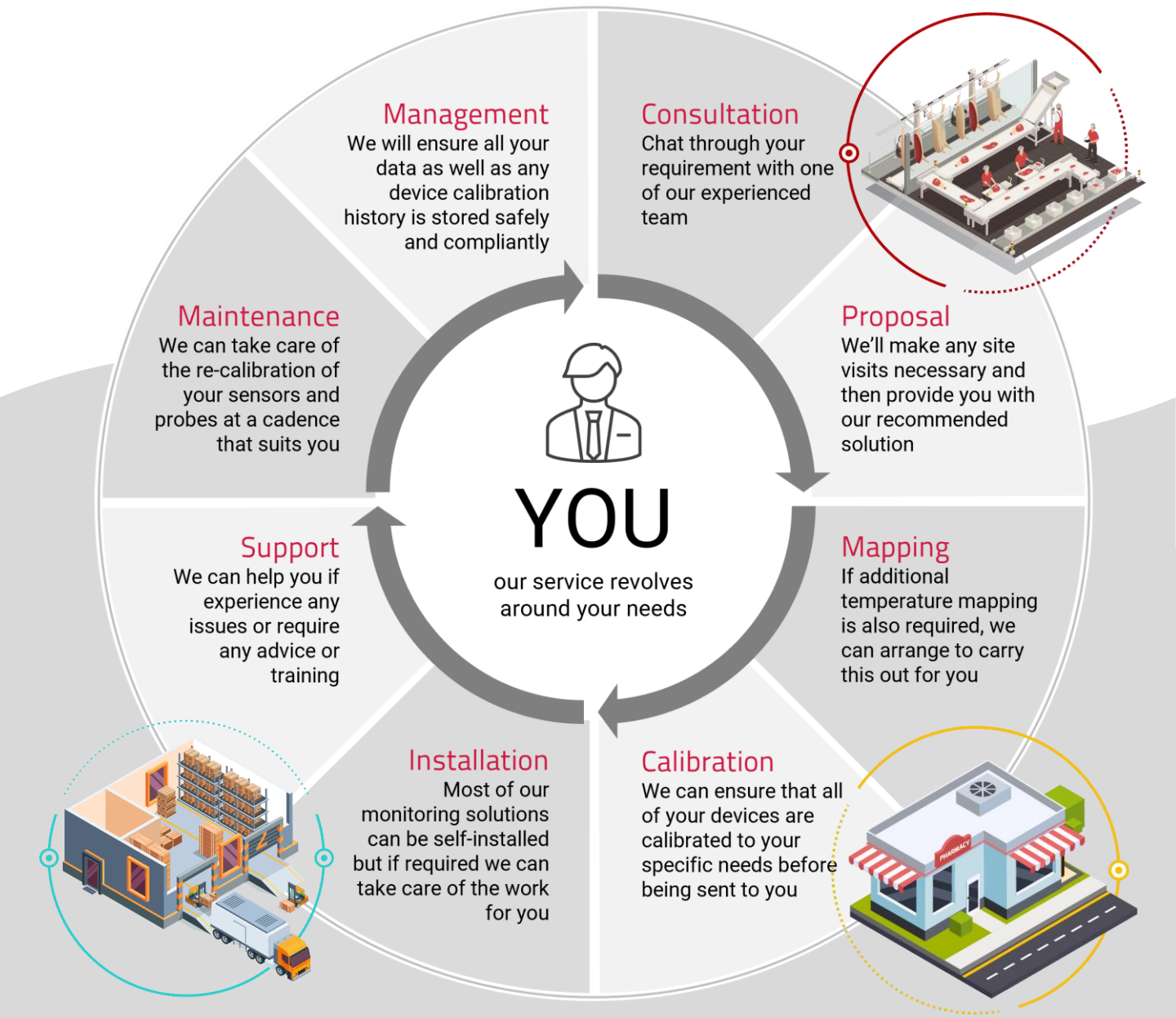
protect your coolers, walk-ins and freezers

Smaller operators are just as aware as the larger chains that the failure to monitor temperatures adequately can result not only in product loss, but food-borne illness outbreaks that will damage consumer confidence in their brand.

For those wishing to keep their food safety monitoring simple, but still meet all the regulatory requirements and HACCP guidelines, we offer a fully scalable solution. Start with a single device, with no hub or gateway required and scale right up to multiple devices, in multiple premises, across multiple regions.

Our Service Promise

We believe in more than just selling systems, because we know you need more than that. Our history is filled with customer journeys just like yours and whether you are involved in food processing, storage, distribution or foodservice we know we have the right balance between product and service to deliver on our promises and meet your needs.



*Services offered may vary depending on geolocation

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Why Comark?

We have over sixty years experience in providing quality temperature measurement solutions. We are the trusted choice for food industry professionals, because we demonstrate a thorough understanding of temperature regulations and guidelines within food processing, food storage/distribution, testing as well as foodservice and catering.

sodexo

The Cheesecake Factory

Levy

WHATABURGER

Hilton
HOTELS & RESORTS

US. FOODS

Diligence™ 600

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WiFi Monitoring System

Our most advanced system yet, the Diligence 600 provides a highly accurate, continuous temperature monitoring and analysis solution that utilizes your organization's existing WiFi (Wireless) network.

Combine transmitters, adaptors, probes and sensors to suit your exact needs and leverage the power of our Diligence Cloud platform to measure and monitor temperature data and other parameters, within any professional application or environment.

Diligence™ Cloud

Diligence™ 600

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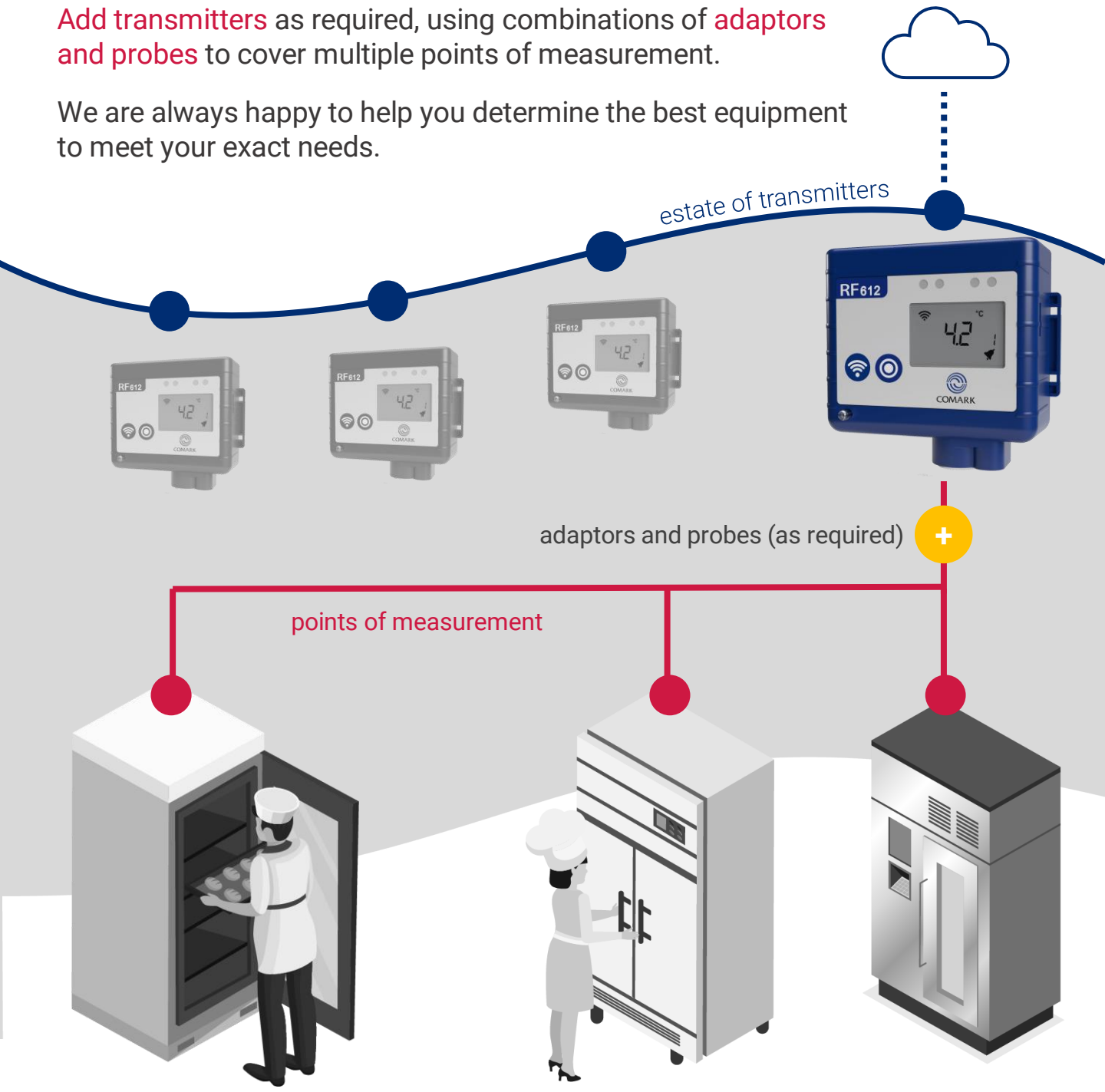
WiFi Monitoring System

Your Diligence 600 WiFi Monitoring System is your estate of transmitters, linked centrally to your Diligence Cloud account. This could be anything from a single transmitter, to multiple transmitters across multiple sites.

Consider how many points of measurement you will need to monitor and the different parameters that are to be measured.

Add transmitters as required, using combinations of adaptors and probes to cover multiple points of measurement.

We are always happy to help you determine the best equipment to meet your exact needs.



Diligence™ 600

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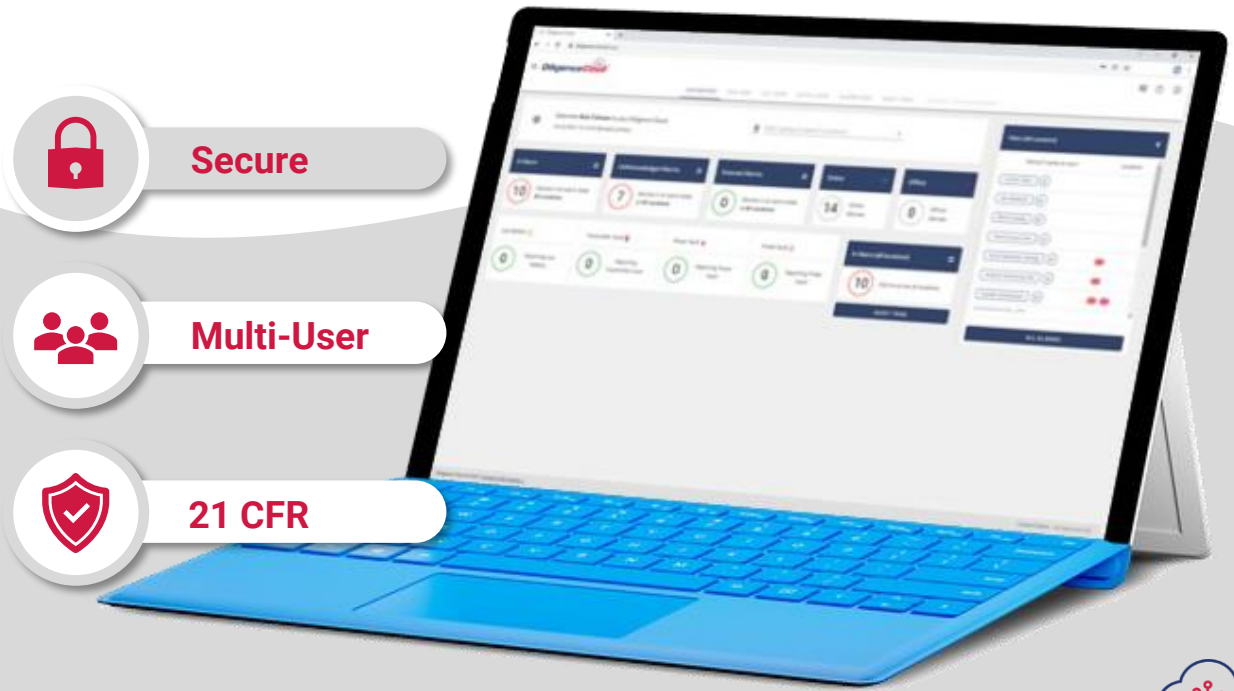
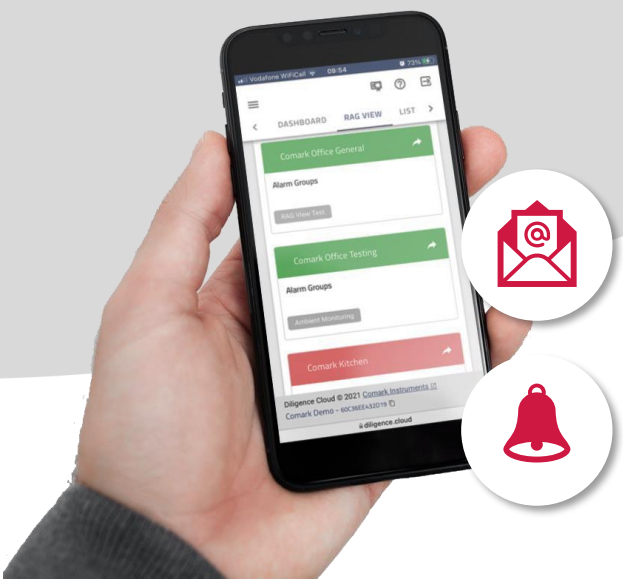
Powerful Data Management

Our intuitive Diligence Cloud platform provides secure, multi-user access to data records and audit trails, from any web-browser enabled device. It is fully scalable to meet the demands of monitoring multiple devices across multiple sites, in line with your monitoring, data logging and compliance requirements.

Benefit from truly automated data recording and storage, saving you time, money and valuable resources and safeguarding product, whilst adhering to the strict compliance and regulatory requirements of the healthcare industry.



Diligence™ Cloud



Always Alert

Get alerts via the Diligence Cloud platform including audio and visual alarms and digital notifications when any parameter is recorded out of programmed range.

Diligence™ 600

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WiFi Temperature Transmitter

Part No: RF612 (5306302)

The Diligence 600 WiFi Temperature Transmitter is designed to monitor the ambient temperature of your storage and work areas with an integral sensor, whilst allowing for up to four external points of temperature measurement to also be measured and recorded.

Also available in white - Part No. RF612W (5306316)

Suited to a wide variety of applications...

Connect a compatible external Lumberg (Thermistor) probe directly to the socket at the base of the adapter in order to monitor the temperature according to your needs.

Available Types:

- Penetration Probes
- Duplex Air Probes
- Single Air Probes

Diligence™ 600

COMARK
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WiFi Temperature Transmitter

Part No: RF612 (5306302)

Integral Temperature Sensor Specifications	
Sensor Type	Thermistor
Scales	°C and °F
Temperature Measurement Range	-18°C to +55°C (-0.4°F to +131°F) [1]
Accuracy 0°C to +55°C (-32°F to +131°F)	<±0.3°C (±0.6°F)
Accuracy (full range)	±0.5°C (±0.9°F)
Temperature Resolution	0.1°C (0.2°F)

External Probes Specifications	
Number of External Channels	4
Sensor Type	Thermistor
Connector	6-Pin Lumberg
Scales	°C and °F
Temperature Measurement Range	-40°C to +125°C (-40°F to +257°F)
System Accuracy 0°C to +70°C (-32°F to +158°F) - including Probe	<±0.3°C (±0.6°F)
System Accuracy -25°C to 100°C (13°F to +212°F) - including Probe	±0.5°C (±0.9°F)
System Accuracy (Full Range) - including Probe	±1°C (±1.8°F)
Temperature Resolution	0.1°C (0.2°F)

Door Sensor Specifications	
Door Sensor Resolution	5 seconds
Door Sensor (Optional for RF612 only)	Available as standard (RF521) or Heavy-Duty (RF522)
Door Sensor Alarms	Door Switch Alarms Continuous and Average (up to 60 minutes programmable)

[1] Temperature and Storage range with Energizer Lithium L91 Cells is expanded to -30 to +60°C (-22°F to +140°F)

Diligence™ 600

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Accessories

For the Diligence 600 WiFi Temperature Transmitter (RF612)

The Diligence 600 WiFi Temperature Transmitter (RF612) is capable of handling up to FOUR external channels. Add an adaptor should you have multiple points of measurement that you wish to monitor from a single device.

4-Way PST Adaptor

Part No: RF601A (5306369)

Designed to allow you to connect four compatible single channel Lumberg thermistor probes to your Diligence 600 WiFi Temperature Transmitter (RF612).

Y Adaptor

Part No: RF602Y (5306378)

Designed for use with a combination of either single or dual-channel thermistor probes to extend the monitoring capability of your transmitter.

Door Event Sensors

Part No: RF521 (3063449) - Standard
Part No: RF522 (3063451) – Heavy-Duty

Work with your transmitters to monitor activity on doors such as those on storage areas and large walk-in refrigerators and freezers.

Diligence™ 600

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WiFi Temperature and Humidity Transmitter

Part No: RF613 (5306325)

The Diligence 600 WiFi Temperature and Humidity Transmitter is designed to monitor the temperature and humidity of local environments such as offices, storage and production areas or critical applications, such as clean rooms.

Suited to ambient monitoring applications ...

The WiFi Temperature and Humidity Transmitter utilises a high accuracy digital sensor for stable measurement of humidity over many years and can be calibrated (RH scale only) to remove small humidity offset values.

- Battery powered
- Integral digital temperature and humidity sensor
- High accuracy (temperature) +/-0.5°C range -18 to +55°C
- High accuracy (humidity) +/-3% RH range 10 to 90% RH
- Connects to your local Wi-Fi network
- Designed for easy self-installation

Diligence™ 600

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WiFi Temperature and Humidity Transmitter

Part No: RF613 (5306325)

Integral Temperature Sensor Specifications	
Sensor Type	Digital Temperature
Scales	°C / °F and Dew Point
Temperature Measurement Range	-18°C to +55°C (-0.4°F to +131°F) [1]
Accuracy (full range)	<±0.5°C (±0.9°F)
Temperature Resolution	0.1°

Integral Humidity Sensor Specifications	
Sensor Type	Digital Humidity
Scales	%RH
Measurement Range	0 to 100% RH
Accuracy	±3% RH (10 to 90% RH)
Humidity Resolution	0.1%
Calibration	5-Point RH Calibration (Optional)

[1] Temperature and Storage range with Energizer Lithium L91 Cells is expanded to -30 to +60°C (-22°F to +140°F)

Diligence™ 600

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WiFi Thermocouple Transmitter

Part No: RF614 (5306333)

The Diligence 600 WiFi Thermocouple Transmitter is designed for extended range temperature monitoring in high-temperature, or low-temperature, food environments.

Perfect for low and ultra-low temperature applications...

With the ability to add Type T and Type K Thermocouple probes via a variety of adaptors, the Diligence 600 WiFi Thermocouple Transmitter becomes the perfect device for monitoring temperatures as low as -200°C (-328°F).

Diligence™ 600

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WiFi Thermocouple Transmitter

Part No: RF614 (5306333)

Integral Temperature Sensor Specifications [1]	
Sensor Type	Thermistor Sensor is built into Comark Lumberg Thermocouple Probes. A probe must be connected to measure temperature. There is no built in Sensor in RF614.
Scales	°C and °F
Temperature Measurement Range	-18°C to +55°C (-0.4°F to +131°F) [2]
Accuracy 0°C to +55°C (-32°F to +131°F)	<±0.3°C (±0.6°F) [3]
Accuracy (full range)	±0.5°C (±0.9°F) [3]
Temperature Resolution	0.1°C (0.2°F)

External Probes Specifications	
Number of External Channels	3
Sensor Type	Type T and Type K Thermocouple
Connector	6-Pin Lumberg and Sub-Min Connector Options [4]
Scales	°C and °F
Temperature Measurement Range (Thermocouple Type T)	-200 to +400°C (-328 to +752°F)
Temperature Measurement Range (Thermocouple Type K)	-200 to +1372°C (-328 to 2501.6°F)
Instrument Accuracy	+/-0.1% ±0.2°C (±0.4°F) full range @ +23°C Ambient
System Accuracy Type T - Over the range 0°C to +70°C (32°F to +158°F)	±0.5°C @ +23°C (+73°F) Ambient [3]
System Accuracy Type T and K - Full Range	Please refer to specification for the chosen thermocouple probe
Temperature Resolution	0.1°C (0.2°F)

[1] Only applies when Thermocouple Probe or Adaptor used
[2] Temperature and Storage range with Energizer Lithium L91 Cells is expanded to -30 to +60°C (-22°F to +140°F)
[3] When used with a Comark Lumberg Thermocouple Probe or Lumberg Adaptor
[4] Comark Type T Lumberg probes will connect directly to the RF614. For up to 3 channels an N2000ADP/T or N2000ADP/K adaptor is required. These adaptors are compatible with Thermocouple Sub-Min Probes.

Diligence™ 600

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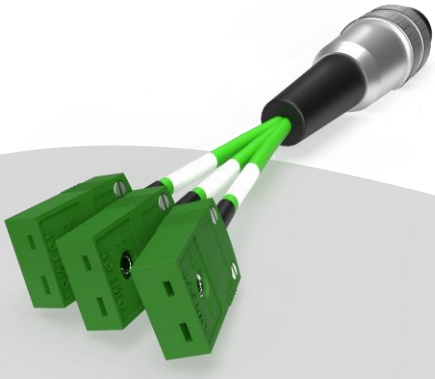
Accessories

For the Diligence 600 WiFi Thermocouple Transmitter (RF614)

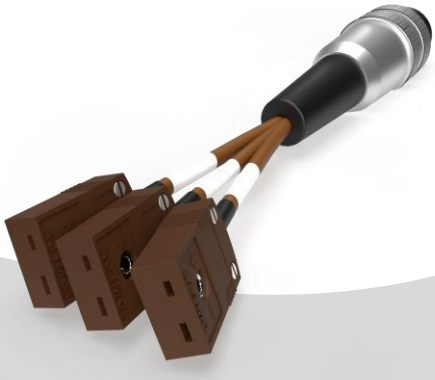
The Diligence 600 WiFi Thermocouple Transmitter (RF614) is capable of handling up to THREE external channels. Add an adaptor should you have multiple points of measurement that you wish to monitor from a single device or if you need the additional temperature ranges offered by Type T and Type K probes.



Type K Sub-Min Adaptor

Part No: N2000ADP/K (3059954)

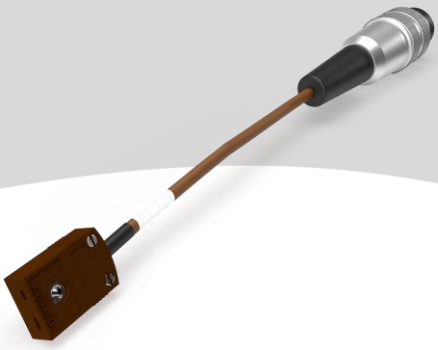
Connect up to three sub-miniature (Type K) probes to your Diligence 600 WiFi Thermocouple Transmitter (RF614) via a single Lumberg connector.



Type T Sub-Min Adaptor

Part No: N2000ADP/T (3059968)

Connect up to three sub-miniature (Type T) probes to your Diligence 600 WiFi Thermocouple Transmitter (RF614) via a single Lumberg connector.



Single Channel Type T Adaptor

Part No: KX9601 (4916991)

Connect a single sub-miniature (Type T) probe to your Diligence 600 WiFi Thermocouple Transmitter (RF614) via its Lumberg connector.

Diligence™ 600

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WiFi Multi-Parameter Transmitter

Part No: RF615 (5306340)

The Diligence 600 WiFi Multi-Parameter Transmitter is designed for a wide range of applications and is capable of measuring parameters such as current, voltage, pressure, gas, flow, level, dissolved oxygen and CO2.

Measure a wide variety of parameters...

Connect up to TWO 2-Way Multi-Parameter Adaptor boxes to allow for FOUR external voltage or current transducers. Add an optional power supply to the adaptor box for 24V power should the need arise.

Talking of power...

All Diligence 600 WiFi Transmitters can be powered via battery or the RF520 Mains Power Supply

Diligence™ 600

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WiFi Multi-Parameter Transmitter

Part No: RF615 (5306340)

Integral Temperature Sensor Specifications	
Sensor Type	Thermistor
Scales	°C and °F
Temperature Measurement Range	-18°C to +55°C (-0.4°F to +131°F) [1]
Accuracy 0°C to +55°C (-32°F to +131°F)	<±0.3°C (±0.6°F)
Accuracy (full range)	±0.5°C (±0.9°F)
Temperature Resolution	0.1°C (0.2°F)

External Probes Specifications	
Number of External Channels	4
Sensor Type	Voltage or Current Measurement
Connector	6-Pin Lumberg [2]
Scales	Free Form on Cloud
Measurement Range	+/-0.32000 to +/-32000
Decimal Points	1DP to 5DP
Displayed Range (LCD Only) Not Applicable to logged readings	+/-0.32 to +/-19999
Instrument Accuracy	+/-0.3% of reading @ +23°C Ambient
Resolution	Resolution @ 0-10V +/-1mV Resolution @ 0-1V +/-0.1mV Resolution @ 4-20mA 1µA

[1] Temperature and Storage range with Energizer Lithium L91 Cells is expanded to -30 to +60°C (-22°F to +140°F)
[2] To connect to two external transducers, the RF615B Box is required. Up to 4 external channels can be achieved by connecting a Y-Adaptor (RF602Y) with two RF615B Boxes.

Diligence™ 600

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Accessories

For the Diligence 600 WiFi Multi-Parameter Transmitter (RF615)

The Diligence 600 WiFi Multi-Parameter Transmitter (RF615) is capable of handling up to FOUR external transducers through a combination of adaptors.

Multi-Parameter 2-Way Adaptor

Part No: RF615B (5306391)

Designed to allow for the connection of up to TWO external transducers using integrated screw terminals to your device.

Y Adaptor

Part No: RF602Y (5306378)

Combine with TWO 2-Way Multi-Parameter Adaptors to maximize the number of external channels you can measure.

24V Power Supply

Part No: 18477 (3616817)

24V Power Supply with interchangeable Mains plugs to suit your region. Designed for use with the Multi-Parameter 2-Way Adaptor Box (RF615B).

Diligence™ 600

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WiFi PT100 Temperature Transmitter

Part No: RF616 (5306357)

The Diligence 600 WiFi PT100 Temperature Transmitter is designed to monitor an external high-accuracy PT100 probe and the ambient temperature of your storage and work areas with its integral sensor.

Designed for applications requiring high accuracy ...

The WiFi PT100 Temperature Transmitter is a highly scalable solution, designed to monitor the temperature of your critical items by means of a highly accurate PT100 probe offering a wide range and capable of ultra-low temperature measurement, whilst also allowing for ambient storage and work areas with an integral sensor.

- Battery Powered
- Integral Temperature Sensor
- Designed for a single External PT100 Channel
- High Accuracy (Transmitter) +/-0.1°C/0.2°F
- Connects to your Local Wi-Fi Network
- Designed for Easy Self-Installation

Diligence™ 600

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WiFi PT100 Temperature Transmitter

Part No: RF616 (5306357)

Integral Temperature Sensor Specifications	
Sensor Type	Thermistor
Scales	°C and °F
Temperature Measurement Range	-18°C to +55°C (-0.4°F to +131°F) [1]
Accuracy 0°C to +55°C (-32°F to +131°F)	<±0.3°C (±0.6°F)
Accuracy (full range)	±0.5°C (±0.9°F)
Temperature Resolution	0.1°

External Probes Specifications	
Number of External Channels	1
Sensor Type	PT100 (4-Wire)
Connector	6-Pin Lumberg
Scales	°C and °F
Temperature Measurement Range	-200°C to +150°C (-328°F to +302°F)
Instrument Accuracy (full range)	<±0.1°C (±0.2°F) [2]
Temperature Resolution	0.05°C (0.1°F)

[1] Temperature and Storage range with Energizer Lithium L91 Cells is expanded to -30 to +60°C (-22°F to +140°F)
[2] When used with a Comark Probe

Diligence™ 600

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WiFi Transmitters

All Models

Every Diligence 600 WiFi Transmitter comes with local LED and LCD indicators for active alarm conditions along with a built-in buzzer for audible alarms.

Ready to get started?

Talk to one of our wireless monitoring experts

Monitoring System Enquiry

Diligence™ 600

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WiFi Transmitters

All Models

Common Specifications (All Models)	
Low and High Alarms / Low and High Alerts - All Channels excluding Door Switch	Low and High Alarms / Low and High Alerts both with Alarm Delay and fully selectable Alarms
Alarm Delay 0-60 minutes - All Channels excluding Door Switch	Delay is programmable for Alerts or Alarms agnostic of whether you program High and Low or High or Low
Ambient Operating Temperature Range	-18 to +55°C (-0.4°F to 131°F) - 10-90% RH - Non-Condensing
Storage Temperature	-18 to +55°C (-0.4°F to 131°F)
Wireless Frequency	2.4GHz WiFi (IEEE 802.11b/g/n)
Wireless Security	WPA2 Pre-Shared Key
Radio Range	Typically, 20 metres indoors
Clock Accuracy	20ppm (1 minute/month) at +25°C (+77°F)
Logging Memory	140000 Max records - Depends on number of active channels
Log Rate	Programmable between 1 minute and 60 minutes
Channel Monitoring Rate	1 Minute
Wireless Radio Rate	Programmable between 5 Minutes to 24 Hours
Alarm/Active LEDs (Front)	The GREEN LED flashes to indicate that the Transmitter Active is logging
Status LEDs (Side)	RED - WiFi Active / YELLOW - Communications Active / GREEN - Mains Power Connected
Case Material	Over-moulded food safe clear polycarbonate with BioCote® Antimicrobial Protection
Environmental Protection	Case enclosure designed to meet IP65 BS EN 60529
Battery Type	4 x AA Alkaline or Energizer Lithium L91 Cells
Battery Life	Up to 1 year
Dimensions	Length 110mm, Height 100mm, Depth 45mm
Weight	300g
Mains PSU (Optional)	Optional Mains PSU Part No RF520 (100-240VAC 0.3A 50/60Hz)
Maximum Probe Lead Length	Not to exceed 30m
Warranty	2 Years

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