

Resource
Data Management



dmTouch Management Solutions and Displays



Putting you in control

Gathering and monitoring data in real time, we deliver meaningful information to the right people at the right time. RDM control and predictive monitoring solutions reduce energy consumption to ensure that your business is operating at optimum levels. Our wide range of controls can be used across almost any type of BEMS infrastructure, maintaining everything from lighting and security to heating and refrigeration.

Our award winning and predictive remote monitoring and energy management software options give you complete visibility of the performance and health of your infrastructure whenever and wherever you need it. User friendly interfaces allow you to easily manipulate complex data into a highly graphical, easy to read, and interactive format. With the ability to set up text alerts, you don't even need to log in to know when the system needs your attention. Kwheeb, our energy dashboard, completes the cycle – making it even easier to identify cost saving options and manage your energy usage.



5 year warranty on all
RDM manufactured products*

*Excluding OEM products and selected product lines. Warranty details for excluded products will be detailed on the respective product pages.



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Free technical support

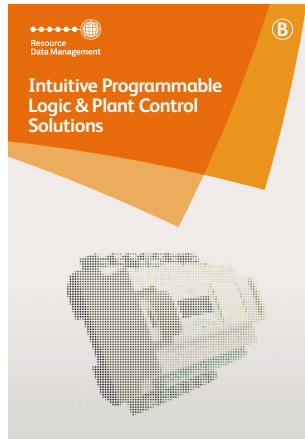
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Other RDM product ranges



Book A Temperature Control Solutions

Flexible temperature control solutions for multiple environments including Retail, Healthcare and Pharmaceutical. Our solutions ensure that your assets and/or environment is optimally maintained to help realise increased profitability and boost your ecological credentials.



Book B Intuitive Programmable Logic & Plant Control Solutions

Intuitive controllers make intelligent control simple and can be coupled with our free license PLC software – The Data Builder (TDB). Select from pre-programmed control options or easily configure your own to create bespoke solutions that precisely meet your requirements.



Book D HVAC & BEMS Solutions

Our control system integrators present you with only what you need to know in order to make informed decisions. We recognise that each client has their own unique requirements, and budget, which is why we have developed options that are affordable and scalable to meet the most simple or the most complex of needs.



5 year warranty on all
RDM manufactured products*

While every effort is made to ensure the information given is accurate the Resource Data Management Group, including all associated companies, subsidiaries and affiliates cannot accept liability for any errors or mistakes which may arise. All specifications are subject to change without notice. For full terms and conditions of sale please visit www.resourcedm.com

*Excluding OEM products and selected product lines. Warranty details for excluded products will be detailed on the respective product pages.

About us

It's common sense that the customer is core to our business. Your needs drive every aspect of our business from product planning, design and development to production.

Designed with reliability and longevity in mind, we develop products and solutions that challenge the way people think and change the industry. We offer the perfect mix, quality solutions that are easy to implement and products made by the best brains in the business. Each and every product is cost effective and packed with features and software that can't be matched. We also give you maximum networking flexibility and will never lock you into propriety networking systems.

Our customer commitment goes that one step further, with free after sales support, from a team of technical experts and free training sessions, tailored to individual customer needs. We ensure that our products and solutions deliver the very best results for each individual customer – which is why we are trusted by the world's leading brands.

Offices throughout Europe, USA, India, Australia and Asia, combined with a carefully selected international distributor and installer network, means that we are perfectly and strategically positioned to support our customers.

Delivering solutions for a wide range of industries



Retail



Healthcare



Public Sector
& Education



Food Production
& Processing



Data Centres



Offices &
Commercial



Leisure



RDM solutions

RDM solutions are used by the world's leading retailers and blue chip companies to control and manage a wide variety of infrastructures. Our control, energy management and asset performance strategies give you the information you need to reduce energy consumption, predict failures, and avoid expensive downtime while giving you the insight you need to accurately forecast capital expenditure and operating costs.

The dmTouch provides the ultimate gateway to interface with a number of standard and proprietary protocols including Modbus® and BACnet®. Our controls also network across industry standard protocols including CAT 5 Ethernet IP.

Quick and simple, plug and play options negate the need for proprietary setup, making for easy installation and networking, minimising both install cost and time.

At the heart of each RDM solution, our management solutions and displays interpret big data presenting you with the information needed to make informed decisions quickly. A high volume of complex, detailed information is presented in a visually stimulating, easily manipulated format, in real time, so that you can respond to potential issues before they become costly

All perfectly complimented by our award winning predictive monitoring and energy management software, our solutions consistently deliver impressive savings to help your business grow.

Remote connectivity

Some of the communication protocols that the dmTouch is capable of communicating with.

Worldwide

ADSL
Cable
Lease Line
3G
4G
GSM
Modem



Local

Wireless Mesh
BACnet®
Wi-Fi
Fibre
Modbus®
SNMP
XML

ActiveFM™

Award-winning monitoring software

RDM energy and building management solutions make it simple to control all aspects of HVACR across your building or multi-site estate. ActiveFM™ supports your predictive, remote monitoring and asset performance strategies by giving you the information you need to identify issues, predict failures, avoid expensive downtime and accurately forecast capital expenditure and operating costs.

How it works

A dmTouch control system front end gives elected staff, contractors and engineers across your estate the ability to effectively manage, and resolve issues on site. ActiveFM™ delivers similar off-site capabilities and control by bringing together data from across your entire estate into one location in WebReporter, RDMs web based reporting and management tool.

Accessible across multiple devices WebReporter makes analysing large volumes of data simple. Pre-defined reports with filters for site, alarm type, date and time allow for statistical analysis of the data. The graphical interface makes it is easy for users to log in and make quick, informed decisions that ensure the best and most cost effective reactive action is taken.

Features:

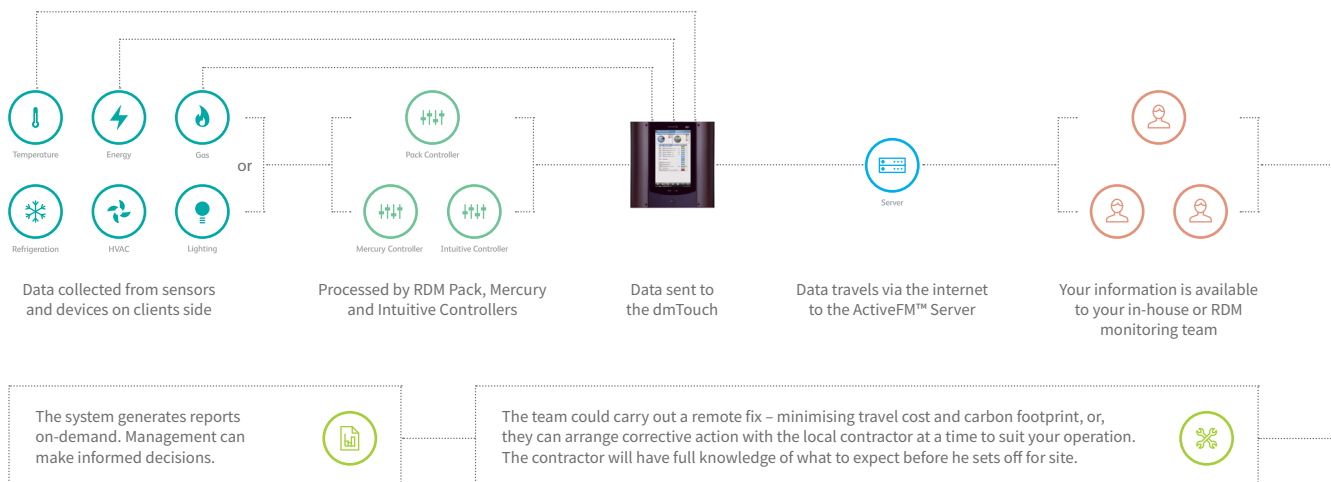
- Web based control dashboard
- Multi-site estate view
- Email alarm alerts
- Automated service and despatch requests
- Real time and historic regression analysis
- System parameter and time clock report
- Dial in Data Manager Access (Optional plug-in)
- Temperature Data Retention (Optional plug-in)
- Live Maps (Optional plug-in)
- Kw^heb (Optional standalone product)

Benefits:

- Real time access to site alarm information
- Improved asset performance
- Reduced asset lifecycle costs
- Minimal interruption to operations
- Avoid costs associated with system downtime
- Increased productivity
- Full visibility of service delivery
- Schedule maintenance at a time that suits your business and operations
- Accurately forecast expenditure and operating costs



How Active FM works



Monitor, measure, predict and react

There are four ActiveFM™ solutions to choose from W¹, W², W³ and W⁴. Each bundle has been designed to give customers the tools and flexibility they need to create a monitoring solution that specifically matches their individual needs.

Three plug-in options, Temperature Data Retention, Dial in Access and Live Maps, and one standalone energy dashboard option are also available to make it even quicker, easier and simpler to effectively manage assets and energy consumption.

To learn more about ActiveFM™ solutions please contact a member of the team on +44 (0) 141 810 2828 or sales@resourcedm.com

Feature	How it works	W1	W2	W3	W4
WebReporter	Web based reporting and management dashboard presenting real-time data from across your estate.	•	•	•	•
Alarm Forwarding by Email	Email alert when alarm is triggered. Designed for systems that are not supported with human monitoring.	•	•		
Data Manager System Parameter & Time Clock Report	Daily report accessed via WebReporter highlighting any item and parameters that have changed.		•	•	•
Data Manager Configuration Capture & Store	Daily data capture of back-up configuration and TDB files from on-site Data Manager. Available for external download.		•	•	•
WebFM2 Licence	Service management software used by either RDM or third party Technical Alarm Handlers.			•	•
Monitoring Team	Team of Technical Alarm Handlers provided by RDM 24/7 to react and respond to alarms across your estate.				•
Dial-in Access as Standard	Ability to access and view individual Data Managers remotely.				•

Optional plug-in

Dial-in Access	Ability to access and view individual Data Managers remotely.	•	•	•	
Temperature Data Retention (TDR)	Daily capture and storage of temperature data, alarm logs and parameter change data. Accessible via WebReporter.	•	•	•	•
Live Maps	Multi-site estate locations represented on an interactive map by pins. Pins change colour to highlight pre-alarm and alarm state.	•	•	•	•

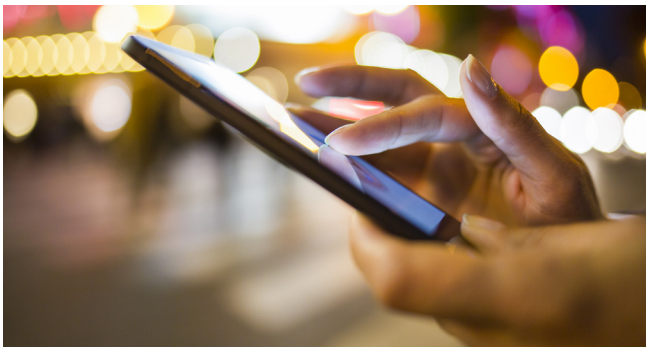
Additional Standalone Products

Kw ^h eb	Web based dashboard presenting meter readings from on-site Data Managers. Compatible with a wide range of Gas, Water and Electricity.	•	•	•	•
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Intelligent alarm prediction and reporting

The Data Manager or dmTouch on site communicates* with our ActiveFM™ server, sending real time data, alarms and analysis. In conjunction with the Data Manager data from sites can be critically scored to enable predictive algorithms to prioritise important alarms and data. Intelligent ActiveFM™ technology then processes your data dependent upon your selected service package.

*via an IP Network Connection



W1

Data is collected from each site, via a Data Manager. WebReporter then presents it in a highly graphical, easy to manipulate format. Accessible via the client login on the RDM website or via an un-branded WebReporter URL. Users can mine site alarm data using a series of pre-defined reports with filters for site, alarm type, date and time for statistical analysis of the data. Allowing users to identify problem sites and trends across the client estate.

Features:

- WebReporter
- Alarm forwarding by email

W2

Includes the same features as W1 with the addition of the Data Manager System parameter and time clock report plus Data Manager Configuration capture plusstore. ActiveFM™ collects data from client site every 24 hours, taking a snapshot of key information. The system then automatically highlights items and parameters that have changed. Resident TDB programs, and dmTouch configuration files are stored securely off site for download.

Features:

- WebReporter
- Alarm forwarding by email
- Data Manager system parameter and time clock report
- Data Manager configuration capture and store

W3

Including the same features as W2, with the addition of WebFM2 licensing. Clients have the ability to use their own, or a third party, service desk to monitor alarms and implement corrective action in real time.

Features:

- WebReporter
- Data Manager system parameter and time clock report
- Data Manager configuration capture and store
- WebFM2 licence

W4

Includes the same features as W3 with Technical Alarm Handlers and service desk provided by RDM.

Features:

- WebReporter
- Data Manager system parameter and time clock report
- Dial in Access
- Data Manager configuration capture and store
- WebFM2 licence
- Technical Alarm Handlers provided by RDM

Request a demo

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sales@resourcedm.com
 +44 (0) 141 810 2828



A wide range of industries



Retail



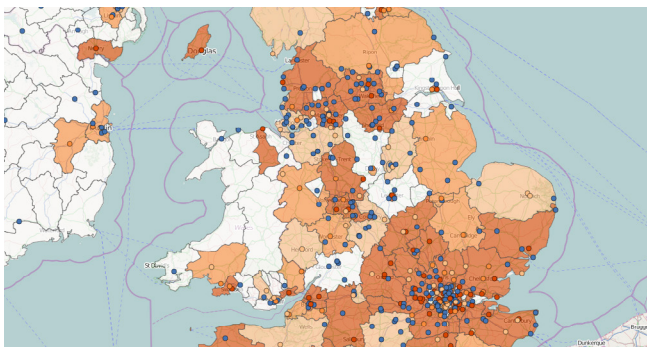
Healthcare

Public Sector
& EducationFood Production
& Processing

Data Centres

Offices &
Commercial

Leisure



Kw^heb*

Available as an optional plug-in with any ActiveFM™ solution or as a standalone product.

Kw^heb is a server based energy management software platform. It gathers information from site metering equipment and aggregates the information into a single web dashboard.

Delivering complex data in an easy and quick to interpret format it allows users to bring together essential energy information in a simple, clear and dynamic format and export the data if necessary.

Configurable for electricity or gas or water usage.

Live Maps

Available as an optional plug-in with any ActiveFM™ solution.

Client locations are represented as coloured pins. Configurable buttons change colour under pre-determined alarm parameters. When parameters are breached the associated pins change colour.

The quick view function, activated by clicking on a pin, displays a real time overview of critical data. A second click connects the user directly to site for further analysis options.

Temperature Data Retention

Available as an optional plug-in with any ActiveFM™ solution.

When due diligence is a priority the Temperature Data Retention plug-in gathers data from each location in your estate, daily extracting the temperature data from the previous 24 hour period. Your data is then retained off site, stored securely and available on demand. Data streams include:

- Device input data
- Device output data
- Device status data
- Alarm logs
- Parameter changes

Dial In Access

Available as an optional plug-in with W1, W2 and W3.

One click connection to site via WebReporter. Dial in Access allows third party call centres or third party consultants to analyse data and trends to facilitate fault finding and remote adjustment. Supports remote and time clock management, and energy saving initiatives through GP channels.

Kw^heb

Cloud based energy management

Embrace the future and be one step ahead with Kw^heb, RDMs cloud based energy dashboard. Kw^heb takes a fresh approach to energy and building management giving you the power to easily and effectively manage energy consumption to reduce energy costs and meet your sustainability objectives.

We understand that to be truly green you need to understand exactly how, when and where your building uses energy and that gathering that information can be difficult. Kw^heb overcomes that challenge. A fully configurable platform it collates data from monitoring and metering devices across your building or multi-site estate. Delivering full visibility of multiple consumables including electric, water and gas.

Presenting valuable data in an easy to interpret graphical format, Kw^heb allows you to make strategic, informed decisions. Getting that information in real-time gives you the ability to be proactive in quickly detecting irregularities and analysing energy waste, so that you can implement a solution that will reduce your energy consumption, and the associated costs, fast.

Resource Data Management HVACR Control and Remote Monitoring solutions consistently reduce electricity costs, offer attractive returns on investment and enable far broader visibility and control of sites. Not only are our Control and Remote Monitoring systems future proof, but they also ensure savings are sustained for years to come.

Connected real-time, anywhere, anytime big data

Simply log on and have access to real-time actionable insight that is relevant to the right person at the right time. Building managers can compare individual assets. Estate Managers can compare site to site performance. Our intelligent technology filters the vast volumes of big data collected so that only the right data is presented. Saving everyone time and money.

Reporting & Benchmarking

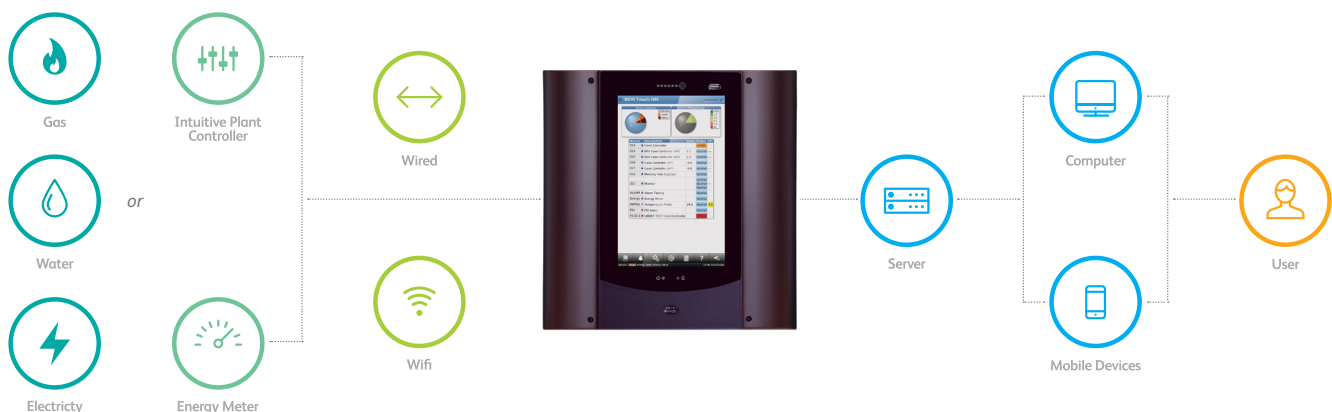
Kw^heb has been designed to be user friendly, delivering complex data in an easy and quick to interpret format. Fully configurable the dashboard allows users to bring together essential energy information in a simple, clear and dynamic format. In a few simple steps users can select the dashboard format that matches their needs, and export data if necessary.

Reduce Energy, Boost Profits

Energy costs may only be a small percentage of turnover, but reducing them can directly increase margins without the need to increase sales. A 20% energy reduction represents the same bottom line benefit as a 5% increase in sales.* Our solutions regularly reduce energy consumption by much more than 20%. How much could you save?

*source Carbon Trust

How kw^heb works



Kw^heb is compatible with over 20 models of energy meter including Schneider, Carlo Gavazzi and Enviro

Features

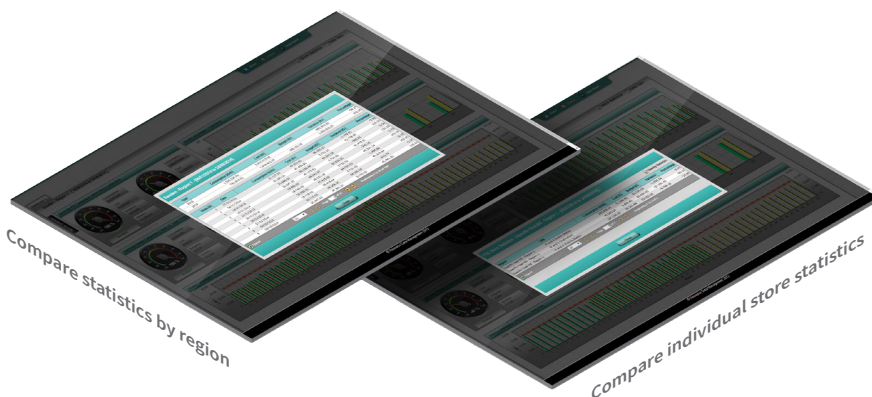
- Multi-site reports
- Budget management tool
- Asset performance tracking
- Actionable Insight and Analytics
- Historic or current data
- Data Export (to excel)
- Hierarchical structure
- Predictive analytics
- Graphic Displays
- Calculates actual consumption costs in multiple currencies
- Compatible with a broad range of consumables
- Intuitive and user friendly interface

Benefits

- Complete and in-depth overview of your entire estate at a glance
- Easily identify energy waste and inefficient assets
- Extend the lifecycle of assets
- Optimise the efficiency of your maintenance contract
- Access your data anywhere, anytime
- Make informed, reactive decisions quickly
- Accurately measure the effectiveness of your sustainability contract
- Engage staff; increase awareness and make them accountable for energy consumption levels
- Boost consumer sentiment and brand value

Why Kw^heb?

With over 30 years industry knowledge and experience, we live and breathe building and energy management. Our award-winning solutions make it simple, and cost effective, to reduce your energy costs quickly, which is why we are trusted by some of the world's biggest brands. Kw^heb takes our energy management solutions one step further to deliver even greater savings.



Both features allow you to benchmark performance and identify key trends and anomalies

Request a demo

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PR0510

dmTouch

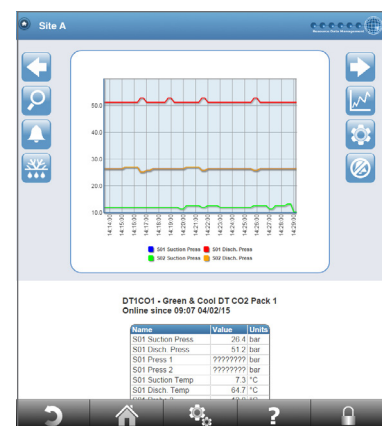
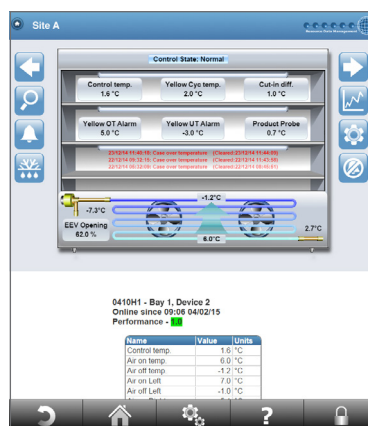
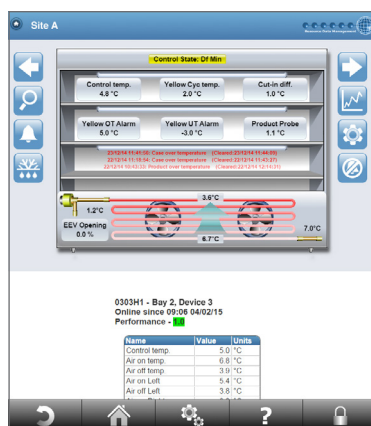
Future proof front-end control system

dmTouch provides the ultimate gateway to interface with a number of standard and proprietary HVACR (heating, ventilation, air conditioning and refrigeration) protocols including Modbus® and BACnet®. Our products also network across industry standard protocols including CAT 5 Ethernet IP. This means our customers are free to use their current control equipment to maximise the return on existing investments without becoming locked in to a new and proprietary system.

With a 10.1" HD touch screen, dmTouch processes your data into easily interpreted and actionable insights in real time. Detailed information from across your control and monitoring infrastructure is presented in a visually stimulating format and, as it's quick to read, it allows you to extract the information you need to make informed decisions about your business at a glance.

Typical Applications

BEMS (Building Energy Management System), HVAC, commercial, factories, healthcare, retail refrigeration.



Features

Hardware/Connectivity

- IP Ethernet connectivity
- Built in 4 port Ethernet Switch
- 5 USB ports: 4 internal and 1 front facing
- Alarm Sounder

Inputs/Outputs

- 12 Analogue/Digital inputs
- 4 x configurable relay outputs
- 3 x expansion board slots
- Optional fibre board

Benefits

- TDB Programmable PLC editor for any control, monitoring or alarm strategy you want, for any discipline. (optional)
- Monitors energy and can react locally to changing demand
- Networks to field devices with full two way communications.
- Scalable architecture for connection with other control systems.
- Stores log data, alarm information and device settings
- Provides predictive real time analysis with alarms and pre-warnings
- Provides centralised control in addition to local field management and event management on site
- Interacts with remote monitoring bureau, to display call status information

Specification

Onboard Storage

8GB Solid State Disk (Approx 25MB reserved for Application)

Inputs

12 Inputs Individually configurable as analogue temperature inputs or digital inputs. Probe types supported (PT1000 (default), 470R, 700R, 2K, 2K25, 3K, 5K, 6K, 10K, 10K(2), 100K)

Range: -99°C to +350°C for PT1000

Digital Input: Normally Open or Normally Closed input (Volt Free) with alarm delay.

Outputs

4 Relay Outputs: 7.5A resistive load 250Vac, 5A inductive load 250Vac COS Ø=0.4

Onboard Expansion Cards & Network Interfaces

3 x Daughter Card Slots 5 x USB A Ports

1 x RS485 Interface (Option to enable) 4 x Ethernet RJ45

*Please refer ordering information on page 16 for details of compatible expansion cards and network interfaces.

Power

Supply voltage range: 100 - 240 Vac ±10%

Supply frequency: 50 - 60 Hz

Maximum supply current: 1 Amp

Typical supply current: <1 Amp

Voltage fluctuations not to exceed ±10° of nominal voltage

Environmental

Operating temperature range: -10°C to +60°C (14°F to 140°C)

Operating humidity: 10% to 80% (non-condensing)

Storage temperature range: -20°C to +65°C

Environmental: Indoor use at altitudes up to 2000m, Pollution Degree 1, Installation Category II.

Dimensions

H x W x D 330mm x 310mm x 96mm



Better Resolution, More Control

High definition and multi-touch, dmTouch offers detailed information in a more visually stimulating and easier to read format than its competitors.



Free PLC Editing Software

TDB is the highly flexible Programmable Logic Control software. It's free and infinitely configurable to precisely meet your control requirements.



Light Speed Communications

dmTouch is available with a fibre-optic communication module, enabling high-speed and long-distance connection from RDM's other fibre-optic enabled products.



Free Site Layout Software

RDM Layout Editor gives you the ability to easily create dmTouch compatible site layouts that can be saved, modified, reused and shared across your sites.



Accessorise & Expand

dmTouch is available with a range of accessories and expansion modules to match the unique security, connectivity and presence requirements of your projects.



Remote Monitoring Tools

dmTouch comes with the ability to monitor and control your sites from anywhere, at any time, on your PC, tablet or smartphone when it's convenient for you.

Ordering information

dmTouch base unit

Description	Part number
Data Manager with 8gb SSD	PR0510

Expansion cards

Description	Part number
12 x Analogue / Digital Inputs	PR0460
3 x Relay Digital Output	PR0461
4 x 4-20mA Inputs	PR0462
4 x 4-20mA Outputs	PR0463
4 x Voltage Outputs (0-5V/0-10V)	PR0464
4 x Voltage Inputs (0-5V/0-10V)	PR0465
2 x Voltage Inputs, 2 x Voltage Outputs	PR0466
6 x Status Inputs (240 Vac)	PR0467

Other hardware options

Description	Part number
On-Board USB Analogue Modem	PR0491
Battery back-up	PR0492
USB Logger Reader Enabler	PR0499
Secondary IP Interface	PR0486
USB Magnetic Swipe Card Reader	PR0494
Data Manager USB 3G Modem	PR0496-3G

dmTouch PLC options

Description	Part number
The Data Builder (TDB) (PLC editor)	PR0485
The Data Builder (TDB) Lite	PR0485 -Lite
TDB CANBus Exp Board Interface (Hardware)	PR0489

dmTouch Energy Features

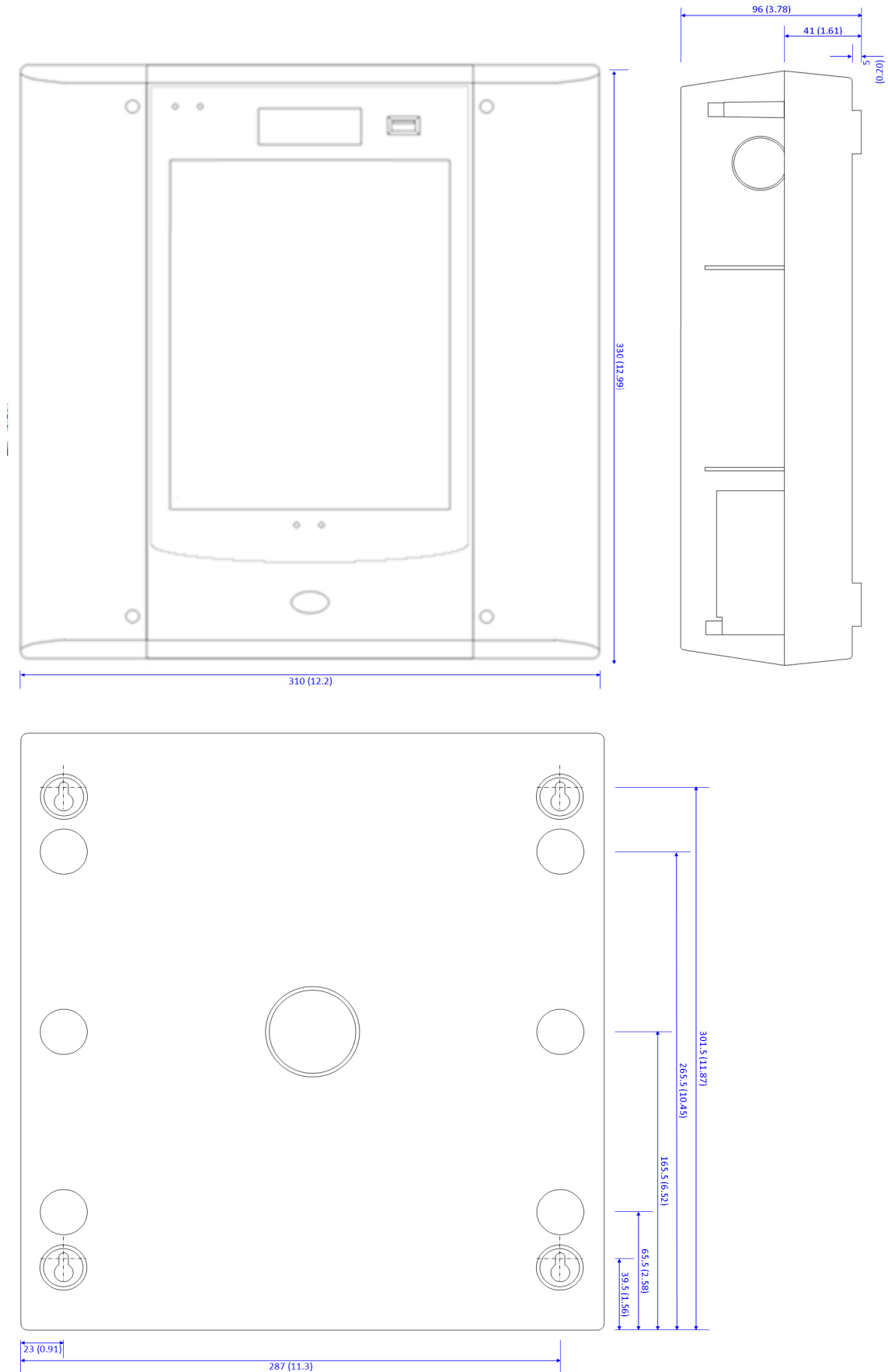
Description	Part number
Pack Optimisation	PR0474
Trim Heater Control	PR0475
Night Blinds Check	PR0476
Condenser TD	PR0477
Temperature Performance Indicator (TPI)	PR0478
Defrost warning	PR0479
Total Energy package (all of the above)	PR0484

dmTouch network interfaces

Description	Part number
NEW! 1 x 100Base-FX Fibre Networking Interface	PR0150F
1 x RS485 Genus® Compatible Network (1st 32 devices)	PR0480
1 x IP Network (32 devices)	PR0481
USB RS485 Genus® Compatible Adaptor (2 x networks)	PR0482
Parasense Gas Interface enable	PR0469
Modbus® TCP Interface enable	PR0470
Emerson® VSD Modbus® enable	PR0470-ECT
BACnet® Interface enable	PR0471
Secondary IP Interface (Hardware & Software)	PR0486
Modbus RS485 Adaptor (Hardware & Software)	PR0623
Mesh System Wireless enable (32 Devices)	PR0735
CBISS Gas Interface Enable	PR0498
Shuttle USB Logger Reader (Data Manager Software Enable)	PR0499
Wireless Mesh IP Access Point	PR0732
Wireless Mesh USB Access Point	PR0734



Mechanical — all dimensions in mm (Inches)



PR0493

dmTouch card reader

Swipe card reader interface

The swipe card reader is an easy and convenient way to control access to the dmTouch and can be used as an alternative to the PIN access method. When using the swipe card system alarms can be accepted by swiping a card, the time, date and details of the card holder will be logged automatically by the dmTouch. The same system controls access to the service menus on the dmTouch, again all details and time of access are automatically logged.

The dmTouch can learn details of an existing card by simply swiping the card through the reader, user name and access privileges can then be added. This means that a dedicated card does not need to be issued to every user, an existing card, such as a clock in card, can be used instead. The swipe card mechanism is supplied fitted to a dmTouch wing and is plugged into one of the dmTouch's four internal USB ports. The wing is held in place by two fixing screws making installation simple and quick.

Shown fitted to dmTouch (not included)



Features

- Prevent unauthorised access
- Control access to features/service levels.
- Complete logging of all access
- Can be used with any swipe card
- Powered from one of the dmTouch's USB ports
- Plug and play installation
- Tri colour LED indicator and sounder
- Dual head design allows swiping in both directions

Specifications

Operating

Swipe speed: 72 to 1500mm per second

Power

Maximum Current: 40mA, powered from USB port

Environmental

Operating temperature: 5° to 50°C (41° to 122°F)

Operating humidity: 10% to 80% (non condensing)

Dimensions (H x W x D)

330 x 65 x 71mm (13 x 2.6 x 2.8in) Weight: 250g (8.8oz)

Ordering Information

Description	Part number
dmTouch Card Reader	PR0493

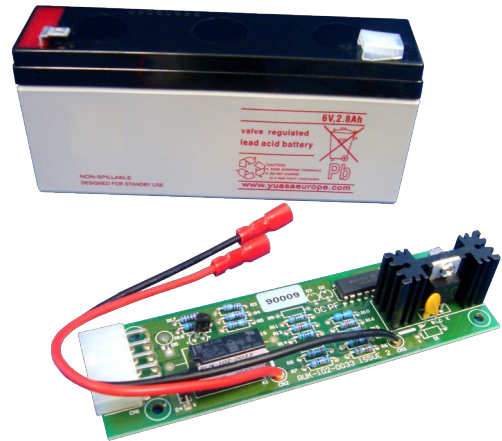
PR0492

dmTouch Battery Backup

Internal uninterruptible power supply (UPS)

The dmTouch Battery Backup unit provides power to the dmTouch in the event of a mains power failure, it comprises a heavy duty rechargeable battery and a charging control board.

The unit is mounted inside the dmTouch and only requires three plug in connections. Should the dmTouch detect a loss of mains voltage it will switch seamlessly over to battery backup without any interruption in function, a power fail alarm will also be generated. Charging of the battery is automatically controlled and regulated. The length of time the battery back up kit will power the dmTouch when no mains is available varies according to dmTouch usage and how many peripheral devices are fitted but typically it will be around 30 minutes. RDM recommend that the battery from the on-board battery backup is replaced once a year.



Features

- 2.8Ah Maintenance free rechargeable battery
- Fully automatic charging and changeover
- Plug and play installation

Ordering Information

Description	Part number
Battery Backup kit	PR0492

Power

2.8Ah, 6V

Environmental

Operating temperature: 5° to 38°C (41° to 100°F)

Operating humidity: 10% to 80% (non condensing)

Dimensions

Battery 64 x 134 x 34mm (5.3 x 2.5 x 1.3in)

Control Board 125 x 32 x 25 (4.9 x 1.2 x 1in)

Weight: 620g (21.9oz)



PR0496

USB 3G Modem

USB 3G Modem

This modem allows the dmTouch to send out alarms without the need for a phone line or IP network. Alarms can be sent out as text messages, via a mobile network, as they occur

Features

- Powered from the dmTouch
- Plug & Play installation
- No need for a dedicated landline connection
- LED Indicator Two-colour LED provides status information
- Internal antenna

Communications

Various frequency bands supported - GSM Band 850/900/1800/1900 MHz

Power

Typical operating current: 500mA

Environmental

Operating temperature: 0° to 40°C (32°F to 104°F)

Operating humidity: 10% to 80% (non condensing)

Dimensions (H x W x D)

82 x 26 x 12 mm (3.2 x 1.0 x 0.5in) Weight modem: 50g (1.8 oz)



Ordering Information

Description	Part number
USB dmTouch 3G Modem	PR0496-3G

Note This product is currently only available in the UK. International customers should contact technical support on +44 (0) 141 810 2828 opt 2 to discuss international options. RDM supply the USB 3G modem only. Minimum software and hardware requirements apply. Data SIM card required.



PR0486

dmTouch Ethernet Adaptor

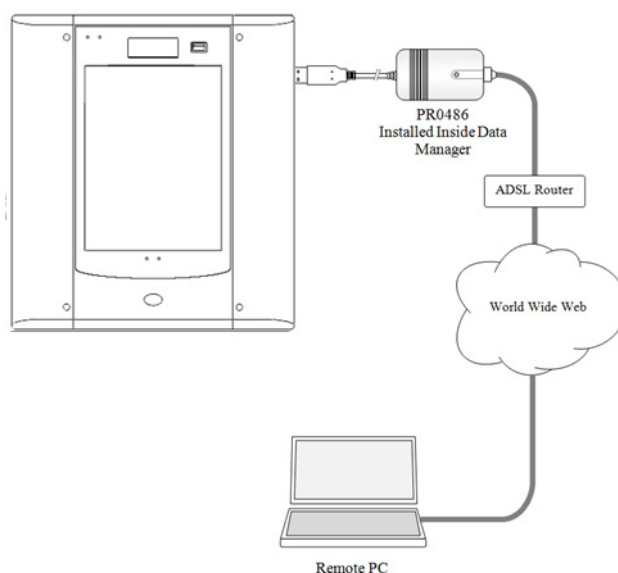
Secondary IP interface

The dmTouch has an inbuilt Ethernet interface as standard, allowing local connection to multiple IP devices including Intuitive controllers (subject to activation), an Orbit Outstation or PC. The dmTouch Ethernet Adaptor provides an additional Ethernet interface enabling the dmTouch to be connected to another IP network. This second network would typically be a building wide network or an internet router allowing users to remotely view, and log onto, the dmTouch from multiple devices.

The Ethernet adaptor utilizes one of the dmTouch's four internal USB ports, power is derived from the dmTouch so no additional power supply is required.



Typical wiring



Features

- Fast Ethernet connection up to 100Mbit/s
- Connect and Data LED display network status at a glance
- Self powered
- Plug and play installation

Ordering Information

Description	Part number
2nd Ethernet Adaptor	PR0486*

*Includes software activation.

Communications

10/100Mbit/s Ethernet USB 2.0

Power

Maximum Current: <0.1A

Environmental

Operating temperature: 5° to 50°C (41° to 122°F)

Operating humidity: 10% to 80% (non condensing)

Dimensions

78 x 28 x 15 mm (3.1 x 1.1 x 0.6in), USB cable length 300mm

Weight: 60g (2.1 oz)

PR0491

USB Analogue Modem

This USB Analogue modem adaptor makes it easy to connect directly to a dmTouch (or Data Manager) via an existing analogue telephone line. The USB connects directly into one of the four USB ports on the dmTouch providing two way communications to a second modem.

Features

- Plug and play installation
- USB connection to dmTouch
- RJ-11 port for line connection
- 56Kbps

Communications

Receive rate 56Kbps
Transmit rate 48Kbps

Power (via USB)

USB powered

Dimensions

75 x 25 x 20mm (2.9 x 0.98 x 0.79in) Weight: 29g (1.02 oz)



Ordering Information

Description	Part number
USB to Analogue Modem	PR0491



PR0458-CLR

Remote Alarm Beacon

Features

- Supplied with adaptor cable to connect straight to dmTouch
- Flash Rate—60 per minute in accordance with legal limit to avoid epileptic fits
- Waterproof IP65
- Clear Filter
- Simple Plug and Play installation.

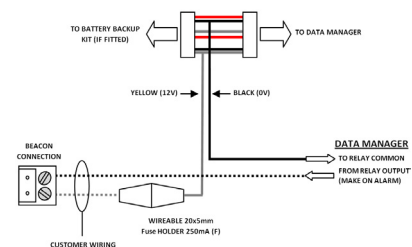
Specifications

Dc Voltage 12V
Rated Current 0.14A (Powered from dmTouch)

Mechanical

Dimensions 85 x 85 x 81mm
Weight 100g (3.4 oz)

WARNING : flashing lights may affect vision and cause epileptic fits



PR0460

Probe Input Expansion Card

12 x analogue / digital inputs

The Probe Input Expansion card provides an additional 12 temperature probes or switched inputs to the dmTouch.

Features

- 11 different probe types pre-configured
- Switched inputs can be normally open or normally closed
- Defrost signal option
- User definable high/low temp. alarm limits and delay

Inputs

12 x Probe/ digital inputs

Probe types supported PT1000, 470R, 700R, 2K, 2K25, 3K, 5K, 6K, 10K, 10K(2) & 100K)

Range: -99°C to +350°C for PT1000 configurable as degrees Celsius or degrees Fahrenheit Digital Inputs: 0V return, configurable as normally open, normally closed or defrost.

Power

Maximum Current: <0.1A, powered from dmTouch.

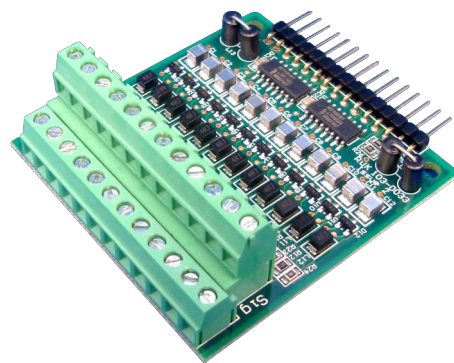
Environmental

Operating temperature: 5° to 50°C (41° to 122°F)

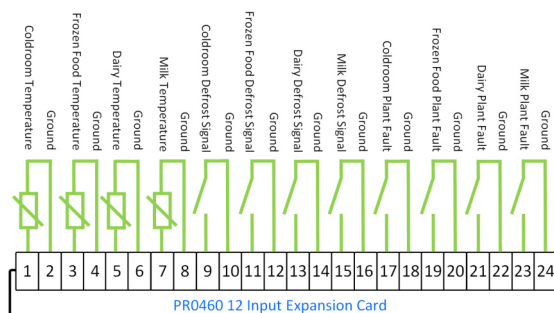
Operating humidity: 10% to 80% (non condensing)

Dimensions

62 x 52 x 20mm (2.44 x 2.05 x 0.79 in) Weight: 50g (1.76 oz)



Typical Wiring



Ordering Information

Description	Part number
12 Input Expansion Card	PR0460



PR0461

Relay Expansion Card

3 X digital outputs

Provides an additional three relay outputs on the dmTouch.

Features

- Normally open and normally closed volt free contacts
- Mains or low voltage switching (relays 2 & 3 must have the same voltage applied)
- Can be used with the dmTouch 40 channel GP timer or The Data Builder
- Plug and play installation

Outputs

3 x N/O and N/C contacts, 5A resistive, 2A Inductive (cosØ=0.3)

Power

Maximum Current: <0.1A, powered from dmTouch

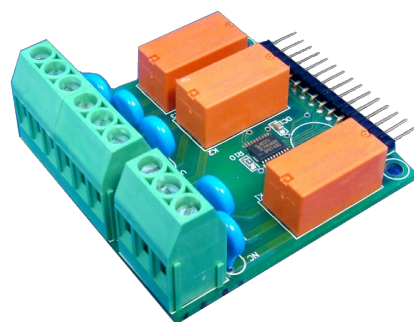
Environmental

Operating temperature: 5° to 50°C (41° to 122°F)

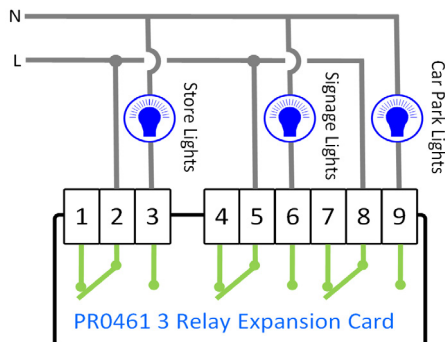
Operating humidity: 10% to 80% (non condensing)

Dimensions

62 x 52 x 22mm (2.44 x 2.05 x 0.87in) Weight: 50g (1.76 oz)



Typical Wiring



Ordering Information

Description	Part number
3 Relay Expansion Card	PR0461



PR0462

4-20mA Input Expansion Card

4 x analogue inputs

The 4-20mA input expansion card provides 4 x analogue inputs to the dmTouch. The inputs are for use with 4-20mA, two wire loop devices such as a pressure transducer.

Features

- User selectable units, %, Bar, PSI and mA.
- User definable upper and lower alarm limits with time delay
- Scalable Pressure inputs
- Provides 12Vdc supply for loop devices
- Inputs can be utilised by a TDB program running within the dmTouch

Inputs

4-20mA current loop, use 12Vdc output to feed the device

Power

Maximum Current: <0.1A, powered from dmTouch

Environmental

Operating temperature: 5° to 50°C (41° to 122°F)

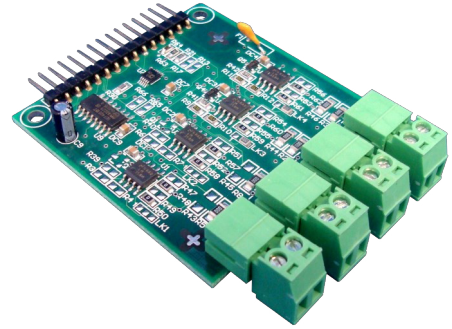
Operating humidity: 10% to 80% (non condensing)

Dimensions

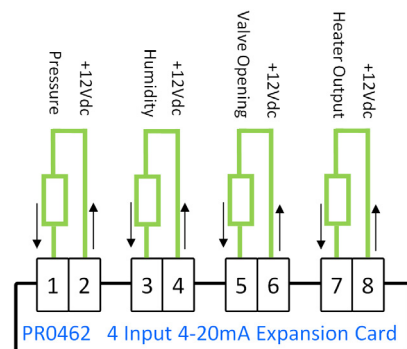
73 x 52 x 12mm (2.87 x 2.05 x 0.47in) Weight: 45g (1.6 oz)

Ordering Information

Description	Part number
4-20mA Input Expansion Card	PR0462



Typical Wiring



PR0463

4-20mA Output Expansion Card

4 x analogue outputs

Provides 4 x 4-20mA analogue outputs on the dmTouch which can be utilised by a TDB program running within the dmTouch.

Features

- 4-20mA loop output
- Can be used to drive devices such as an inverter drive or proportional valve
- Plug and play installation

Outputs

4-20mA current loop output

Power

Maximum Current: <0.1A, powered from dmTouch

Environmental

Operating temperature: 5° to 50°C (41° to 122°F)

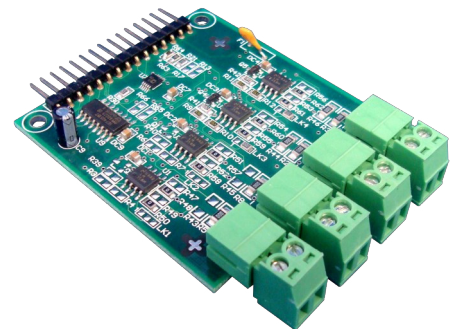
Operating humidity: 10% to 80% (non condensing)

Dimensions

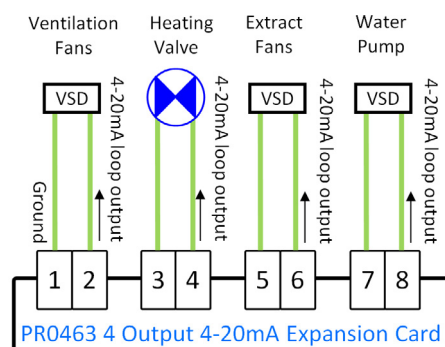
73 x 52 x 12mm (2.87 x 2.05 x 0.47in) Weight: 45g (1.6 oz)

Ordering Information

Description	Part number
4-20mA Output Expansion Card	PR0463



Typical Wiring



PR0464

0-5V/0-10V Output Expansion Card

4 x analogue outputs

Provides 4 x 0-5V or 0-10V analogue outputs on the dmTouch which can be utilised by a TDB program running within the dmTouch.

Features

- 0-5V or 0-10Vdc output
- Can be used to drive devices such as an inverter drive or proportional valve
- Plug and play installation

Outputs

0-5Vdc or 0-10Vdc outputs

Power

Maximum Current: <0.1A, powered from dmTouch

Environmental

Operating temperature: 5° to 50°C (41° to 122°F)

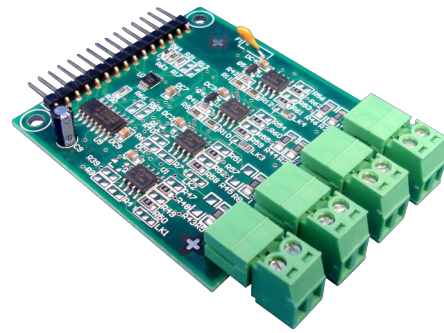
Operating humidity: 10% to 80% (non condensing)

Dimensions

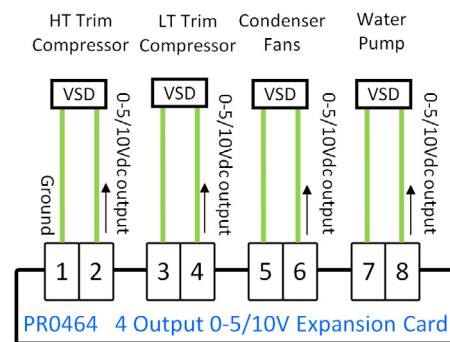
73 x 52 x 12mm (2.87 x 2.05 x 0.47in) Weight: 45g (1.6 oz)

Ordering Information

Description	Part number
0-5V/0-10V Output Expansion Card	PR0464



Typical wiring



PR0465

0-5V/0-10V Input Expansion Card

4 x analogue inputs

Provides 4 x 0-5V or 0-10V analogue inputs on the dmTouch. This can be used with two wire devices with a voltage signal output, such as a humidity sensor.

Features

- User selectable units, %, Bar, PSI and Volts.
- User definable upper and lower alarm limits with time delay
- Scalable Pressure inputs
- Plug and play installation
- Inputs can be utilised by a TDB program running within the dmTouch

Inputs

0-5Vdc or 0-10Vdc inputs

Power

Maximum Current: <0.1A, powered from dmTouch

Environmental

Operating temperature: 5° to 50°C (41° to 122°F)

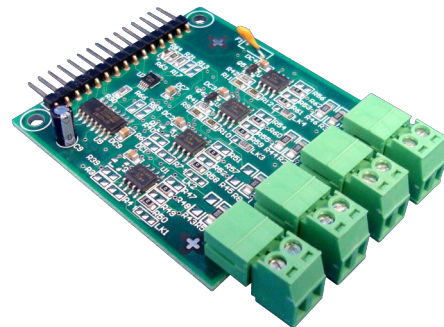
Operating humidity: 10% to 80% (non condensing)

Dimensions

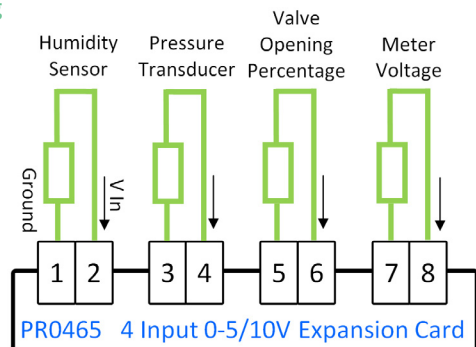
73 x 52 x 12mm (2.87 x 2.05 x 0.47in) Weight: 45g (1.6 oz)

Ordering Information

Description	Part number
0-5V/0-10V Input Expansion Card	PR0465



Typical wiring



PR0466

0-10V Input / Output Expansion Card

2 x analogue inputs / 2 x analogue outputs

Provides 2 x 0-10V inputs and 2 x 0-10V outputs to a dmTouch

Features

- User selectable input units, %, Bar, PSI and Volts.
- User definable upper and lower alarm limits with time delay on inputs
- Scalable Pressure inputs
- Plug and play installation
- Analogue Outputs are utilised from a dmTouch TDB Program
- Inputs can also be utilised by a TDB program running within the dmTouch

Inputs

2 x 0-10Vdc

Outputs

2 x 0-10Vdc

Power

Maximum Current: <0.1A, powered from dmTouch

Environmental

Operating temperature: 5° to 50°C (41° to 122°F)

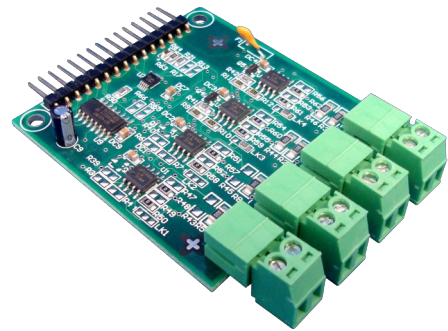
Operating humidity: 10% to 80% (non condensing)

Dimensions

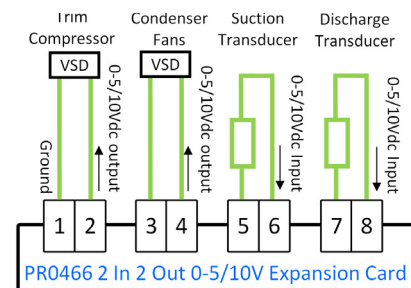
73 x 52 x 12mm (2.87 x 2.05 x 0.47in) Weight: 45g (1.6 oz)

Ordering Information

Description	Part number
0-10V 2 In / 2 Out Expansion Card	PR0466



Typical wiring



PR0467

Status Input Expansion Card

6 x 240v status inputs

Provides 6 x mains voltage status inputs into the dmTouch

Features

- Enables mains voltage digital inputs to be applied to the dmTouch
- No need for a transformer or signal relay
- Plug and play installation
- Inputs can also be utilised by a TDB program running within the dmTouch

Inputs

6 x 230Vac

Power

Maximum Current: <0.1A, powered from dmTouch

Environmental

Operating temperature: 5° to 50°C (41° to 122°F)

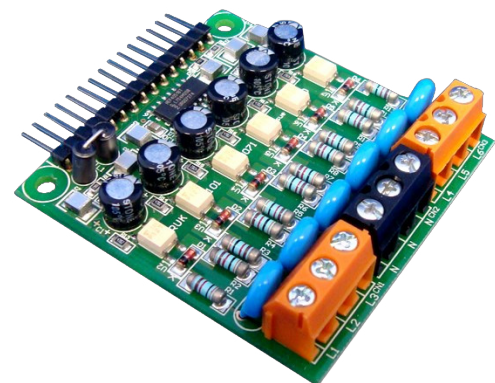
Operating humidity: 10% to 80% (non condensing)

Dimensions

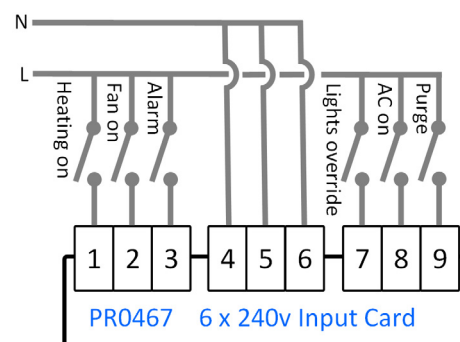
73 x 52 x 12mm (2.87 x 2.05 x 0.47in) Weight: 45g (1.6 oz)

Ordering Information

Description	Part number
6 x 240V Status Input Exp Card	PR0467



Typical wiring



Energy saving options

Pack optimisation

The pack optimisation feature enables the target pressure of a pack controller to be adjusted in response to the average valve openings of all the evaporators using that pack. This ensures that all the evaporators are being used at optimum efficiency and the resultant energy usage of the pack compressors is reduced.

Optimisation requires an RDM pack controller to be used in conjunction with a dmTouch or Data Manager and a number of networked evaporator controllers.

Network trim

The network trim feature can be used in conjunction with networked RDM case controllers with trim heater (anti-condensate) control. Using a humidity and ambient temperature sensor reading from anywhere on the network, the dmTouch or Data Manager will instruct the controllers to adjust their trim heater output levels accordingly. The output level of the trim heaters will be enough to prevent condensation forming without using unnecessary power and will constantly adjust to changing atmospheric conditions.

The trim heat level settings can also be automatically reduced at night time to provide further energy savings when the facility is unoccupied. Even by simply reducing the maximum output of the heaters to 70% (as opposed to always on), energy consumption is instantly reduced by 30%.

Night-blinds

When fitted to a refrigerated cabinet, night-blinds when deployed after store trading, can reduce the power requirement of the case by up to 40%. This of course is dependant on the night-blinds actually being used.

By comparing different temperature sensors in the refrigerated cabinet, a dmTouch or Data Manager can ascertain if the night blinds have been used and generate an alarm if they have not. A dmTouch or Data Manager can also produce a report detailing night-blind use for the store.



Condenser TD (temperature differential)

The condenser TD feature provides monitoring of the efficiency of up to 50 condenser units. Three probes are fitted to the condenser to measure liquid return, discharge and ambient air temperature. A dmTouch or Data Manager will report three levels of alarm: pre-warning, warning and alarm, thus giving early notification if a condenser is not operating efficiently (due to the condenser being blocked with leaves or rubbish for example). Two measurement methods are available: Discharge to Liquid Return and Liquid Return to Ambient Air On.

Temperature Performance Indicator (TPI)

This performance feature monitors the performance of the case allocating a score for easy monitoring. TPI informs the user of poor performing equipment providing a predictive monitoring solution to easily identify faults before they become a costly issue.

The score is based on a number of variables such as the set-point, differential, over-temperature alarms and under-temperature alarms. A score of one equates to a good performance, a score of 10 equates to a poor performance. The performance indicator is also displayed in the Device List as shown. If the energy feature Pack Optimisation has been enabled there will be an additional column "Pack", as shown. This also has a similar performance indicator for each case and gives an indication as to which case is holding optimisation off. Red indicates a case holding optimisation off. Green is ok.

Defrost warning

The defrost warning feature will give a warning if a consecutive number of defrost cycles on a particular evaporator terminate on time limit as opposed to the temperature limit. The number of consecutive defrosts before a warning is issued is user configurable on a dmTouch or Data Manager. If a defrost cycle terminates on time then it may indicate that the evaporator has not cleared all the ice which will affect efficiency and use more power. There is also a defrost limit setting which produces an alarm if an evaporator has more than a preset amount of defrost cycles per day. Having unnecessary defrosts increases the amount of energy wasted.

Order information

You can order any single feature, combination of features or all features to suit your application.

Feature	PR0474	PR0475	PR0476	PR0477	PR0478	PR0479	PR0484
Pack Optimisation	•						•
Network Trim		•					•
Night-Blinds			•				•
Condenser TD				•			•
Case Performance					•		•
Defrost Warning						•	•

Pack shutdown support (intelligent load shedding)

The intelligent load shedding feature constantly monitors pack compressor performance and outdoor ambient air temperature to calculate how much system capacity is available. The feature can also be set to monitor a critical system pressure (such as CO2 vessel pressure).

If the calculated system capacity drops below 100% or the pressure rises to a pre-defined limit then a network command will be sent out to all evaporator controllers which, within 10 seconds, will start closing evaporators in order of priority (frozen food cabinets will be high priority, drinks cabinets will be low priority, for example).

The system will continue closing evaporators (or shedding load) until system capacity is regained and/or pressure is below an acceptable level.

The intelligent load shedding application is invaluable, particularly in CO2 sites, as it can prevent the considerable cost, loss of trading and environmental impact due to refrigerant gas being vented into the atmosphere.

CPT and additional alarm functions

The CPT (calculated product temperature) feature provides a more realistic alarm method than relying on the air temperature around the product and thus reduces the amount of false alarms generated.

Additional alarm functions are TD (temperature differential), superheat too high and valve open too long which can help to identify a blocked evaporator, fan failure or an inefficiently operating cabinet or coldroom

Ordering Information

You can order any single feature, combination of features or all features to suit your application.

Description	Part number
dmTouch/Data Manager Pack Shutdown Support	PR0484-PSS
dmTouch/Data Manager CPT and Additional Alarm Functions	PR0487-CPA

dmTouch Web Services

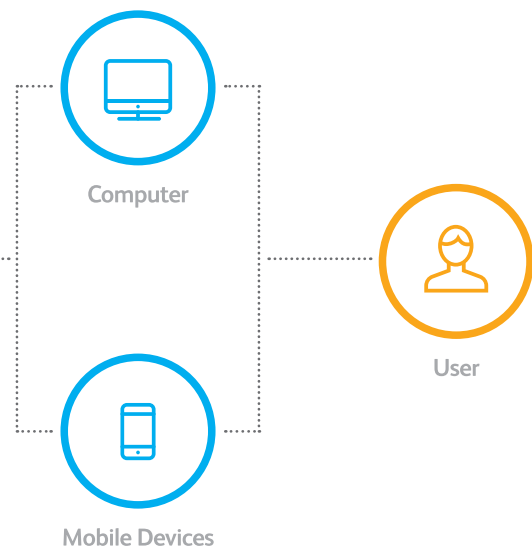
Web Services provide read/write access to information and key features found within a Data Manager or dmTouch. Web services are Extensible Markup Language (XML) based providing an open and flexible standard for communication between a third party facility management systems and a Data Manager or dmTouch.

Web Services do not have the same disadvantages as proprietary systems, giving users the ability to communicate across multiple systems it provides a transparent, flexible and cost effective interface. Users can quickly and easily integrate their Data Manager or dmTouch with their existing facilities management solution across their building or multi-site estate. It is also licence free and comes auto-enabled in a Data Manager and dmTouch.

Web Services offer a number of advantages and features, some example functions available for use in a Data Manager or dmTouch are listed below.

- Alarm Log information can be requested allowing the user to view active and historic alarm events which have occurred on a single site or multiple sites.
- The current schedules entered for a General Purpose Timer (GP Timer) Channel(s) can be requested and modified. Thus allowing users to review their current estate with the option of modifying timer schedules across multiple sites for equipment such as lighting, heating, air conditioning etc as part of an energy saving initiative.
- Real-time and historic data can be requested for any device or sensor connected to the Data Manager. With the multi-protocol options found within the Data Manager this allows a user to request information from various devices: - e.g. energy meters, gas leak detection systems, air conditioning plant, refrigeration plant using multiple protocols such as Modbus, BACnet, XML and SNMP.
- System log information can be requested enabling the user to view a variety of events which have occurred within the Data Manager or dmTouch such as service personnel logging in, when configuration changes have been made, confirmation of alarm events and their destination etc.

Web Services are also available for use with the Intuitive TDB (PR0650) range of products. For detailed information about the full list of features for either products please contact RDM Technical Support on +44 (0) 141 810 2828



MaRS

MaRS software allows users to remotely receive and monitor alarms generated by an Intuitive TDB Controller, Data Manager or a dmTouch. Easily installed on a PC or Laptop, minimal updates are required on the devices that you want to connect to, however they must be accessible remotely via a WAN/LAN structure.

software collates alarm data from multiple sites and locations to one central point designated by the user. Giving users the ability to view and manage alarms efficiently, it removes the need to view each individual alarm log on a monitored device or be inundated with emails and SMS alerts from numerous sites.

Minimum operating specification

- Windows 7 or 8
- 1GB RAM
- 2GB of free hard disk space.

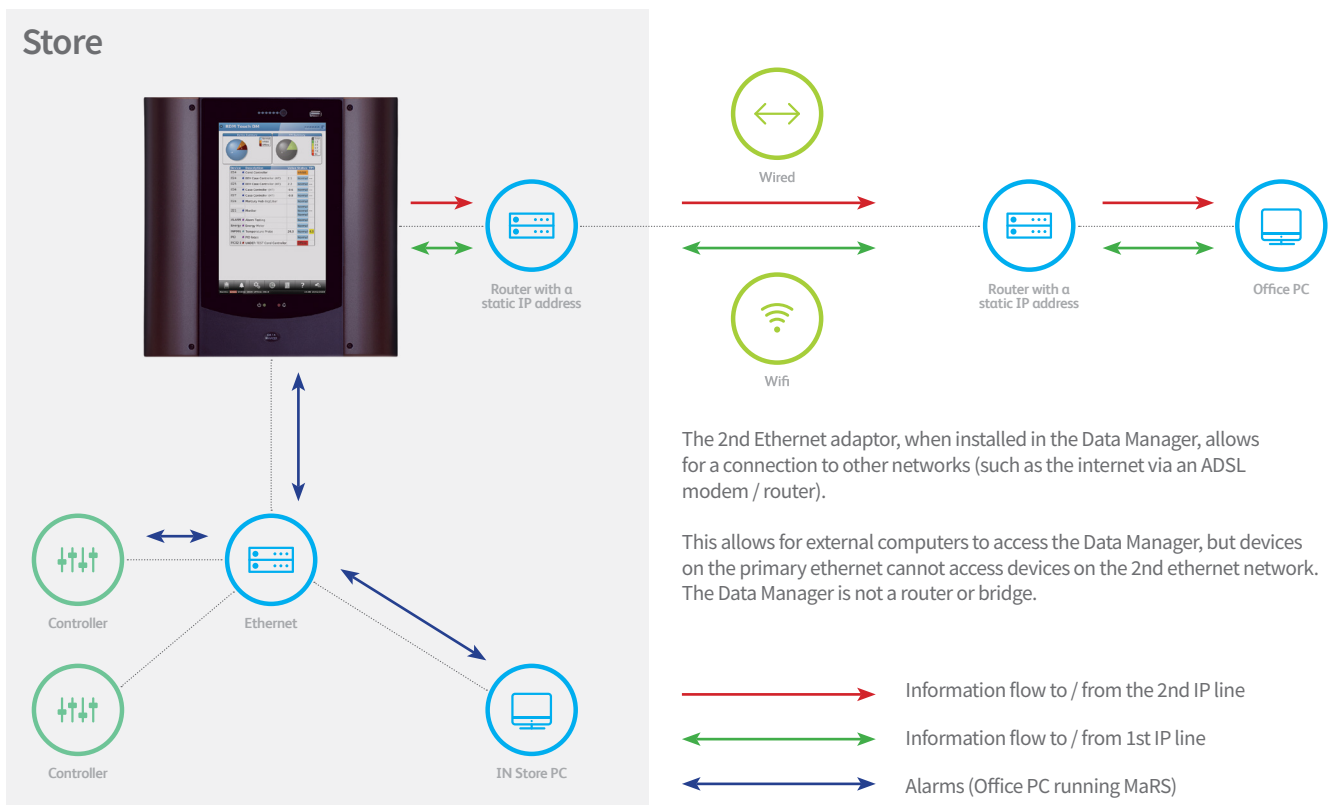
Note: a greater amount of free disk space will enable the MaRS software to store more alarm data in its database.

MaRS Software – easy set up process

- Run the MaRS set up CD on a PC or laptop, following the simple step by step instructions.
- Restart the PC or laptop.
- Contact Technical Support for response key code to complete the installation process.
- Ensure that an IP network connection is available between the MaRS software and devices to be monitored.
- Connect each device to be monitored and configure to send alarms to the PC/Laptop running MaRS.
- Monitor alarm traffic in MaRS.

Features:

- Web server port
- Audible alarm sounder
- SQL Server Set-Up
- Alarm management tools



The above diagram shows how a Data Manager or dmTouch can be connected to a wide area network allowing users to remotely access the Data Manager or dmTouch.

A static IP address is required in the modem/router connected to the PC running MaRS to the WAN/Internet. Alarms will then be directed to the static IP address. A static IP address will also be required for each site that you want to collect data from.

Note: The MaRS licence key can only be used on a single PC/Laptop, and is valid only for the life of that equipment. The licence key is non-transferable to another PC/Laptop.

The Data Builder

What is The Data Builder?

It's possible that there are times when standard 'off the shelf' controls do not provide the functionality for a specific installation, especially where the application is a one off job and it would be cost prohibitive to develop OEM embedded software. Data Builder allows you to easily create and modify the desired functionality yourself.

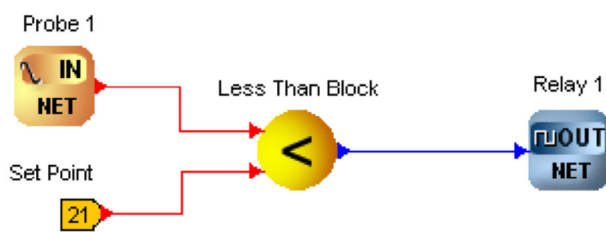
Using the data builder you can design bespoke and complex control strategies with ease. Choose inputs, add conditions to the inputs and as a result drive various outputs. Utilise logic, timers and custom functions to carry out the exact functionality that you need for your application.

Save programs to your PC and re-use them to provide rapid deployment of custom control across your sites.

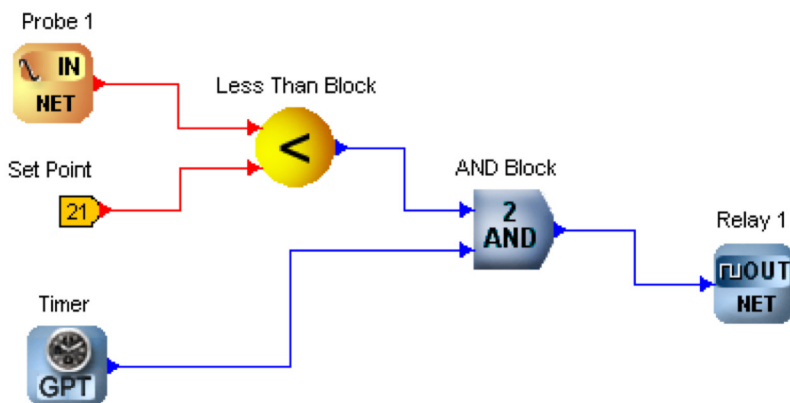
Sounds complicated?

Whilst an incredibly powerful tool, the Data Builder programming application software is really quick and easy to use.

Below is the simple drag and drop of a few blocks to give control that when Probe 1 is 'Less than' 21°C then Relay 1 is turned on. For example this could be a temperature probe being used to control a central heating boiler.



However we now decide that we don't want the heating boiler to be on all day. So let's add a timer to the control:



So now we have a timer function which can be set and when the timer is on AND the room temperature is below 21°C then the boiler will come on.

As the timer is a basic feature of the dmTouch, if your dmTouch is connected to an internet enabled network then you can access and modify this timer remotely from your PC anywhere in the world. It really is that simple.

This is just a basic thermostat function, but what if you need an override switch? Also frost protection? What about comfort control on humidity? And sending out an alarm when something goes wrong? How about load shedding for energy reduction? It's as simple as dropping in the functionality that you want, giving you total control.

How do I get it?

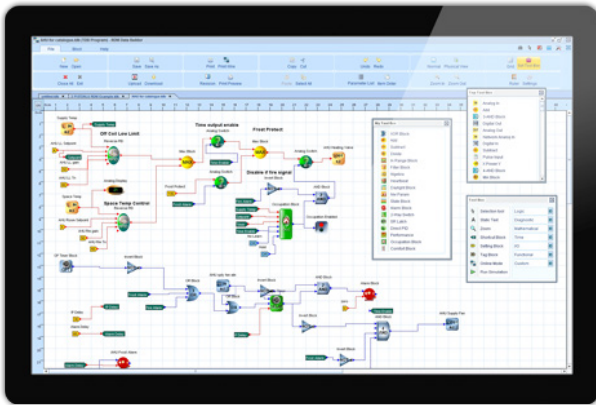
There are three versions of Data Builder for the dmTouch:

Free 90 days trial	Full access
Lite	1 program / 100 block maximum
Full	16 programs / up to 4096 blocks per program.

The Data Builder Editor

The Data Builder (TDB) application is supplied embedded within a TDB enabled dmTouch, an Intuitive TDB controller or as a stand alone PC package. When connected directly to a dmTouch or Intuitive TDB controller, the “Online” mode allows real time viewing of the controller’s inputs, outputs and parameters allowing easy fault diagnosis and system overview.

Applications are developed by selecting from a comprehensive but straightforward selection of blocks. Blocks are then linked using virtual “wires” which are automatically coloured red for analogue or blue for digital, built in safety features prevent accidental analogue to digital connections.



TDB applications can be fully password protected to prevent unauthorised users from copying or amending applications. Settings and parameters are also fully pass-code protected in the same way as all other RDM controllers. Applications can be easily uploaded to a PC (subject to password protection) and transferred to one or more dmTouches.

A maximum of 4096* control blocks and interconnects can be added to any single application and up to 16 applications can be run simultaneously on the dmTouch. Blocks are categorised under the subsections I/O, Logic, Mathematical, Time, Functional, Diagnostic, Custom, Text, Shortcut and Setting.

*Full version required.

Examples of TDB design blocks

I/O

Analogue in



This allows an analogue input to be brought into the application, this is typically a temperature probe, a lux sensor or a pressure transducer.

Logic

4 input AND gate



This is a simple logic gate which allows 4 digital inputs to give a single digital output if all 4 inputs are “On”, for example if 4 different conditions need to be satisfied before an alarm is

Mathematical Algebra Block



The algebra block can perform Calculations on up to 5 different analogue values. Calculations include addition, multiplication, division, raise to the power of and a variety of trig. and log equations.

Time

Daylight block



By entering the longitude and latitude of any location on the planet, this block will calculate whether it is currently daytime, night time or twilight at that location.

Functional

Direct PID



This block calculates a percentage output based on the rate of change of an input against a target set point. This is useful for controlling the speed of an inverter drive with relation to an analogue value.

Diagnostic

Analogue display



Analogue displays can be added at any point in an application and will show the instantaneous value of the item it is connected to. This can be used in real time using the online mode, or in the simulation mode.

Custom

4 stage block



This allows the user to create their own simplified block to suit a particular application which can then be used repeatedly as required. In this example, an application which contains 20 blocks has been saved as a single custom block.

I/O

Analogue in block



The Analogue In block allows an analogue value to be brought in from the outside world and used in the application. This would typically be a temperature probe or pressure transducer connected to the dmTouch.

Setting block



This block allows a setting to be added to an application, settings can be analogue or digital. This setting can be internal to the application such as a starting or default value, or can be used externally as a set point, such as “target pressure”.

Static text

A Static text block can be added anywhere in the application to add a description to a particular section or as a reminder to the user. Text font and size can be selected as required.

Shortcut



The shortcut block allows two or more points to be connected anywhere in the application without having to draw a connection line between them. This makes larger applications easier to work with and simpler to follow.

Functional

Pressure to Temperature Block



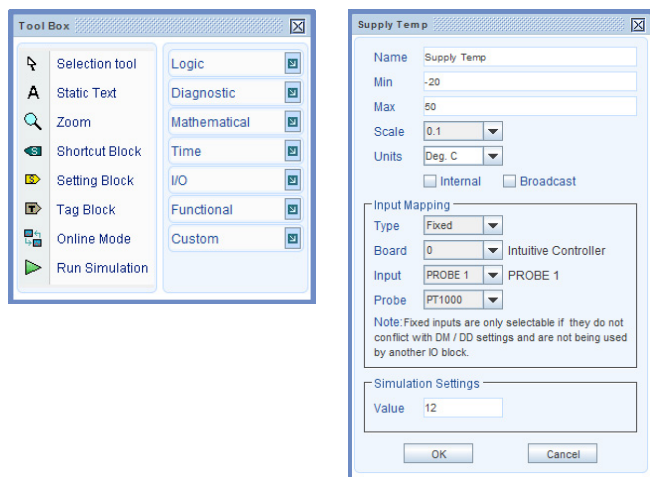
this block converts the pressure of a refrigerant gas to temperature. Look up tables for all the common refrigerants are contained within this block.

Four simple steps to create an application using The Data Builder

STEP 1 — Define your inputs and outputs

When creating a new TDB application for the first time on a dmTouch, a blank workspace will be shown along with a floating toolbox which provides access to all the editing functions required. Multiple tool box options are available including the easy interaction block menu, top tool box and my tool box, which is fully customisable and available with one-click.

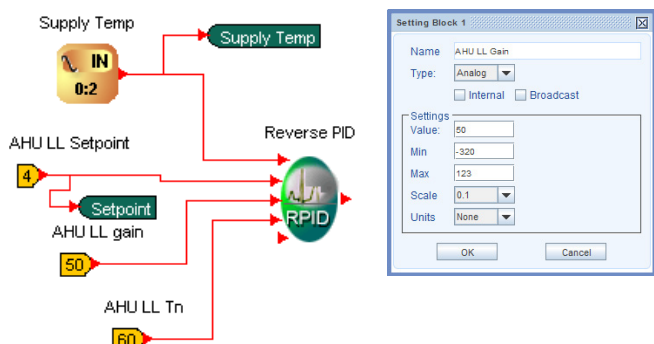
Selecting the I/O menu on the toolbox allows input and output blocks to be selected and dropped into the workspace, each block can then be named and its function defined, the example below shows a PT1000 temperature probe. Any unused inputs and outputs can be deleted, they can be easily added again at a later date if required.



STEP 2 — Connect your blocks to define operation

Once all the inputs and outputs have been allocated and named, all the other blocks required can be selected from the floating toolbar and dropped into the workspace. In this example set points, shortcuts and a reverse PID Functional block are to be used. An example of defining a set point is shown below right, this menu is displayed by clicking on the set point block.

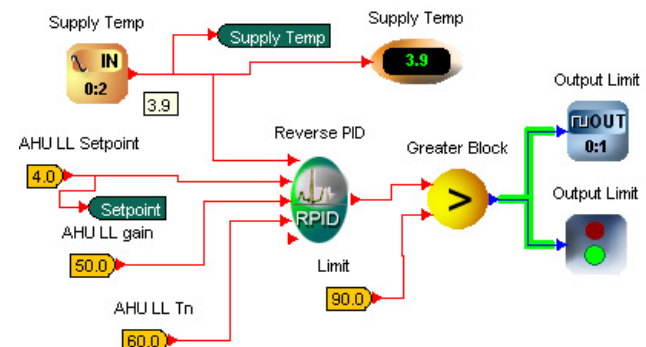
All the blocks can now be connected together as required, this is a simple drag and drop procedure.



STEP 3 — Test your program

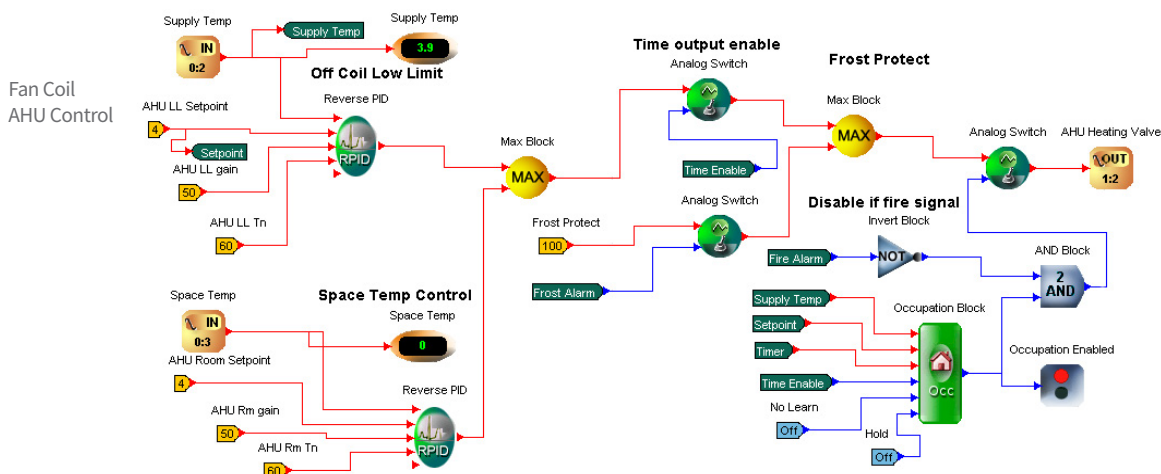
At any point whilst developing the application or when the application is complete, a simulation can be run using the simulation tab on the floating toolbox. Diagnostic displays can be added to make fault finding easier. Digital signals which are on will be highlighted in green, as shown to the right. Analogue values can be displayed on a virtual display or by placing the pointer at the input or output of a block.

If the controller has all the physical inputs connected (such as temperature probes), then using the online mode enables all the values to be viewed in real time.



STEP 4 — Expand as required and Save complete application

Additional blocks added to complete the program. Static notes can be added for easy editing at a later date. The complete program can then be saved (to PC or direct to controller). Password protection can be set if required to prevent unauthorised changes/copying or viewing of code.



Layout Editor gives you the ability to easily create site layouts compatible with the dmTouch.

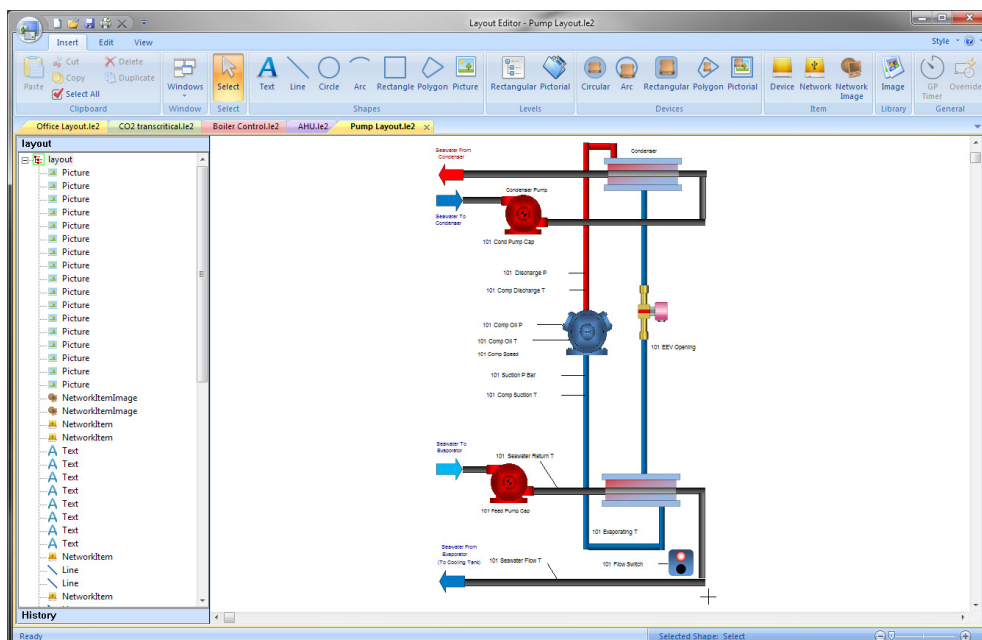
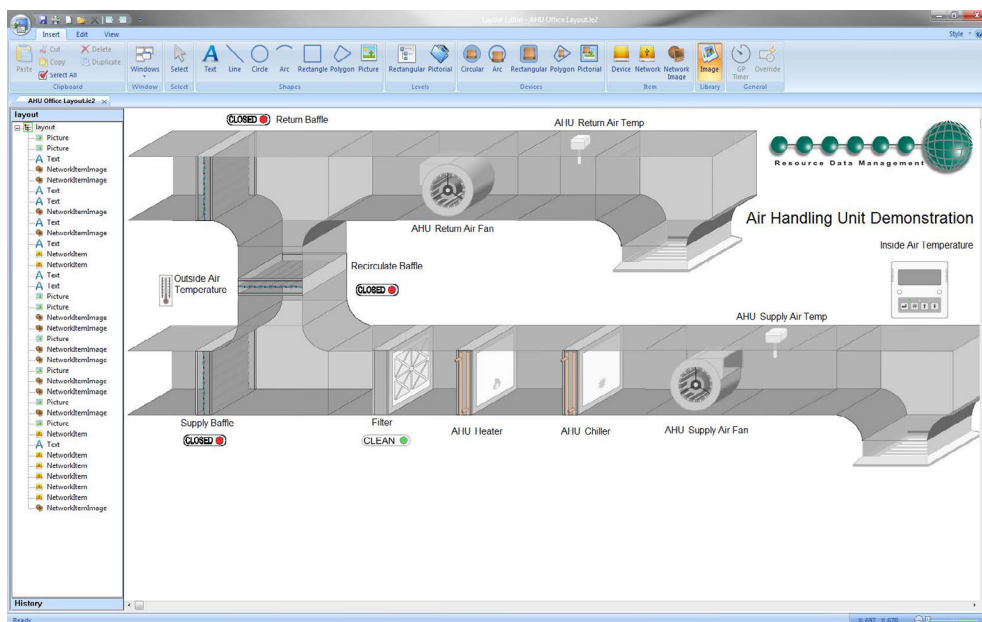
Once created layouts are visible on the dmTouch or a local/remote PC. Giving a clear, and easily interpreted, visual indication of device locations across your site compared to a traditional list format.

Layout Editor enhances the user experience, informing users at a glance if a device has changed state by changing colour. Bespoke parameters can be set to each individual requirement. For example red could indicate an alarm condition and blue could indicate normal.

Features include:

- Layouts can be created without the need for imported drawings, or from an imported AutoCAD DXF file
- Multi or single level/floor design options
- Easy to use interface

For more information please contact our team of technical experts on +44 (0) 141 810 2828



3rd Party Interface Enablers

The Data Manager can provide the definitive gateway to your connect your networks together. In addition to standard IP Ethernet and Genus® compatible RS485 networking, the Data Manager offers a range of network options for connection to 3rd party devices.

Below are just a few of the Interface types available on the Data Manager:

Parasense gas interface enabler

This allows the Data Manager to communicate with the GRM 16 channel refrigerant gas monitor over the IP network. The Data Manager can then log gas concentration levels over 16 channels and can generate an alarm should a leak occur.

Ordering Information

Description	Part number
Parasense Gas Interface Enabler	PR0469

Modbus® tcp interface enabler

The Data Manager can communicate with Modbus® devices logged onto its IP network via a third party Ethernet TCP/IP to serial converter, this allows an interface to a range of energy meters pre configured in the Data Manager. Other Modbus® TCP devices, such as variable speed drives or gas monitors, can be added subject to a software interface enable. To be used in conjunction with the PR0020-MOD or PR0020 DIN-MOD

When an RDM USB Modbus® converter (PR0623) is being used instead of a 3rd party device, the PR0470 interface enabler does not need to be purchased.

Ordering Information

Description	Part number
Modbus® TCP Interface Enabler	PR0470

BACnet® interface enabler

BACnet® is standard communications protocol mainly used by HVAC and BEMScontrol systems. The Data Manager BACnet® interface enables up to 32 BACnet compatible devices to log onto its IP network. No additional hardware or software interfaces are required.

Ordering Information

Description	Part number
BACnet® Interface Enabler	PR0471

Siemens® NetRS/NetPX interface enabler

This interface enabler specifically allows Siemens® NetRS/NetPX controllers to log onto the Data Manager's IP network, no additional hardware is required.

Ordering Information

Description	Part number
Siemens® NetRS/NetPX Interface Enabler	PR0483

CBISS gas detection interface enabler

This is a specific interface for the CBISS Gas Detection system which allows it to be logged onto the Data Manager's IP network. Gas levels can be logged and high level alarms reported by the Data Manager.

Ordering Information

Description	Part number
CBISS gas detection interface enabler	PR0498

Data Manager and dmTouch software upgrade

Both Data Managers and the dmTouch can be easily updated with the most recent version of the application software by using a file on a USB memory stick. The low upgrade cost allows you to enjoy the benefits of new functions and features, developed after your Data Manager unit was purchased, without having to replace the unit.

Ordering Information

Description	Part number
Data Manager Software Upgrade Code	DMSWUPG

dmTouch Enhanced Software Updates

The dmTouch has a wide range of software enhancements which can be factory installed or easily added at a later date as required. Providing total flexibility and cost effectiveness it allows users to select exactly what they need, rather than pay for features that are not necessary to their specific application or project. For example, if a site only requires the logging of 12 temperature probes with local alarms, and energy saving features (such as pack optimisation), networking capabilities and third party interfaces whilst not be activated and charged for.

Software enhancements are available in three categories:

- Energy saving features
- Network options
- Third party interfaces

Enhanced features can be activated remotely by RDM if the dmTouch has remote access capabilities, otherwise the features can be activated by the user entering a unique 16 digit activation code using the dmTouch's keypad.



Each dmTouch has a unique system key. When this key is quoted to RDM technical support an activation will be generated. The user then simply needs to type the activation code into the dmTouch and the unit will automatically restart with the new feature(s) enabled.

In most cases a number of features can be added with a just single activation key.

for more information about energy saving features please refer to pages 26 and 27.

PR0623

USB to RS485 Modbus® Interface

Features

- Modbus® RS485 Interface
- USB Connection to dmTouch
- Simple Plug and Play installation.

Specifications

Dc Voltage	5V
Rated Current	0.1A (USB Powered)

Mechanical

Dimensions	35 x 22 x 260mm
Weight	50g (1.7 oz)

Ordering Information

Description	Part number
USB Plant Modbus® Adaptor	PR0623

Note: This product is also available in a DIN mount enclosure. The DIN mount enclosure is typically used with the Intuitive range of controllers.



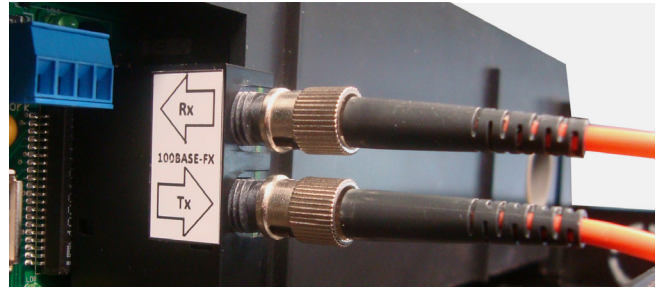
PR0510F

Fibre Interface

100Base-FX Fibre Networking

Fibre optics have a long proven track record of providing data transmission backbones all around the globe. The Data Manager Fibre Interface allows the Data Manager to be run over very long distances using low cost fibre optic cable without the need for repeaters to boost signals.

Fibre optic cables provide high reliability network connections which are not effected by electromagnetic noise, removing the need, and associated costs, for special segregation between data and power cables. Cable cost and distance restrictions can make copper network wiring prohibitively expensive. Wireless networking can often overcome these issues, dependent upon site conditions; however wireless networking can be less reliable and create security concerns. A fibre optic network is intrinsically very secure and reliable by design and does not require complex security settings to be configured on installation.

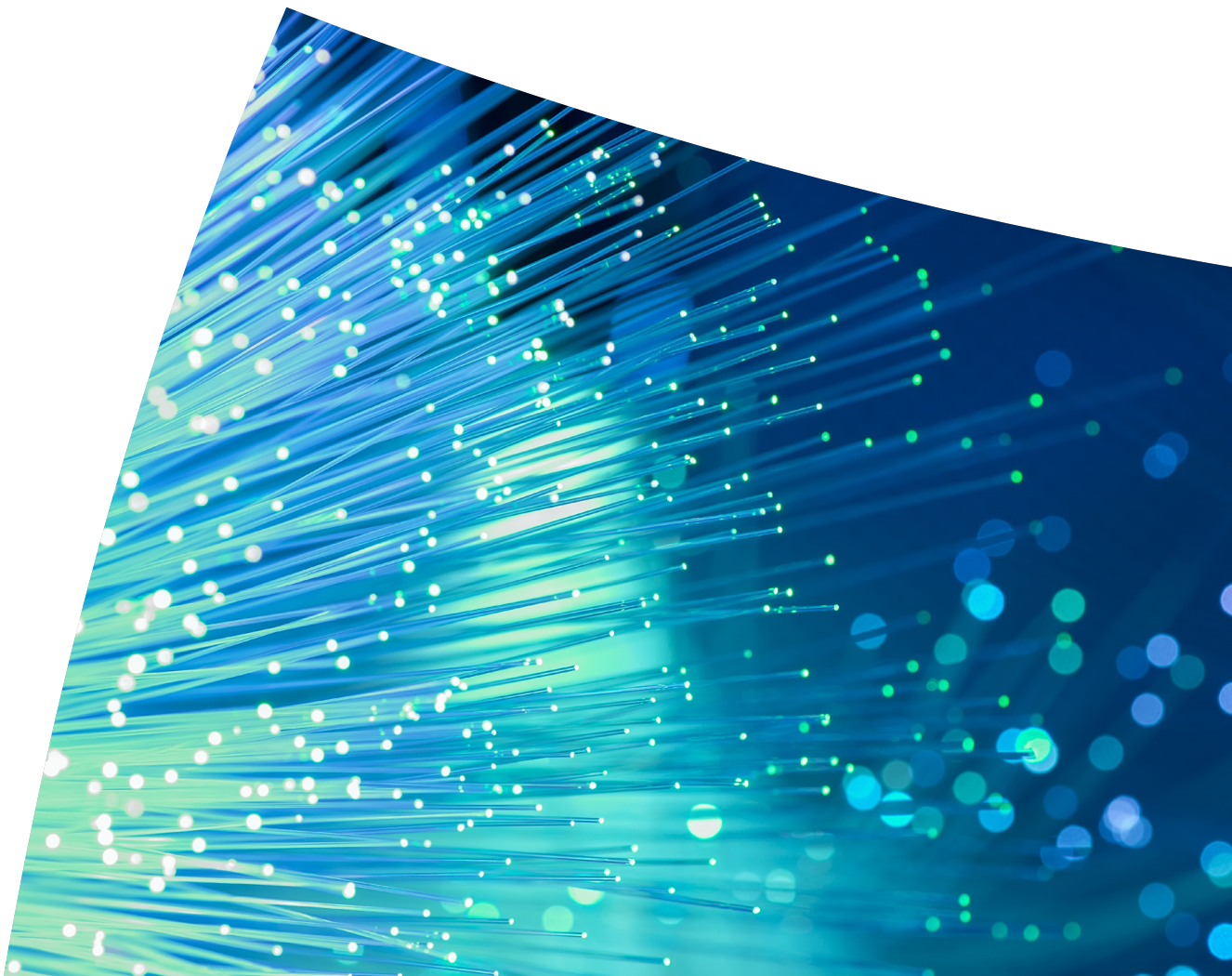


Features and Benefits

- Bayonet style (stick and twist) connections for easy installation
- Immune to Electromagnetic Interference
- Very long distance (> 2000m)
- Non Conductive Cables
- Ease of cable installation due to small cable size and low weight (typically 3mm OD / approx. 8kg per 1000m).

Specification

- Multimode Duplex Fibre Optic Interface
- Connectors: IEC 61754-2 ST Connections
- Maximum Recommended Conn



PR0482

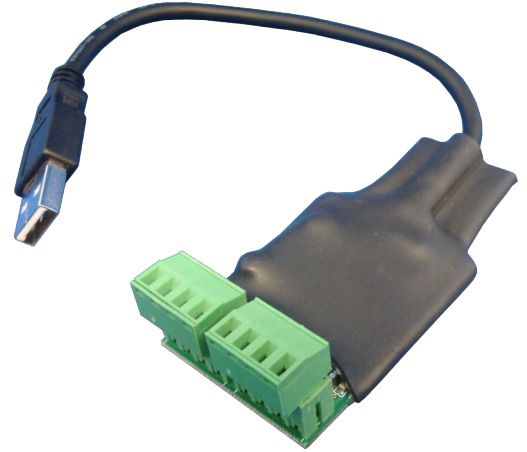
dmTouch USB RS485 Genus® Interface

2 x RS485 networks

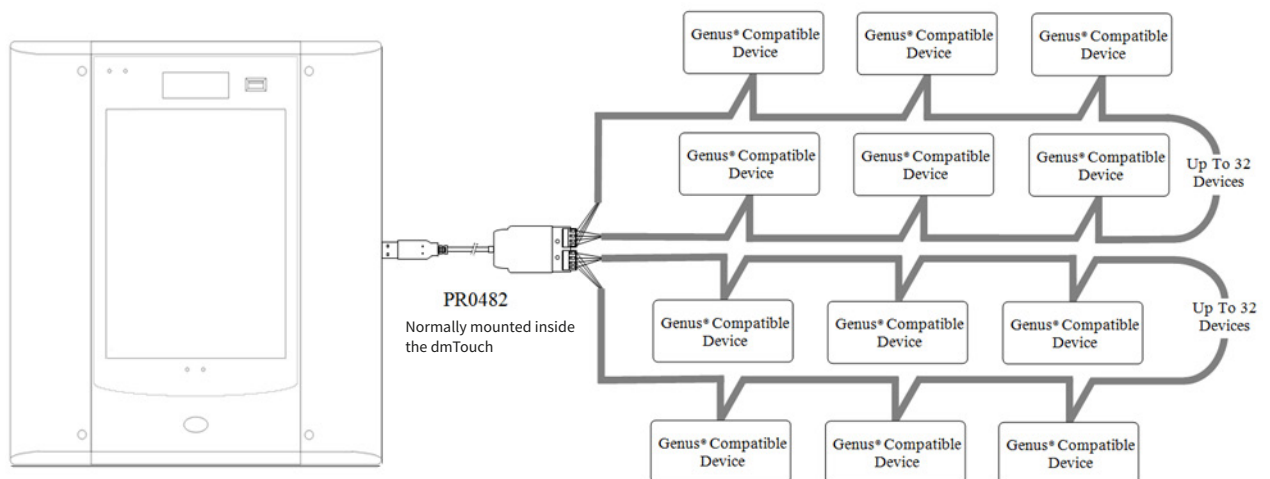
The dmTouch is supplied with one RS485 network interface built in, this allows connection with up to 32 Genus® compatible devices (subject to activation). Additional RS485 network lines can be added using a USB RS485 interface, each interface allowing an additional two network lines. Four interfaces can be added to a single dmTouch giving a total of nine RS485 network lines. This means that up to 288 Genus® compatible devices can be networked to a dmTouch.

The USB RS485 Interface is an ideal solution for upgrading existing Genus® network sites. A dmTouch can be used to replace an existing legacy Genus® front end panel without having to replace controllers and network wiring, the dmTouch can still connect to IP controllers as and when they are added.

The RS485 adaptor utilises one of the dmTouch's four internal USB ports, power is derived from the dmTouch so no additional power supply is required.



Typical wiring



Features

- Self Powered
- Mounted inside the dmTouch
- Plug and play installation

Ordering Information

Description	Part number
USB to RS485 Adaptor	PR0482

Communications

RS485, Genus® compatible

Power

Maximum Current: <0.1A, derived from dmTouch

Environmental

Operating temperature: 5° to 50°C (41° to 122°F)

Operating humidity: 10% to 80% (non condensing)

Dimensions (H x W x D)

260 x 38 x 22mm (10.2 x 1.5 x 0.9 in) Weight: 60g (2.1 oz)

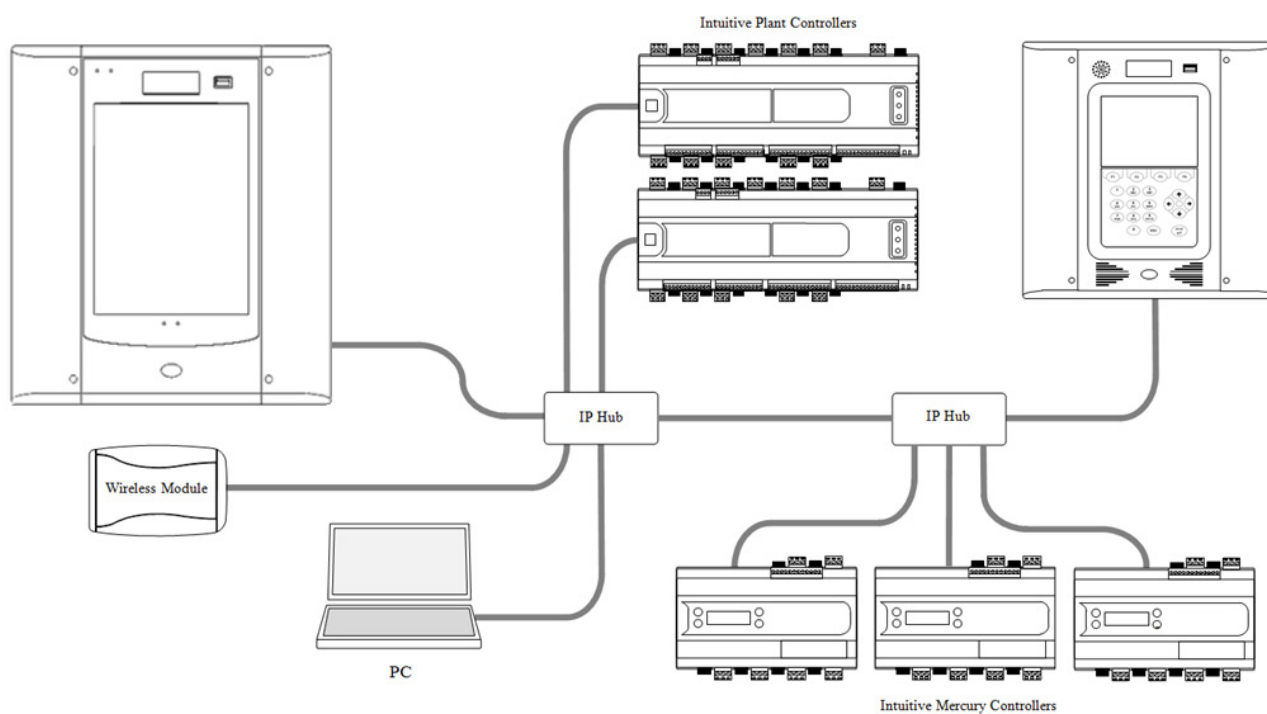
PR0481

IP Network Option

IP Network

The dmTouch primary IP network is used to connect to a wide range of networkable devices such as the RDM range of Intuitive and Mercury controllers, Orbit remote consoles and on site PCs.

The IP network uses the Cat 5 wiring system which is the worldwide standard in computer networking. Cat5 cables are widely available and are supplied with latching connectors fitted at both ends, cables can be up to 100m long. As with normal IP networks, cabling can be greatly reduced and simplified by using network hubs, again these are widely available in high street stores as well as from RDM. Typically a group of controllers would be connected to a single hub and a single Cat 5 cable run back to a dmTouch or Data Manager directly or via another hub.



The above example shows a simple dmTouch IP network, a typical system may have well over 100 remote devices.

The Data Manager has a built in DHCP server which automatically issues a unique IP address to each IP device. Intuitive devices have three rotary switches which gives each one a unique ID to differentiate them on the Data Manager's device list.

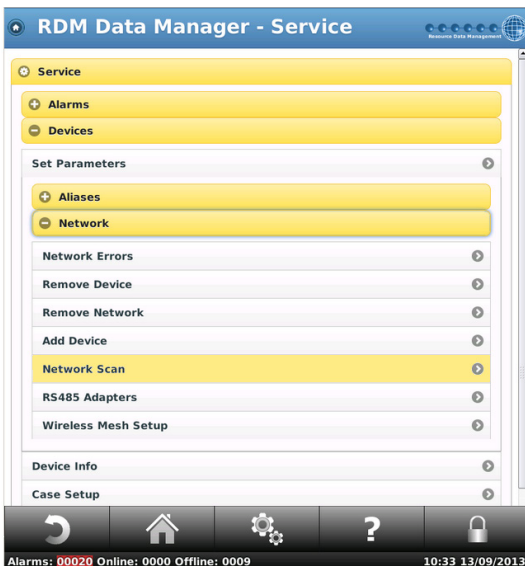
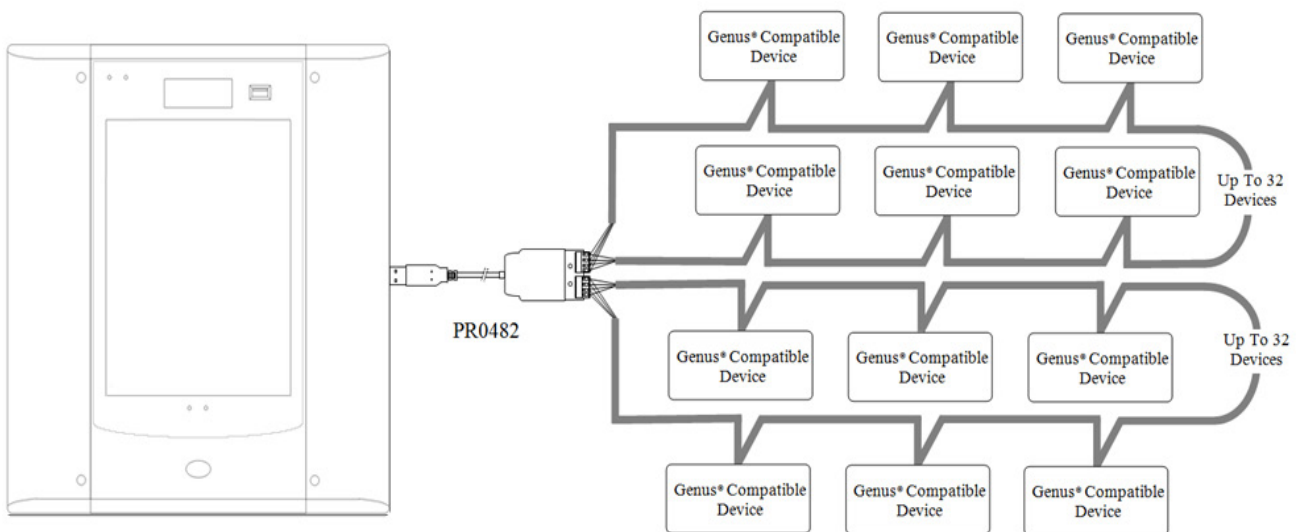
PR0480

RS485 Network Option

RS485 Network

RS485 is a data network standard which is robust, has high immunity to electrical noise and can transfer data up to a distance of 1200 metres, making it ideal for use in industrial and commercial applications.

A dmTouch or Data Manager is equipped with one RS485 network interface as standard, more can be added using the RDM USB Network adaptor (PR0482). RS485 network capability is optional and can be activated using product code PR0480



RS485 communications ability means that a dmTouch or Data Manager can be used with existing networked Genus® compatible controllers without the need to replace network wiring.

Once the network is connected, using the Network Scan option will, in most cases, locate all the Genus® Compatible devices and log them onto the dmTouch or Data Manager. Genus® compatible devices can also be logged on manually.

PR0488

USB to LON[®] Adaptor

XLON[®] adaptor

This USB adaptor allows connection of certain LON enabled devices to the dmTouch (or Data Manger). Currently there is provision for Danfoss[®] LON devices only (subject to change).

Features

Available with RS485 Transceiver for Twisted pair network or FTT-10A transceiver for Free Topology

Communications

USB 1.1 12Mbit/s

LON[®] via FTT-10A or RS485 Transceivers

Power (via USB)

5V DC +/- 5%, 100mA typical

Environmental

Operating temperature: 0° to 70°C (32° to 158°F)

Operating humidity: 0% to 90% (non condensing)

Dimensions

123 x 68 x 30mm (4.8 x 2.7 x 1.2in) Weight: 100g (3.5 oz)

Warranty

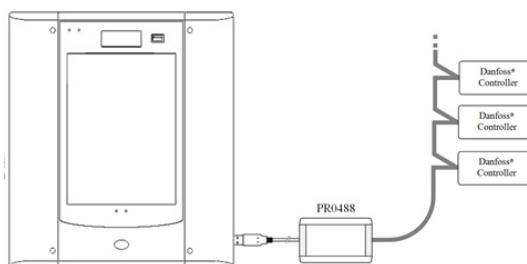
6 month manufacturer warranty



Ordering Information

Description	Part number
USB to LON [®] Adaptor RS485	PR0488-485
USB to LON [®] Adaptor FTT-10A	PR0488-FTT

Typical wiring



PR0489

USB to CANbus Adaptor

This adaptor allows a variety of RDM Intuitive expansion boards to be connected directly to a dmTouch (or Data Manger) running a TDB application, this greatly increases the amount of inputs and outputs available to the user.

Features

- Communicates with up to 10 RDM Intuitive Expansion boards.
- Self powered from any one of the dmTouch's USB ports.
- Plug and play installation

Communications

Up to 1Mbit/s CAN bitrate, USB 2.0 Full Speed

Power

Maximum Current: <0.1A

Environmental

Operating temperature: 5° to 50°C (41° to 122°F)
Operating humidity: 10% to 80% (non condensing)

Dimensions (H x W x D)

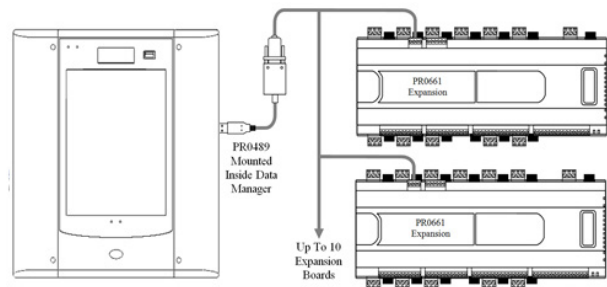
55x 36 x 16mm (2.2 x 1.4 x 0.6 in) Weight: 65g (2.3 oz)



Ordering Information

Description	Part number
USB to CANbus adaptor	PR0489

Typical wiring



PR0020

RS485 to IP Communications Module

MODBUS® Variant

The RS485 to IP module is used to convert RS485 Modbus® traffic, from a third party network, into Modbus TCP/IP traffic for use with an RDM dmTouch. This will allow RS485 Modbus devices, such as energy meters, to an IP network thus reducing wiring costs and complexity onsite.

Features

- 10/100 Base-T port with Auto MDI-X feature allowing either a standard or cross over patch cable to connect directly
- Rotary switches to allow easy static IP addressing
- DHCP option to allow automatic IP addressing
- Allows up to 32 Modbus devices to be networked using one gateway
- Gateway can be used as a standard RS485 Modbus to Modbus TCP/IP module without the use of a dmTouch.
- Powered from low voltage supply (included in kit)
- DIN or panel mount options

Power

5Vdc, <500mA

5V / 90-230Vac Switch module power supply included in kit

Environmental

Operating temperature: 5° to 50°C (41° to 122°F)

Operating humidity: 80% max

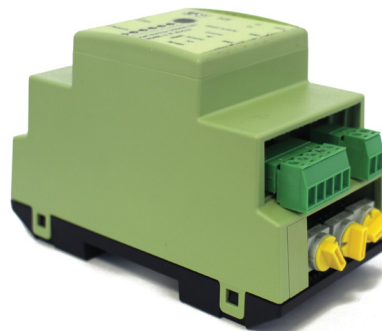
Panel Mount

Dimensions (H x W x D): 97 x 114 x 30mm (3.8 x 4.5 x 1.2in)

Panel fixings 84mm between centres (3.3in)

DIN Mount

Dimensions (H x W x D): 130 x 52.5 x 67mm (6.2 x 4.9 x 2.6in)



Ordering Information

Description	Part number
RS485 to IP Module—Modbus Variant	PR0020-MOD
RS485 to IP Module—Modbus Variant	PR0020-MOD DIN

Possible RS485 Network Configurations

MODBUS Setup	Value
Type	RTU / ASCII
Baud Rate	9600/ 19200
Data Bits	7/ 8
Parity	None/ even/ odd
Stop Bits	1/ 2

PR0470-TEK

USB/485 Tektroniks® Adaptor

Tektroniks network support can be enabled using the RDM USB to RS485 Tektroniks Compatible network adaptor. Up to four network adaptors are supported by the dmTouch and each communicates with up to 2 network lines with up 32 devices on each network.

Features

- Tektroniks® RS485 Interface
- USB Connection to dmTouch
- Simple Plug and Play installation.
- 5 year warranty

Power

Dc Voltage	5V
Rated Current	0.1A (USB Powered)

Mechanical

Dimensions	35 x 22 x 260mm
Weight	50g (1.7 oz)



Ordering Information

Description	Part number
USB to RS485 Tektroniks adaptor	PR0470-TEK

Note: Contact technical support on +44 (0) 141 810 2828 opt 2 to discuss this product and additional items required to support this solution.

PR0734

Wireless Mesh Adaptor

Wireless mesh connectivity

The dmTouch USB wireless mesh adaptor allows the dmTouch to communicate with up to 256 RDM wireless mesh devices, eliminating the need for network cabling. The adaptor can be powered from any one of the dmTouch's five USB sockets and does not require an external power supply. A 2m USB extension lead is supplied with the adaptor to allow it to be mounted externally, to increase operating range.

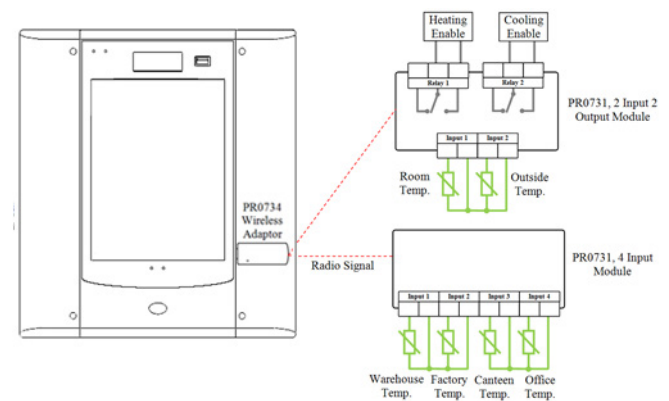
The wireless mesh system means that the wireless adaptor does not have to have direct communication to all the wireless mesh devices. Data is transferred from device to device back to the adaptor even if one or more device is out of range of the adaptor.

The dmTouch can be set to operate on one of four wireless networks. This allows a number of different wireless mesh networks to operate in the same area without interfering with each other.

Note: any dmTouch built pre-February 2011, Issue 7.0 or lower, will require a RDM USB Hub, PR0624, to operate high power USB devices such as the Wireless Mesh USB adaptor.



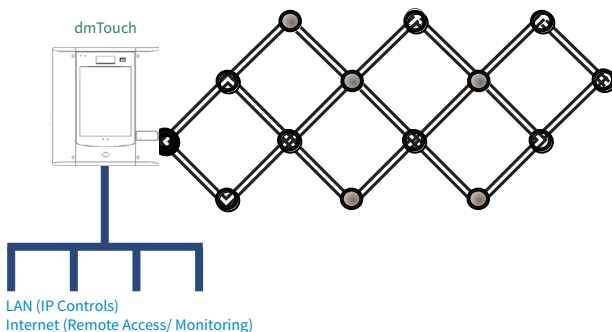
Typical wiring



Features

- Simple wireless setup
- Self powered
- Can be mounted internally or externally
- Plug and play installation

Wireless mesh devices



Communications

Wireless Zigbee® protocol, 2400MHz to 2483.5MHz

Power

Maximum Current: <0.2A

Environmental

Operating temperature: 5° to 50°C (41° to 122°F)
Operating humidity: 10% to 80% (non condensing)

Dimensions

80 x 26 x 8.5mm (3.1 x 1 x 0.3in) Weight: 130g (4.6 oz)

Warranty

1 year manufacturer warranty

Ordering Information

Description	Part number
USB Wireless Mesh Adaptor	PR0734

PR0730

Wireless Mesh

Wireless mesh interface module

The wireless mesh interface module allows multiple RDM controls to be connected to an RDM wireless mesh network to allow easy installation in areas to which it would be difficult or impossible to run hardwired network cables.



Key benefits

Networked controls with no wires

Wireless networking

Using the latest ZigBee® wireless mesh technology this module allows many of Resource Data Management standard controls to be instantly connected to a wireless mesh network.

Easy configuration

Plug and play operation ensures quick and easy setup of devices. Simply plug the controller in to the wireless mesh communications module using a standard CAT5E patch cable, power your controller on and enter a three digit address through the controller display. In a mesh enabled dmTouch system the controller will automatically log online.

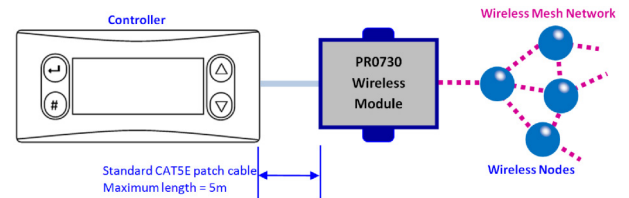
Ordering Information

Description	Part number
Wireless Mesh Interface	PR0730
Wireless Mesh Interface DIN mount	PR0730 DIN

Features

- ZigBee® wireless mesh communications
- Network Channel ID with four settings allows segregation of network systems
- Panel and DIN rail mount options
- RJ45 RS232 Port for connection to RDM controls
- Interconnect with off the shelf CAT5E patch cables

Typical wiring



Communications

RJ45 Connector. RS232 Protocol.

** Maximum 5m from controller to wireless mesh communications module **

Radio specification

Radio Frequency specification: 16 Channels selectable from 2400MHz to 2483.5MHz

Wireless Protocol: ZigBee®

FCC ID: T7VEM250A

Output Power: +3dBm

Maximum Number Hops: 30 Hops to the Wireless Mesh Base Unit.

Range: Typically 30M from one wireless mesh device to another. (Range dependant on site conditions. Obstacles such as metal structures and the presence of other 3rd party wireless devices operating in the same frequency range affect the maximum range achievable.)

Power

Maximum Supply Current: <1A

Environmental

Operating temperature: 5° to 50°C (41° to 122°F)

Operating humidity: 10% to 80% (non condensing)

Panel Mount

Dimensions (H x W x D): 97 x 114 x 30mm (3.8 x 4.5 x 1.2in)

Panel fixings 84mm between centres (3.3in)

DIN Mount

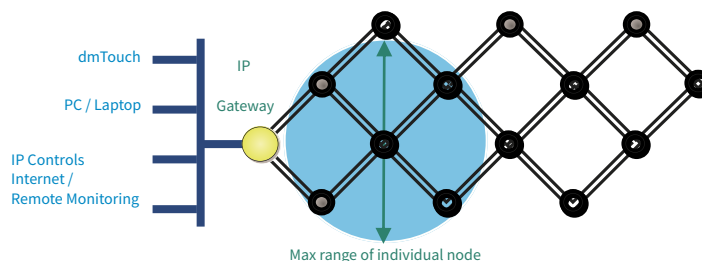
Dimensions (H x W x D): 130 x 52.5 x 67mm (6.2 x 4.9 x 2.6in)



What is wireless mesh technology?

Wireless mesh technology provides a mechanism to transmit wireless data over large areas without the need for powerful transmission antennas. Each element of the mesh system acts as a relay point ensuring that maximum wireless coverage is achieved.

Generally this system will include a gateway device such as the Resource Data Management wireless mesh access point, which enables an IP Ethernet network to communicate with the wireless devices.

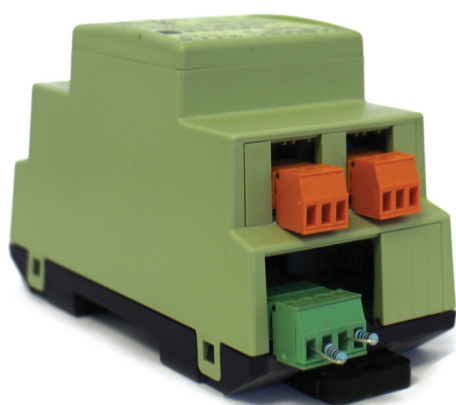


PR0731-2I2O

Wireless Mesh

Wireless mesh input/output module

The wireless mesh 2I2O module has two inputs which support analogue and digital signals for temperature or plant fault monitoring and two relay outputs which can be operated from a dmTouch GP timer channel or TDB program.



Key benefits

Monitoring with no wires

Wireless monitoring

The wireless mesh 2I2O module uses the latest ZigBee® wireless mesh technology. The 2I2O module negates the need for a full site wired network infrastructure. This provides greater flexibility for monitoring and control solutions for applications where the installation of a wired network isn't feasible or cost effective.

Easy configuration

The Plug and play operation ensures quick and easy setup of devices.

Simply power on the 2I2O module, enter a unique three digit network address via the built-in rotary switches and when in range of a mesh enabled dmTouch system the device will automatically log online.

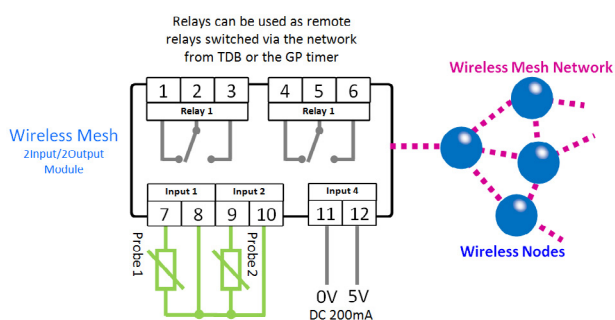
Ordering Information

Description	Part number
Wireless Mesh Module °C 2 input / 2 output	PR0731-C-2I2O
Wireless Mesh Module °F 2 input / 2 output	PR0731-F-2I2O
Wireless Mesh Module °C 2 input / 2 output DIN	PR0731-C-2I2O DIN
Wireless Mesh Module °F 2 input / 2 output	PR0731-F-2I2O DIN

Features

- ZigBee® wireless mesh communications
- Network Channel ID with four settings allows segregation of network systems
- Panel and DIN rail mount options
- 2 inputs can be individually configured for temperature input or plant fault input.
- 2 relay outputs for remote switching via network
- Over and under temperature alarms with delay
- Plant fault alarm with associated delay
- Powered from low voltage supply (included in kit)
- Seamless integration in to dmTouch using The Data Builder PLC programming software

Typical wiring



Inputs

2 Inputs supporting NTC2K, 470R, 700R, 3K, 5K, 6K, NTC2K25, NTC10K or NTC10K(2) temperature probes (note: probe types cannot be mixed) and digital plant fault.

Outputs

Relay 1 & 2 – 5A(250Vac,30Vdc) resistive (COSΦ=0.4 2A Inductive)

Radio specification

Radio Frequency specification: 16 Channels selectable from 2400MHz to 2483.5MHz

Wireless Protocol: ZigBee®

FCC ID: T7VEM250A

Output Power: +3dBm

Maximum Number Hops: 30 Hops to the Wireless Mesh Base Unit.

Range: Typically 30M from one wireless mesh device to another. (Range dependant on site conditions. Obstacles such as metal structures and the presence of other 3rd party wireless devices operating in the same frequency range affect the maximum range achievable.)

Power

5Vdc, Maximum Supply Current: <1A

5V / 90-230Vac Switch module power supply included in kit.

Environmental

Operating temperature: 5° to 50°C (41° to 122°F)

Operating humidity: 10% to 80% (non condensing)

Panel Mount

Dimensions (H x W x D): 97 x 114 x 30mm (3.8 x 4.5 x 1.2in)

Panel fixings 84mm between centres (3.3in)

DIN Mount

Dimensions (H x W x D): 130 x 52.5 x 67mm (6.2 x 4.9 x 2.6in)

PR0731-4I

Wireless Mesh

Wireless mesh input module

The wireless mesh input module supports up to 4 inputs which can be configured as either analogue temperature inputs or as digital inputs for plant fault monitoring.



Key benefits

Monitoring with no wires

Wireless monitoring

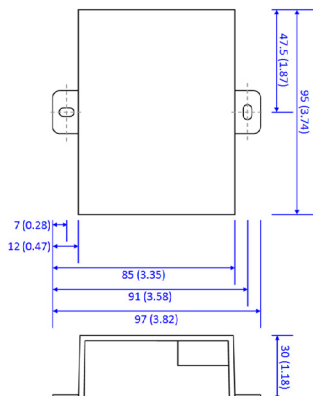
The wireless mesh 4I module uses the latest ZigBee® wireless mesh technology. The 4I module negates the need for a full site wired network infrastructure. This provides greater flexibility for monitoring solutions in applications where the installation of a wired network isn't feasible or cost effective.

Easy configuration

Plug and play operation ensures quick and easy setup of devices. Simply power on the 4I module, enter a unique 3 digit network address via the built-in rotary switches and when in range of a mesh enabled dmTouch system the device will automatically log online.

Ordering Information

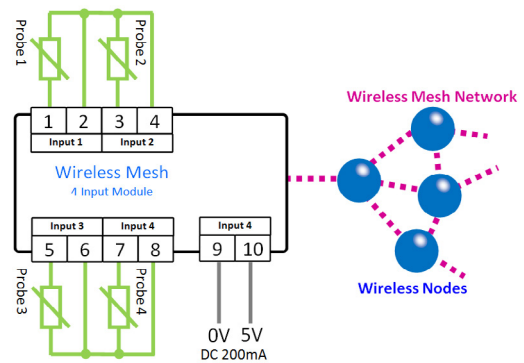
Description	Part number
Wireless Mesh Input Module °C 4	PR0731-C-4I
Wireless Mesh Input Module °F 4	PR0731-F-4I
Wireless Mesh Input Module °C 4	PR0731-C-4I DIN
Wireless Mesh Input Module °F 4	PR0731-F-4I DIN



Features

- ZigBee® wireless mesh communications
- Network Channel ID with four settings allows segregation of network systems
- Panel and DIN rail mount options
- 4 inputs can be individually configured for temperature input or plant fault input
- Over and under temperature alarms with delay
- Plant fault alarm with associated delay
- Powered from low voltage supply (included in kit)
- Seamless integration in to dmTouch using The Data Builder PLC programming software.

Typical wiring



Inputs

4 Inputs supporting NTC2K, 470R, 700R, 3K, 5K, 6K, NTC2K25, NTC10K or NTC10K(2) temperature probes (note: probe types cannot be mixed) and digital plant fault.

Radio specification

Radio Frequency specification: 16 Channels selectable from 2400MHz to 2483.5MHz
 Wireless Protocol: ZigBee®
 FCC ID: T7VEM250A
 Output Power: +3dBm
 Maximum Number Hops: 30 Hops to the Wireless Mesh Base Unit.
 Range: Typically 30M from one wireless mesh device to another. (Range dependant on site conditions. Obstacles such as metal structures and the presence of other 3rd party wireless devices operating in the same frequency range affect the maximum range achievable.)

Power

5Vdv, Maximum Supply Current: <1A
 5V / 90-230Vac Switch module power supply included in kit.

Environmental

Operating temperature: 5° to 50°C (41° to 122°F)
 Operating humidity: 10% to 80% (non condensing)

Panel Mount

Dimensions (H x W x D): 97 x 114 x 30mm (3.8 x 4.5 x 1.2in)
 Panel fixings 84mm between centres (3.3in)

DIN Mount

Dimensions (H x W x D): 130 x 52.5 x 67mm (6.2 x 4.9 x 2.6in)

PR0732

Wireless Mesh

Wireless mesh access point

This module allows the RDM wireless mesh systems to connect directly to an Ethernet network. For use with PR0730 wireless mesh interface and PR0731-2I2O, PR0731-4I (including DIN variants) wireless mesh modules and PR0733 wireless sensor.



Key benefits

Networked controls with no wires

Wireless networking

Providing an Ethernet gateway to a wireless mesh system, this module allows easy connection of wireless controls and sensors to a dmTouch enabled network.

No configuration required

The module is completely plug and play. There is no configuration required.

Optional Wireless Mesh USB Interface available using PR0734.

Power over ethernet

The unit can also be ordered with a Power Over Ethernet (POE) injector, permitting the Wireless mesh base unit to be installed in areas where no power supply is easily accessible.

Ordering Information

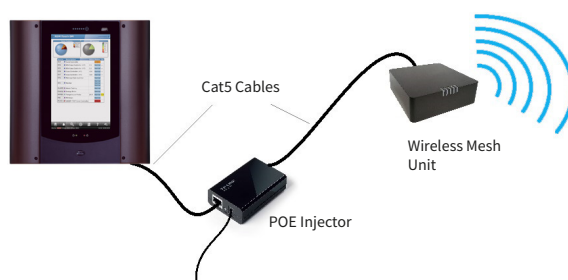
Description	Part number
Wireless Mesh Access Point without injector	PR0732-NI
Wireless Mesh Access Point with POE injector	PR0732-POE

Features

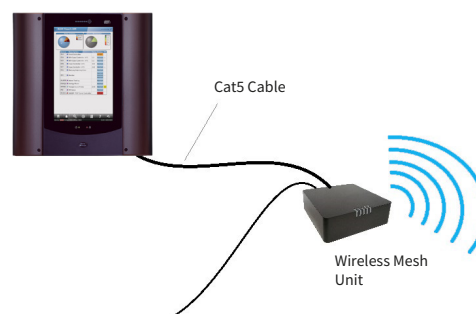
- Plug and play operation. No configuration required.
- For use with PR0730, PR0731-2I2O, PR0731-4I and PR0733 (including DIN variants)
- ZigBee® wireless mesh communications
- 10/100Base-T Ethernet connection
- Link and activity indicator LED's
- 30m wireless range and 100m Cat5 patch cable
- Interconnect with off the shelf CAT5E patch cables
- x2 Power options; Power Over Ethernet (POE) Injector or 5Vdc micro power connection

Typical wiring

POE with injector



POE without injector



Power

Power supplied via Ethernet cable (up to 100m) from POE injector

Environmental

Operating temperature: 5° to 50°C (41° to 122°F)

Operating humidity: 10% to 80% (non condensing)

Dimensions (H x W x D)

30 x 85 x 85mm (1.2 x 3.3 x 3.3in) Weight: 95g (0.2lb)

PR0733

Wireless Mesh Sensor

Temperature probe

- Standalone wireless temperature monitoring
- Compatible with ZigBee® wireless mesh communications
- Logging of temperatures even when mesh communications is unavailable, up to 72 hours of data retention.
- Automatic syncing of data when network communications is re-established
- Battery powered for maximum flexibility
- 10 minute temperature sample frequency
- Temperature reporting to a dmTouch wireless mesh enabled network
- Over and under temperature alarm with delay
- Magnetic fixing for quick and easy installation, and bracket for non-metallic surfaces



Specifications

Radio specification

Radio Frequency specification: 16 Channels selectable from 2400MHz to 2483.5MHz
 Wireless Protocol: ZigBee® FCC ID: T7VEM250A
 Output Power: +3dBm

Maximum Number Hops: 30 Hops to the Wireless Mesh Base Unit.
 Range: Typically 30M from one wireless mesh device to another. (Range dependant on site conditions. Obstacles such as metal structures and the presence of other 3rd party wireless devices operating in the same frequency range affect the maximum range achievable.)

Tolerance

1%

Operating temperature

-30°C to 50°C (-22°F to 122°F)

Operating humidity

0% to 100% (non condensing)

Dimensions

52 x 75 x 75mm (2.05 x 2.95 x 2.95in)

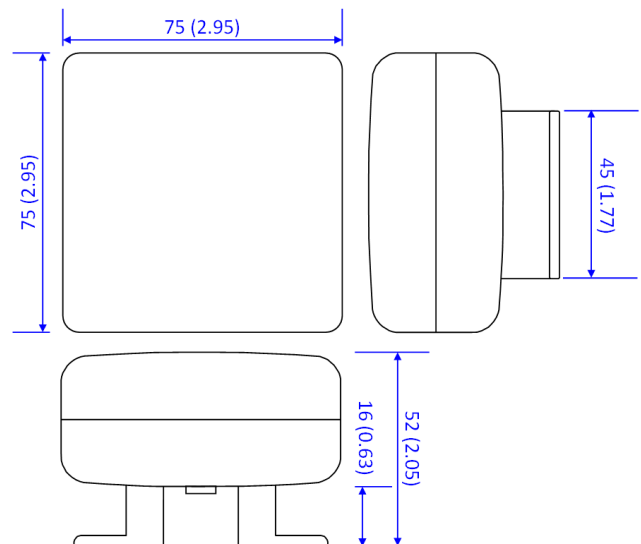
Weight

154g (5.4oz)

Ordering Information

Description	Part number
Wireless Mesh Sensor	PR0733

Mechanical



dmTouch

Energy Saving Options

Software Options

Network & Interface Options

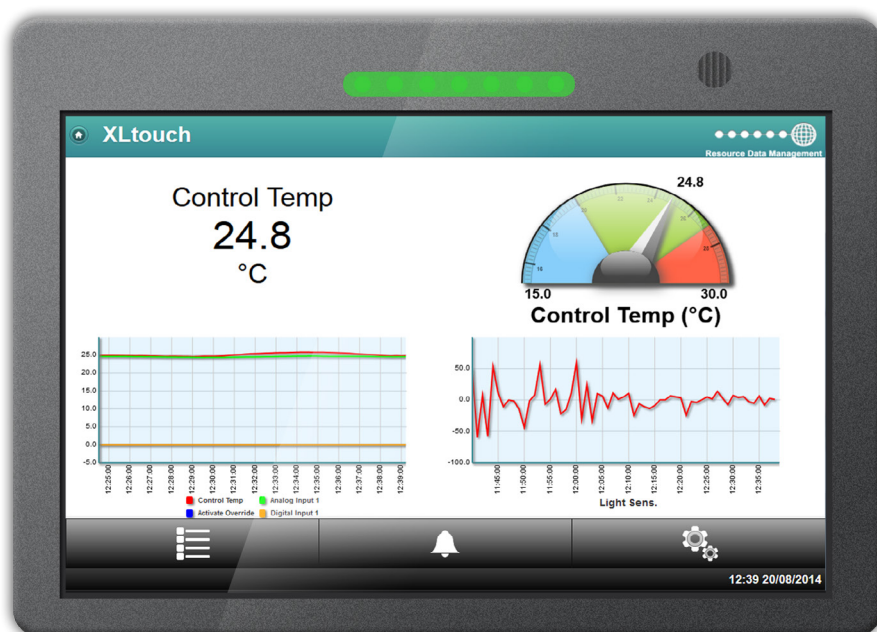
Wireless Mesh

Ancillaries

touchXL

One device, three functions, maximum value for money

The newest member of RDM's pioneering Touch screen family, the slim line touchXL is a multi-function device that can act as a remote display, orbit Data Manager repeater console or stand-alone controller.



With a customisable graphic display it offers easy access to data and settings from an RDM Intuitive controller. As an orbit console connected to a dmTouch LAN, it can act as an additional user interface and alarm console.

Flexible communication options, including IP allow the controller to be sited hundreds of meters from the controller. CANbus allows the touchXL to act as an intelligent controller and display in one, eliminating the need for two separate products.

It can also accommodate multiple power supply options, including a choice of either POE, (Power over Ethernet) or a low voltage 24v supply. Designed with you in mind to offer optimal value for money.

Features

- HD 10" Touch Screen
- Audio sounder
- Customisable graphic display
- Remote display, repeater or controller options
- Fibre, IP and CANbus connectivity
- USB port
- Wall or panel mount
- POE or low voltage

How touchXL works



Specifications

Power

Power Over Ethernet 12.95W (Class 0) or 24Vdc auxiliary supply (11W)

Output

Alarm relay, NO/NC contacts. 30Vdc/24Vac 2A

Environmental

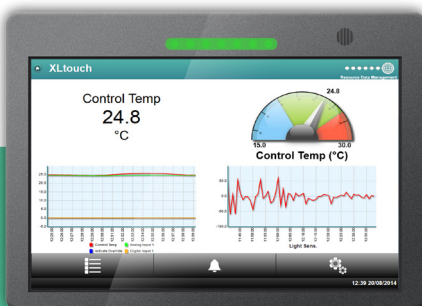
Operating temperature +5°C to +38°C
Operating humidity 80% maximum

Dimensions (HxWxD)

173 x 245 x 30.5

Benefits

- Switched Mode Power Supply (SMPS) – for operation worldwide
- Turnkey Solution
- Cost effective fixed price kit
- Advanced features and functionality
- Easy install



Released Q1 2016

For more information about the new touchXL please register your interest at www.resourcedm.com/touchXL/more

PR0450

48 Channel Temperature Monitor

Input expansion module

When used in conjunction with a dmTouch, the 48 channel expansion module allows an additional 48 inputs to be added. These inputs can be individually configured as temperature probe, switched fault input or defrost input.

Typical applications

Multi-point plant fault and temperature monitoring

Features

- IP Ethernet connectivity
- 11 different probe types
- Individual high and low temperature alarm settings
- Plug and play set up

Benefits

- Temperature data from 48 probes can be sent to the dmTouch (or data manager) using a single Cat 5 cable, greatly reducing site wiring.
- Multiple monitors can be logged onto the dmTouch (or data manager) giving the ability to monitor and log hundreds of temperature probes

Inputs

48 Inputs Individually configurable as analogue temperature inputs or digital inputs.

Probe types supported (PT1000 (default), 470R, 700R, 2K, 2K25, 3K, 5K, 6K, 10K, 10K(2), 100K)

Range: -99°C to +350°C for PT1000

Digital Input: Normally Open or Normally Closed input (Volt Free) with a 1A delay.

Power

Supply Voltage Range: 100 - 240 Vac $\pm 10\%$

Supply Frequency: 50 - 60 Hz

Maximum supply current: 1A

Environmental

Operating temperature: 5° to 38°C (41° to 100°F)

Operating humidity: 10% to 80% (non condensing)

Dimensions

310mm (H x 325mm (W) x 95mm (D), (12.2 x 12.8 x 3.7 in.)

Weight: 1.8kg (3.97lb)

Ordering Information

Description	Part number
48 Channel Temperature Monitor	PR0450
48 Channel Temperature Monitor (°F)	PR0450-VER



PR0340-DME/PR0341-DME

Orbit Console

Remote front end repeater

The Orbit Remote Console facilitates an additional user interface and alarm console for a Data Manager of dmTouch. All of the menus and screens that are available on a Data Manager are also available on the Orbit Remote Console. For the dmTouch only critical functionality and display views are available. Up to three Orbit Remote Consoles can be connected to a single Data Manager or dmTouch.

Typical applications

Additional user interface

Features

- IP Ethernet connectivity
- Built in keypad and display
- Alarm sounder and indicator
- Alarms can be mapped to individual consoles
- Alarm relay (volt free)

Benefits

- Provides additional system access if the dmTouch is in a secure area
- Plug and play, no setting up required

Specification

Power

Supply Voltage Range: 100 - 240 Vac $\pm 10\%$

Supply Frequency: 50 - 60 Hz

Maximum supply current: 1A

Output

1 Volt Free Relay Output: 7.5A resistive load 250Vac

5A inductive load 250Vac COS $\phi=0.4$

Environmental

Operating temperature: 5°C to 50°C (41°F to 122°F)

Operating humidity: 10% to 80% (non condensing)

Dimensions

310mm (H) x 325mm (W) x 95mm (D), (12.2 x 12.8 x 3.7 in.)

Weight: 2.4kg (5.3lb)

Ordering Information

Description	Part Number
Orbit Console	PR0340-DME
Orbit Console with Card Reader	PR0341-DME



Training

At Resource Data Management as well as supplying high quality, feature packed cost-effective products we believe that it is essential that our customers have the best understanding of how to install and use our products to gain the best possible results. Not only does this reduce initial investment costs, as customers will have the knowledge to confidently select the most appropriate products for their solution, it also ensures seamless and quick installation and effective maintenance.

Free bespoke training sessions, inform users how to optimise controls, reduce running costs and extend service life of the equipment for optimal value for money. Training sessions are available to all of our customers at our dedicated training facilities in Glasgow and Minneapolis. Other training solutions include live web based training, webinars, and on-site training sessions at customer premises.*

Training programmes can be tailored to suit your exact requirements and will typically last from one to three days depending on your requirements.

Topics covered include

- Refrigeration Applications
- Heating Ventilation & Air Conditioning Applications
- Lighting Applications
- Energy Monitoring and Reduction
- Controls Applications Using The Data Builder (TDB) Software Platforms
- Temperature and Plant Monitoring Applications
- dmTouch Installation and Setup
- Networking

To discuss your requirements and to arrange training please contact:

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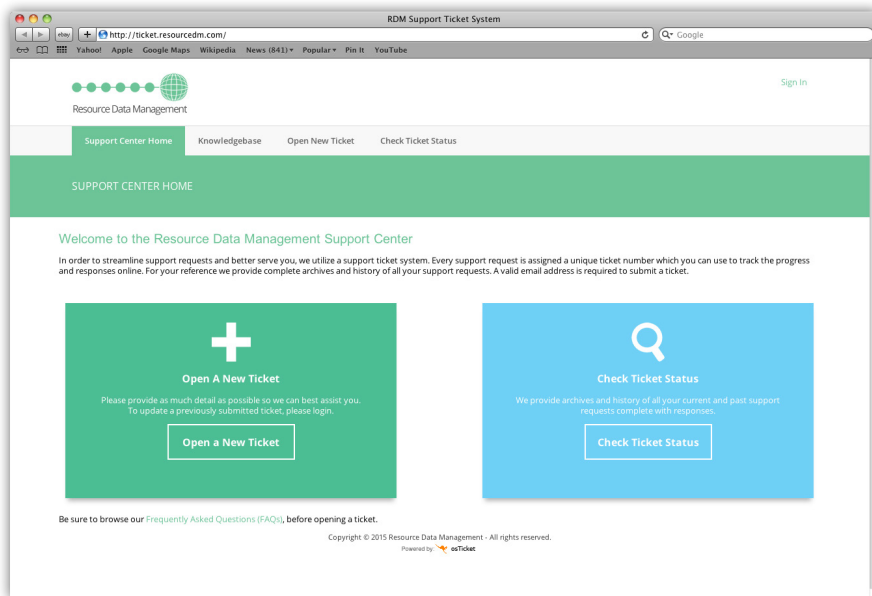
*Training at customer's premises will be chargeable to cover travel/accommodation costs.



Technical support

RDMs Technical Support department offers free after sales support. The resourcedm.com website offers a highly efficient support ticket system, making it easy to submit enquiries at a time convenient to you.

The ticketing system can be found under the **Support** menu



Once the ticket has been submitted it will be routed to the best available person with knowledge of that product, an answer will then be promptly delivered to you. To make it easy to reference your enquiry in the future, or over the phone, you will be issued with a unique ID number that will also allow you to track the progress of your enquiry online.



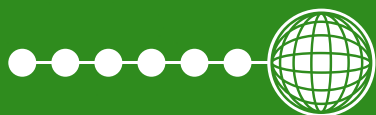
Instant live chat

Visit www.resourcedm.com during office hours and simply click on the link on the left side of any page of the RDM site, you will then be connected instantly with an expert from our Technical Support Team.



Free downloads

To ensure each and every customer has the opportunity to maintain their assets at optimum levels and reduce energy consumption fast we give you access to free license software and documentation downloads including function programmes and The Data Builder (TDB) our highly flexible Programmable Logic Control software.



5 year warranty on all
RDM manufactured products*



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Visit www.resourcedm.com for more information on RDM solutions

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*Excluding OEM products and selected product lines. Warranty details for excluded products will be detailed on the respective product pages.

