



# Bluetooth Wireless Mesh Temperature Due Diligence for Dark Kitchens

# Control and Monitoring

## RDM'S BLUETOOTH SOLUTIONS

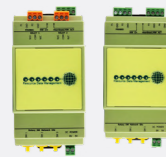
Dark Kitchens are often restricted in space since many are constructed in retrofitted warehouses or individual containers. Installing wired HVACR control and monitoring devices can prove too difficult or expensive. RDM's wireless Bluetooth Mesh Network range offers a cost-effective, easy-to-install alternative. The devices feature Bluetooth 5.0 mesh system which is a robust, reliable wireless system, ideal for picking up multiple data points or controlling simple outputs. One unique feature of the RDM Bluetooth wireless mesh system, is devices can send signals from one device to the next, bypassing obstacles, to find reliable and secure paths for the data.



### WIRELESS TEMPERATURE PROBE (PR0633)

#### Battery-Powered Temp Monitoring

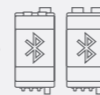
If no power supply is available, the battery-powered probe is the ideal solution for temperature monitoring. It sends temperature data every 10 minutes to a central logging system and switches to sleep mode when not in use to increase the battery's life span. As an extra security, the Wireless Temperature Probe can store up to 7 days of temperature data, should the communication with the central system be lost, and can therefore be used to log temperature data when food is in transit.



### 4 INPUT & 2 INPUT 2 OUTPUT MODULE (PR0631-4I & PR0631-2I2O)

#### Temperature Monitoring & Control

The 4 Input and 2 Input 2 Output Modules send temperature data to the central data logger which replaces the need for manual recordings. The inputs can also be configured to trigger an over or under temperature alarm to ensure food safety compliance. The device featuring two outputs can receive commands from the central system allowing it to control equipment on-site such as lighting or provide a run signal for air conditioning equipment.



### CONTROLLER COMMUNICATION MODULE (PR0630)

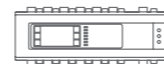
#### Temperature Monitoring & Control

The RS232 to Bluetooth Interface allows an RDM RS232 controller to communicate wirelessly via the RDM Bluetooth network with RDM's control system front-end DMTouch. The controller's inputs, outputs, parameters, control state and alarm information can be viewed on the DMTouch, where parameters can also be changed. It can also be integrated with the DMTouch's GP Timer Channels, to facilitate control of refrigerator lighting, and with the Defrost Timer Channel, for defrost management and energy reduction.



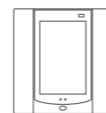
### INTUITIVE TDB (PR0650 TDB) BMS & HVACR Control

Designed for use in varying HVAC, refrigeration and lighting applications, Intuitive Controllers present a powerful BMS control option with the ability to control over 600 points from one device. They are available in multiple build and software configurations, including built-in PLC software. Benefits include open protocol communications and remote dial-in access.



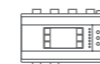
### DMTOUCH (PR0510) Front-End Control and Monitoring

The control and monitoring capabilities of DMTouch are unmatched by any other system Front-End within the building controls industry. It provides a central point to control and monitor all HVAC, refrigeration and lighting assets within a building or multi-building site. Features include both on and off-site monitoring, and the potential to integrate with existing assets and infrastructure.



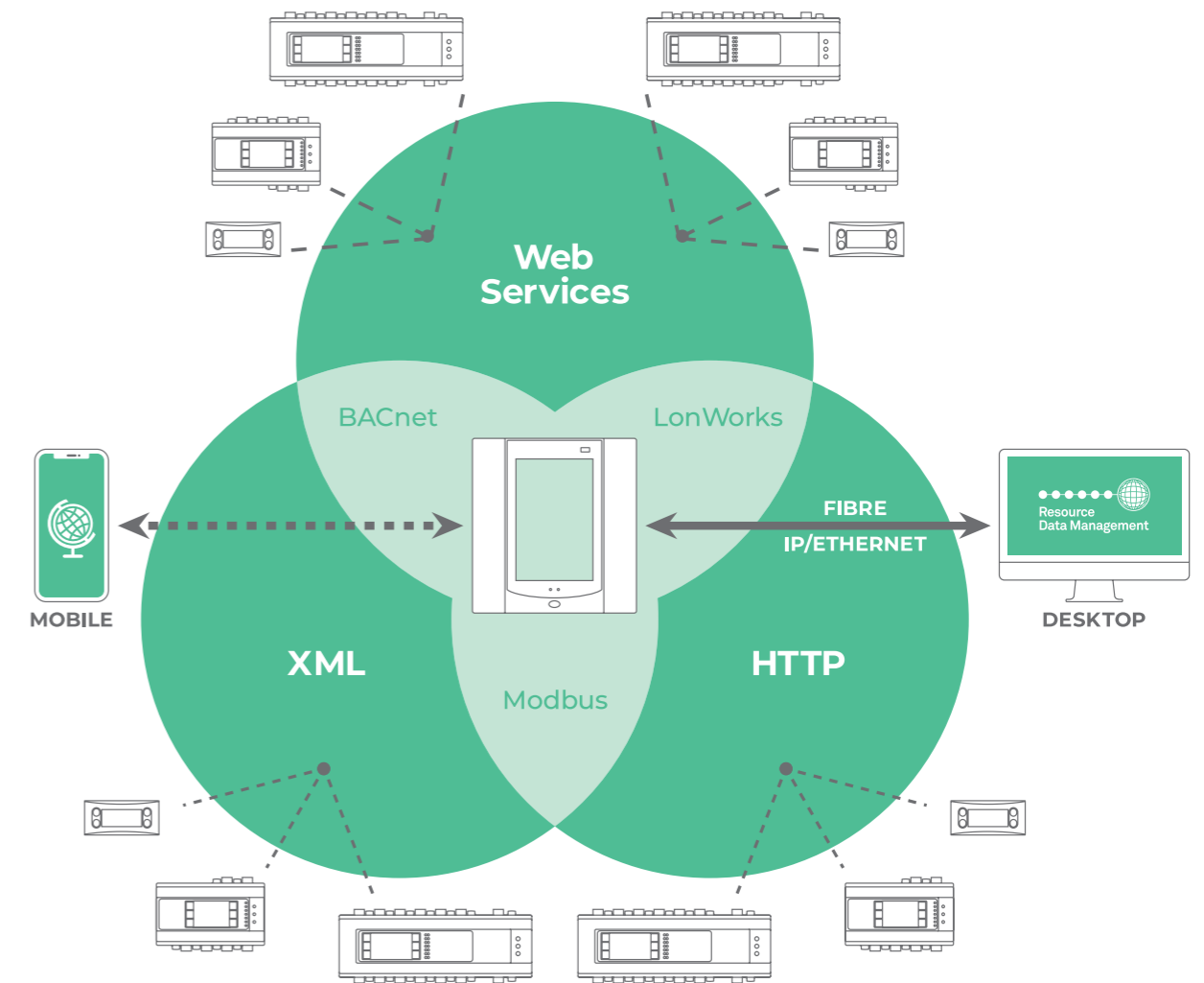
### MINIDM (PR0680 CD NF MDM) Front-End Control and Monitoring

The miniDM is an alternative option to the DMTouch. Smaller in size, this control system front-end utilises the same software interface as the DMTouch in a compact, cost-effective package to provide a central control point on site for HVAC and refrigeration systems. Capable of managing up to 32 independent devices, the miniDM is perfectly suited for small footprint applications such as convenience stores and restaurant kitchens.



# IoT Integration & Networking Across Truly Open Protocols

Communication between RDM devices is based upon truly open protocols, using XML and HTTPS, to provide unmatched control and communication options. Offering Fibre and Bluetooth options, in addition to industry standard networking options, our aim is to simplify the communication process to make it as efficient and cost-effective as possible.



## Truly Open Protocols

## Non-Proprietary Protocols

IP, XML, and HTTPS are genuinely open. They have no hidden membership, license or activation fees. Overcoming the challenges presented by legacy investment, we provide the capability to communicate with existing HVAC and refrigeration equipment via non-proprietary networks including BACnet, Modbus, and LonWorks. Open protocol systems offer a higher degree of flexibility and don't lock the user in.

- Open web-based format
- IP at device level since 2004
- No annual subscription or license fees
- Integrate with third-party systems
- Reduced cost of linking equipment on-site
- Reduced installation and set-up time

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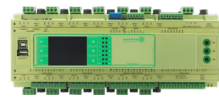
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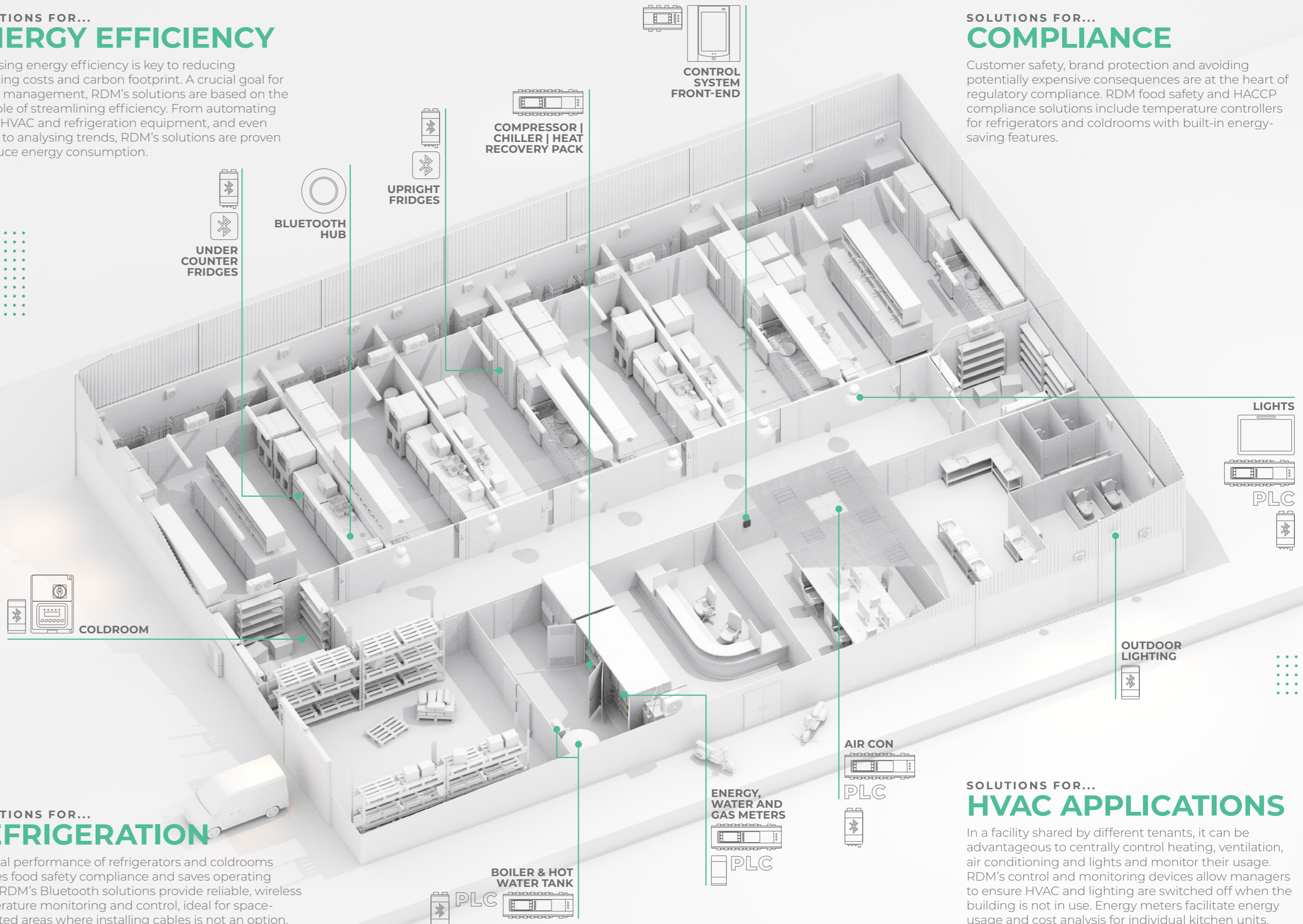
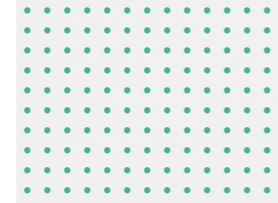


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## SOLUTIONS FOR... ENERGY EFFICIENCY

Increasing energy efficiency is key to reducing operating costs and carbon footprint. A crucial goal for facility management, RDM's solutions are based on the principle of streamlining efficiency. From automating lights, HVAC and refrigeration equipment, and even ovens, to analysing trends, RDM's solutions are proven to reduce energy consumption.



## SOLUTIONS FOR... COMPLIANCE

Customer safety, brand protection and avoiding potentially expensive consequences are at the heart of regulatory compliance. RDM food safety and HACCP compliance solutions include temperature controllers for refrigerators and coldrooms with built-in energy-saving features.

## SOLUTIONS FOR... REFRIGERATION

Optimal performance of refrigerators and coldrooms ensures food safety compliance and saves operating costs. RDM's Bluetooth solutions provide reliable, wireless temperature monitoring and control, ideal for space-restricted areas where installing cables is not an option.

## SOLUTIONS FOR... HVAC APPLICATIONS

In a facility shared by different tenants, it can be advantageous to centrally control heating, ventilation, air conditioning and lights and monitor their usage. RDM's control and monitoring devices allow managers to ensure HVAC and lighting are switched off when the building is not in use. Energy meters facilitate energy usage and cost analysis for individual kitchen units.

# Resource Data Management

Helping companies stay safety-compliant, protect assets and manage energy, we offer a range of over 500 hardware and software products for HVACR, building and energy control applications. Our solutions are used in many industries including food retail, building management, cold chain, food processing and many

more. Users have the option to monitor and control everything from a single device to building-wide energy use, across a national estate and devices worldwide.

As a pioneer in advocating open control systems at device level, our ongoing push for genuinely open protocols, including XML

and web services, has helped our customers save operating costs and optimise control strategies.

Founded in 2000, RDM have expanded over the past two decades. Represented in the UK, US, Malaysia, Australia and New Zealand, we support customers worldwide.

## 5YR

Warranty

## Over 500

Products

## OPEN

Protocols



- RDM Offices
- Affiliates
- Agents & Distributors

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