Take control of your carbon footprint

MITSUBISHI ELECTRIC

MELCloud COMMERCIAL
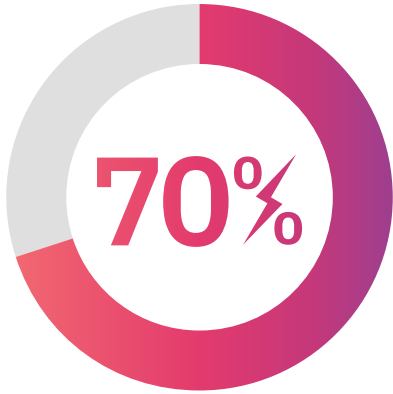
Controls - at the heart of today's building requirements

Today, we all have access to an array of controls to make everyday life easier and more comfortable. The same applies to HVAC systems where modern controls are not only vital for ensuring the right levels of occupant comfort but also help deliver low carbon buildings that operate effectively and efficiently.

In order to achieve the UK's national objective of net-zero carbon emissions by 2050, commercial buildings will have to become much more energy-efficient and building controls will have a significant part to play.

70%

Heating, ventilation and air conditioning (HVAC) systems account for around 70% of the energy used in today's workplaces[1]. Consequently, it is vital to incorporate effective controls and monitoring, which not only optimise the efficiency of the HVAC equipment but also ensure it operates at the correct parameters to maintain occupant comfort.

The combination of internet connectivity and increasingly sophisticated HVAC equipment has had a major impact on the design and integration of control systems - making them an essential option for building managers seeking new approaches to monitoring and management of estates.

Mitsubishi Electric technology

Mitsubishi Electric has a long heritage in providing controls that enhance a HVAC system's performance, efficiency and energy use.

Mitsubishi Electric has developed building controls that put building performance information on an Internet-based platform, using wireless technology, which makes retrofitting into existing buildings so much easier.
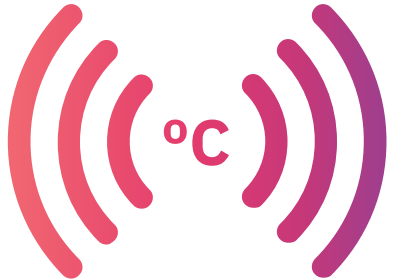
The Internet of Things

The Internet of Things (or IoT) describes the revolutionary movement of the growing number of internet-enabled devices that can network and communicate with each other.

Mitsubishi Electric is at the forefront of this revolution and all of our air conditioning and ventilation products are now connectable to the Internet.

*1 PropTech 2020: the future of real estate, University of Oxford Research, February 2020: **https://www.sbs.ox.ac.uk/sites/default/files/2020-02/proptech2020.pdf**

Introducing
MELCloud Commercial

By harnessing decades of knowledge, we have developed a system of connectivity for our air conditioning and ventilation systems via a new IoT platform. **Meet MELCloud Commercial**.

MELCloud Commercial allows you to remotely manage, monitor and control HVAC systems in multiple buildings from one central location. Benefits include:

- Single platform to remotely monitor, control and maintain buildings
- Provides real-time energy consumption data for HVAC equipment at estate, building and zone level, enabling improved energy management
- Predictive maintenance and reduce HVAC downtime thanks to remote equipment diagnosis and health check
- Choice of subscription packages to tailor IoT platform to customer requirements, and manage costs

Our MELCloud Commercial platform will not only allow building owners to understand a building's energy consumption and monitor it, but also have the means to optimise it.
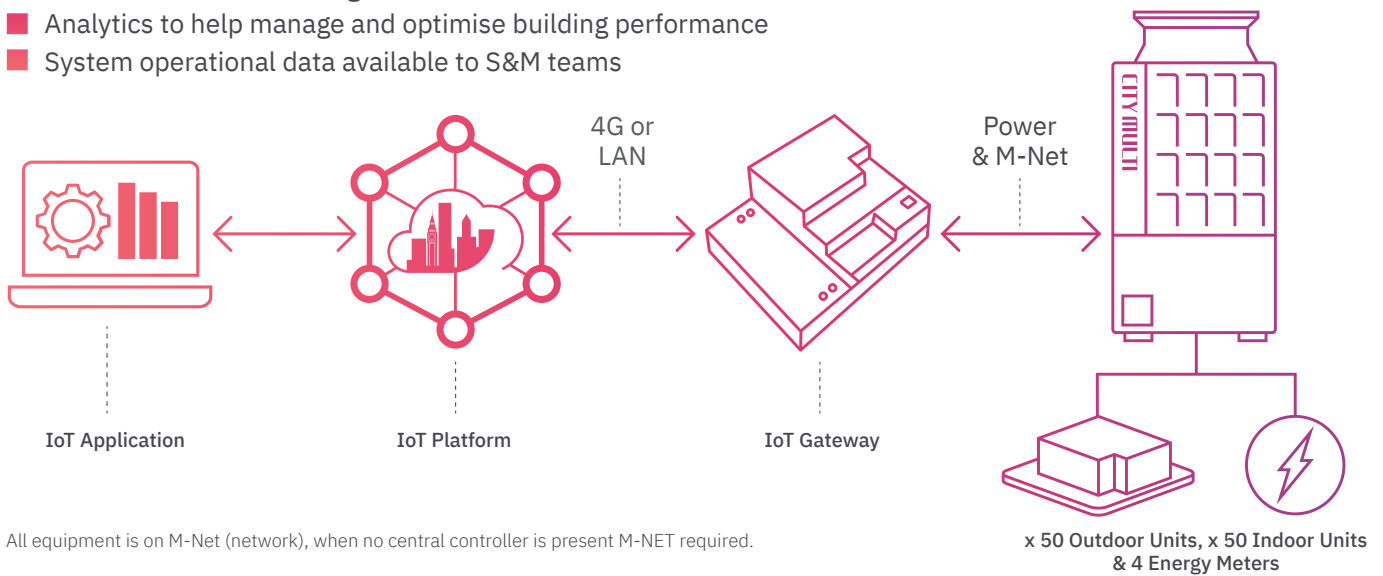

Offices

Hotels

Health

Education

Retail

Data Centres

Leisure
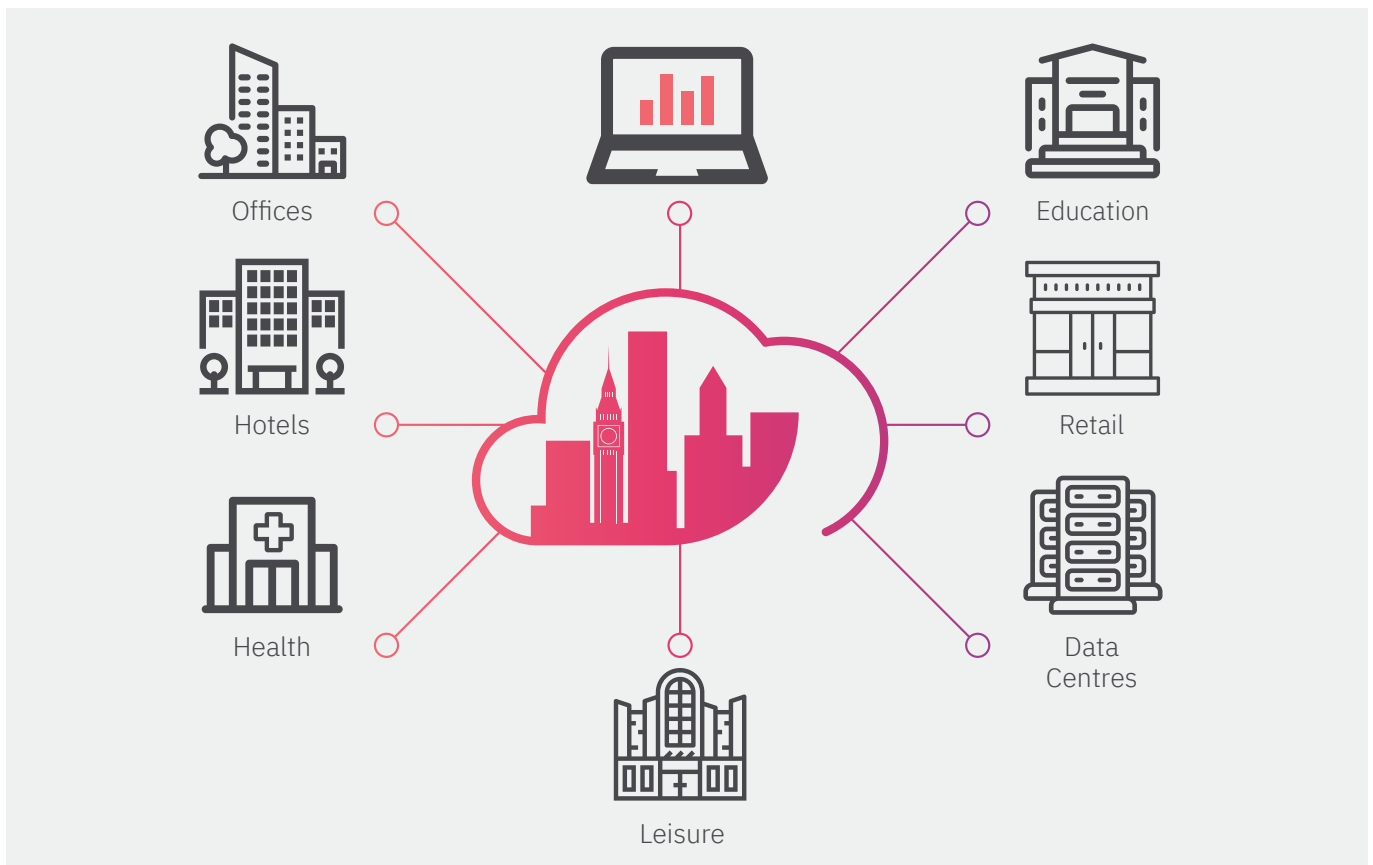
Connectivity to the internet can be achieved through a LAN connection or a wireless connection through a SIM card.

Capabilities include:

- Remote monitoring of buildings
- Remote control of buildings
- Analytics to help manage and optimise building performance
- System operational data available to S&M teams

	4G or LAN		Power & M-Net	

IoT Application   **IoT Platform**   **IoT Gateway**

x 50 Outdoor Units, x 50 Indoor Units
& 4 Energy Meters

All equipment is on M-Net (network), when no central controller is present M-NET required.

Managing Multiple Sites
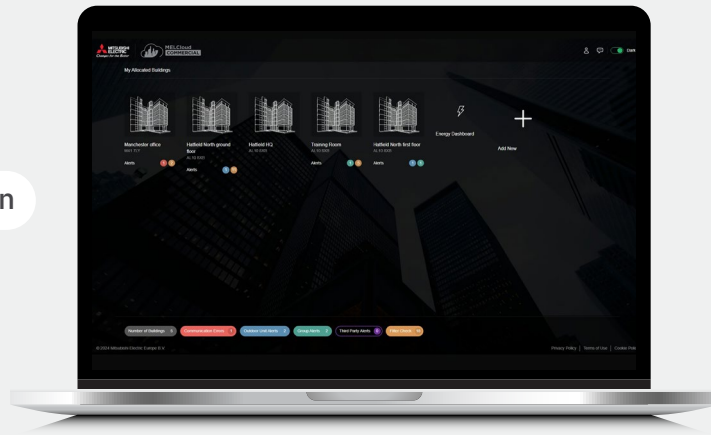## with **MELCloud Commercial**

Remotely managing HVAC equipment across different sites is made simple with the MELCloud Commercial IoT application. The user-friendly interface can be accessed by multiple users via laptop or tablet, and provides the following benefits:

- View of an entire estate displayed on a single page
- Colour coded status of an entire estate displayed in a summary bar
- Colour coded status of each building displayed in building specific tiles
- Asset / equipment management information available such as reference numbers, locations and software version

By utilising the online IoT application for different sites, users can receive dynamic real time information about building systems, including live performance and status data.
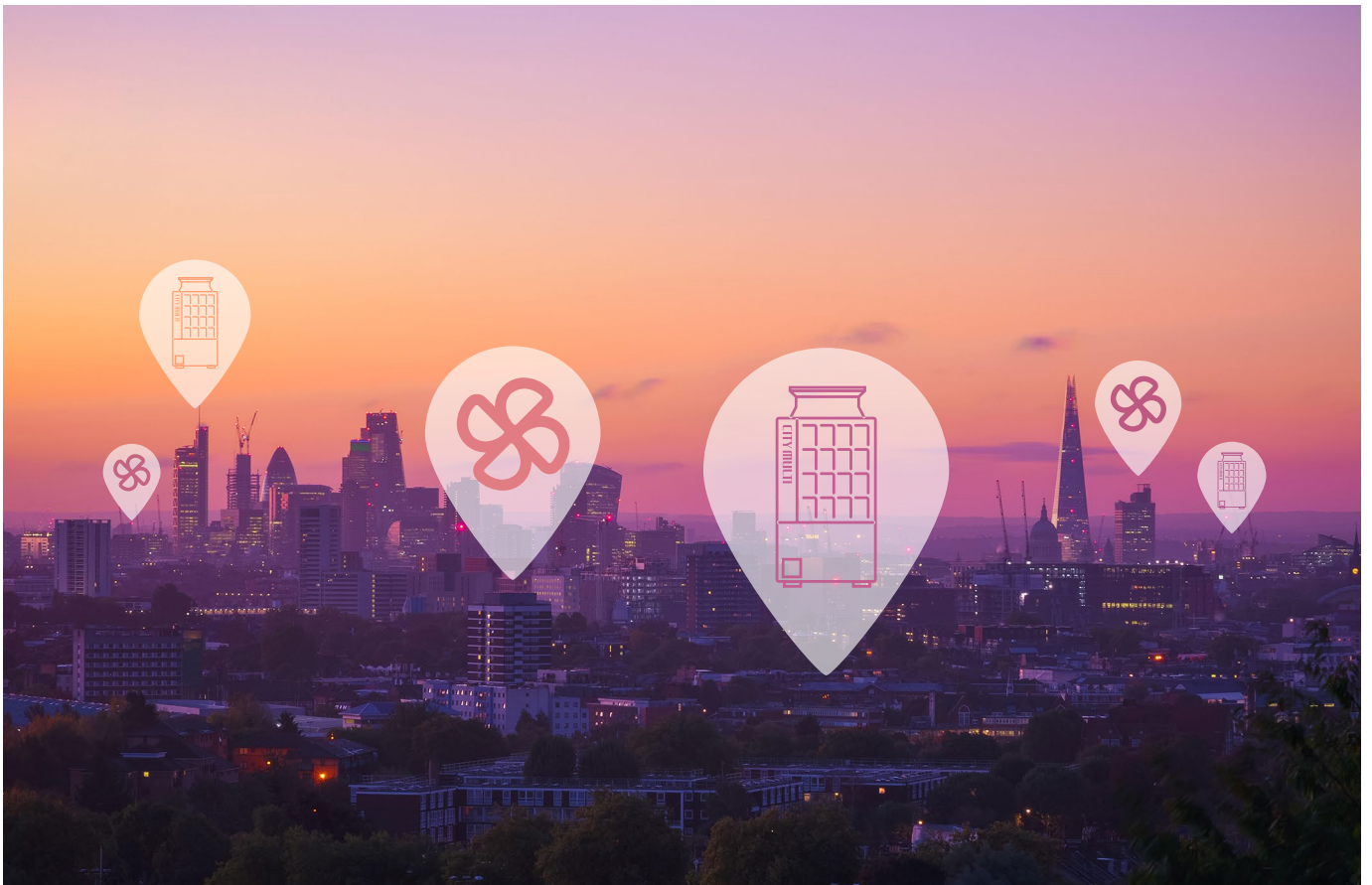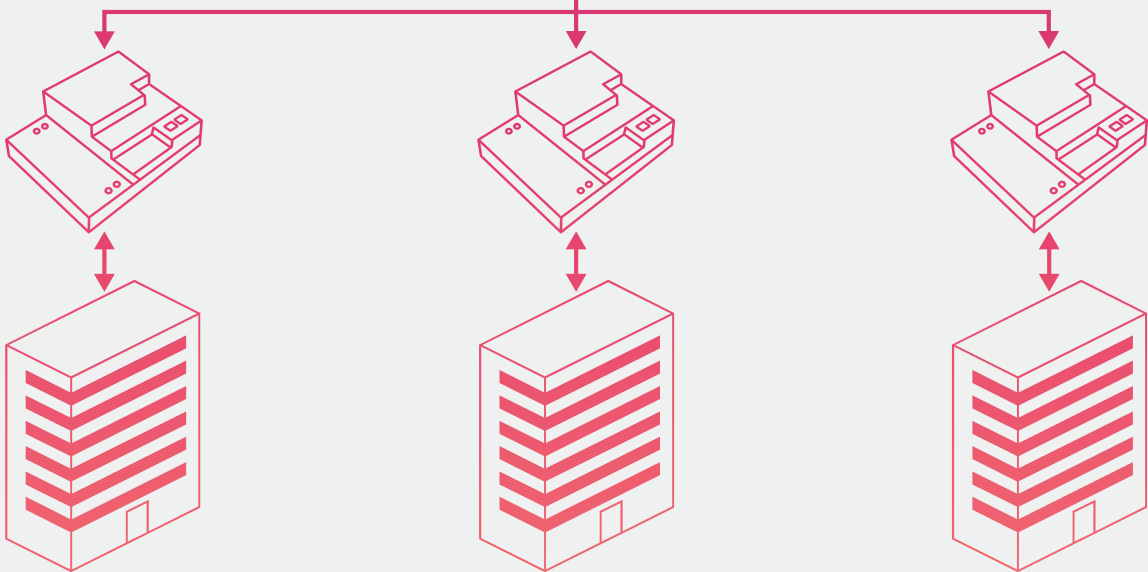
IoT Application
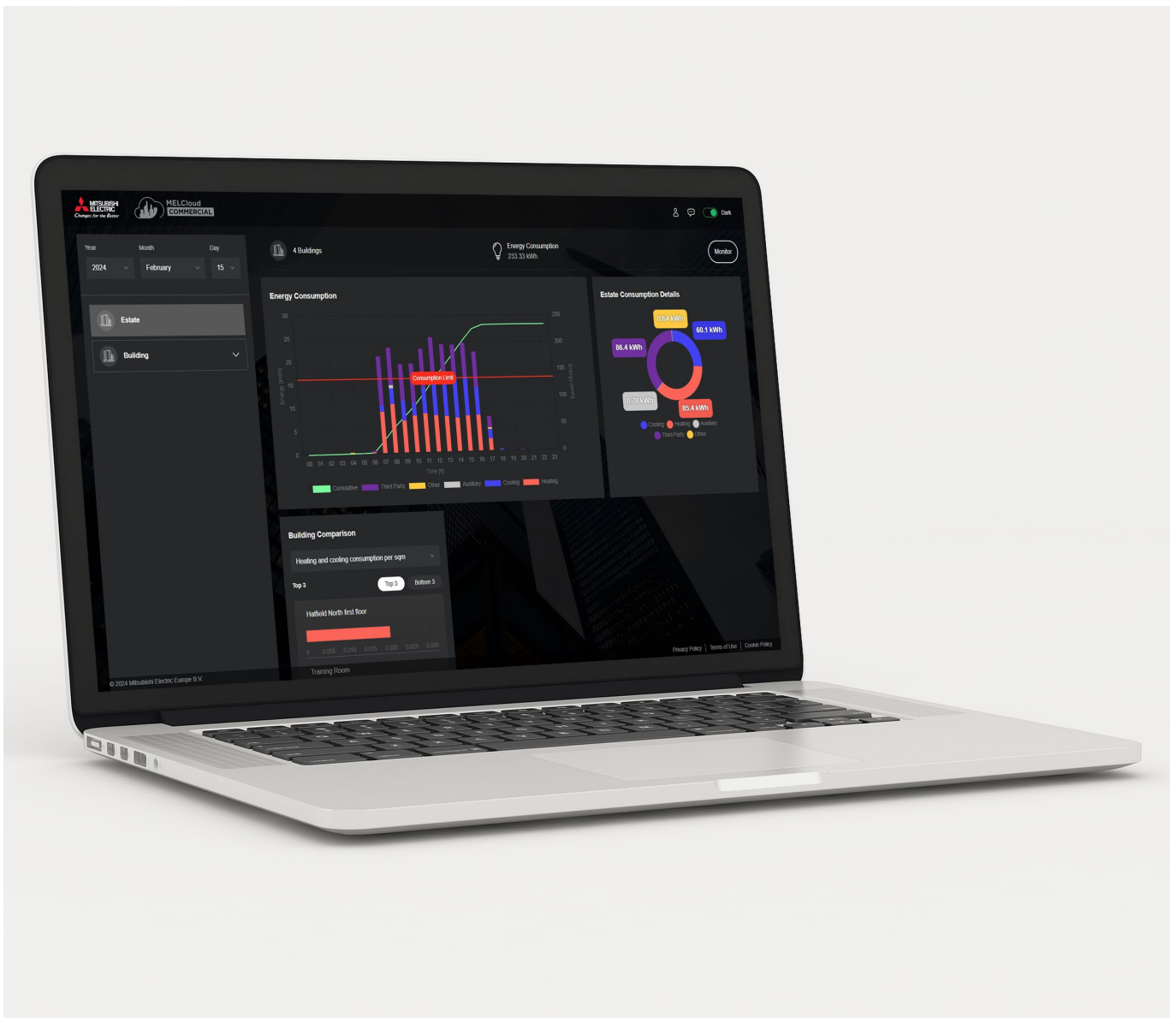
Internet Connectivity
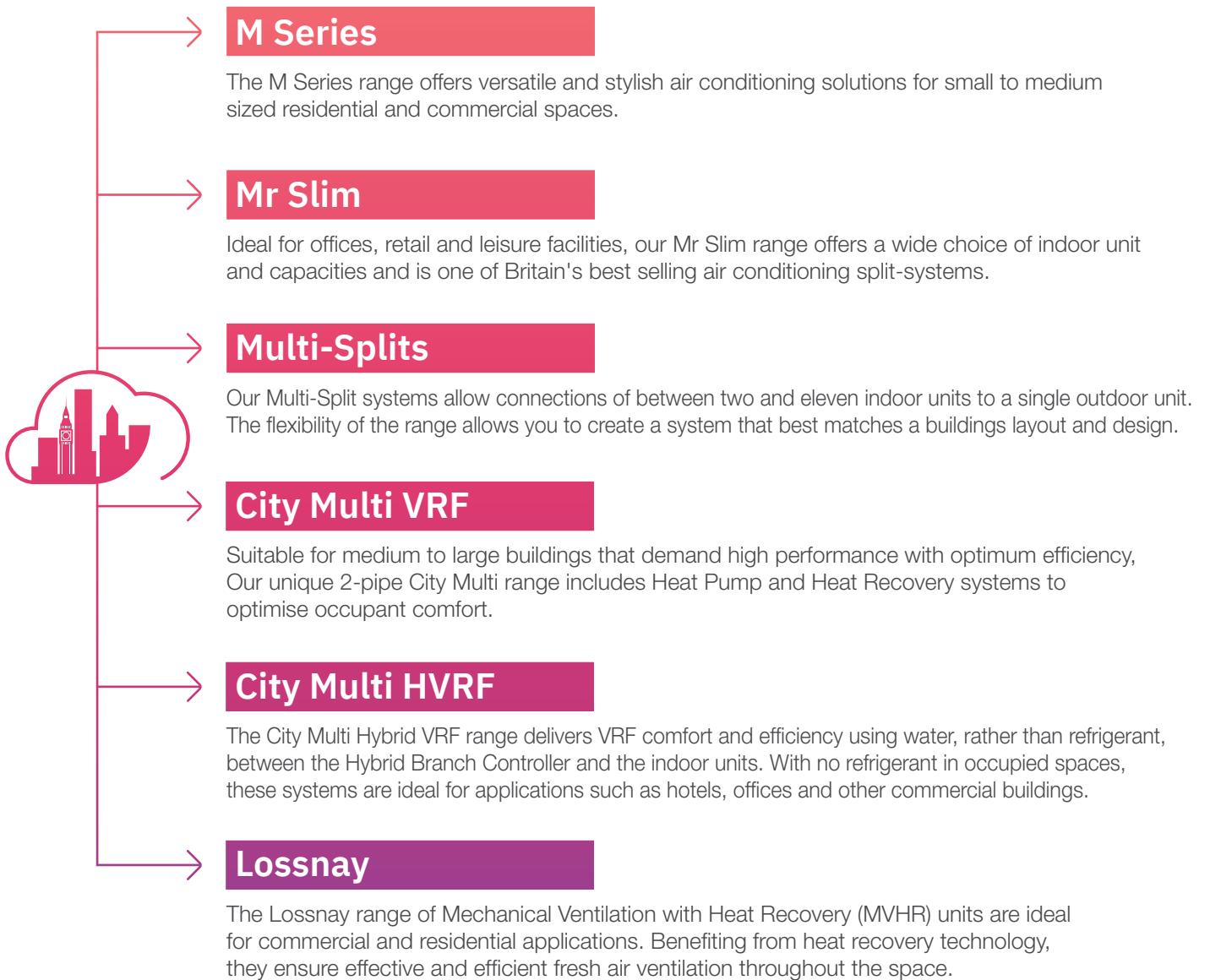
IoT Platform

IoT Gateway

Monitoring and Control
with **MELCloud Commercial**

Monitor and control the air conditioning and ventilation units of your building remotely, via the MELCloud Commercial IoT application which is accessible through your tablet or PC.

MELCloud Commercial has broad connectivity across Mitsubishi Electric HVAC equipment, including indoor and outdoor units of the following ranges:

M Series

The M Series range offers versatile and stylish air conditioning solutions for small to medium sized residential and commercial spaces.

Mr Slim

Ideal for offices, retail and leisure facilities, our Mr Slim range offers a wide choice of indoor unit and capacities and is one of Britain's best selling air conditioning split-systems.

Multi-Splits

Our Multi-Split systems allow connections of between two and eleven indoor units to a single outdoor unit. The flexibility of the range allows you to create a system that best matches a buildings layout and design.

City Multi VRF

Suitable for medium to large buildings that demand high performance with optimum efficiency, Our unique 2-pipe City Multi range includes Heat Pump and Heat Recovery systems to optimise occupant comfort.

City Multi HVRF

The City Multi Hybrid VRF range delivers VRF comfort and efficiency using water, rather than refrigerant, between the Hybrid Branch Controller and the indoor units. With no refrigerant in occupied spaces, these systems are ideal for applications such as hotels, offices and other commercial buildings.

Lossnay

The Lossnay range of Mechanical Ventilation with Heat Recovery (MVHR) units are ideal for commercial and residential applications. Benefiting from heat recovery technology, they ensure effective and efficient fresh air ventilation throughout the space.

MELCloud Commercial
Subscriptions

A MELCloud Commercial subscription provides you with complete peace of mind that your building's services are delivering occupant comfort in the most energy efficient and cost-effective way.

You can choose how to manage and pay for monitoring of your HVAC equipment with our new subscription service.

A level of subscription to suit your needs

Two levels of cover are available for HVAC monitoring and servicing. From simple remote control with engineering assistance to complete monitoring and reporting by our expert Mitsubishi Electric engineers, all subscriptions provide a convenient and predictable way of managing your HVAC system.

How it works

Once a subscription package is selected, your HVAC equipment can be connected to the MELCloud IoT platform in a few simple steps, making it ready for remote monitoring, control and reporting.

Simply register online, provide a few details about your system and you will then receive the IoT gateway for installation either by Mitsubishi Electric or your preferred installer.

Once the simple and intuitive commissioning process is complete, you are ready for full control and monitoring of your HVAC online using the MELCloud Commercial IoT application.

MELCloud COMMERCIAL CONNECT

MELCloud COMMERCIAL OPTIMISE

Package Features

Package Features	MELCloud Commercial CONNECT Control, Monitor, Energy and Help Desk Assistance	MELCloud Commercial OPTIMISE MELCloud Commercial Connect + Energy and Service & Maintenance App + Engineering Assistance
Collective setpoint control	✓	✓
Basic remote controller per indoor	✓	✓
Advance remote controller per indoor	✓	✓
3 customisable scheduling profiles	✓	✓
Estate level monitoring	✓	✓
Building monitoring	✓	✓
Indoor unit monitoring	✓	✓
Comfort monitoring	✓	✓
Energy monitoring	✓	✓
Advanced energy monitoring		✓
View & monitor estate and error criticality		✓
Pre-emptive maintenance and S&M data		✓
Remote / virtual health check		✓
Real time system data		✓
Trend data and bespoke analytic reports		✓
S&M and asset management data		✓
Interactive refrigerant flow diagram		✓
Engineering assistance		✓
Energy assistance		✓

MELCloud Commercial
Support

Once you have subscribed to MELCloud Commercial, Mitsubishi Electric will help maximise the performance and efficiency of your HVAC equipment, as well as quickly diagnose any faults that may occur.

- Remote monitoring and fault diagnostics
- Speedy diagnosis of faults, should they occur
- Reduced travel time and costs - One phone call can often remove the need for a site visit
- Site visit arrangements for issues that can't be resolved remotely*

MELCloud Commercial allows authorised users to interrogate and often fix issues without needing a visit from an engineer. One phone call provides instant remote access to full monitoring and fault diagnostics, ensuring issues with your HVAC systems can often be resolved remotely*.

*Charge may apply from your chosen service provider.
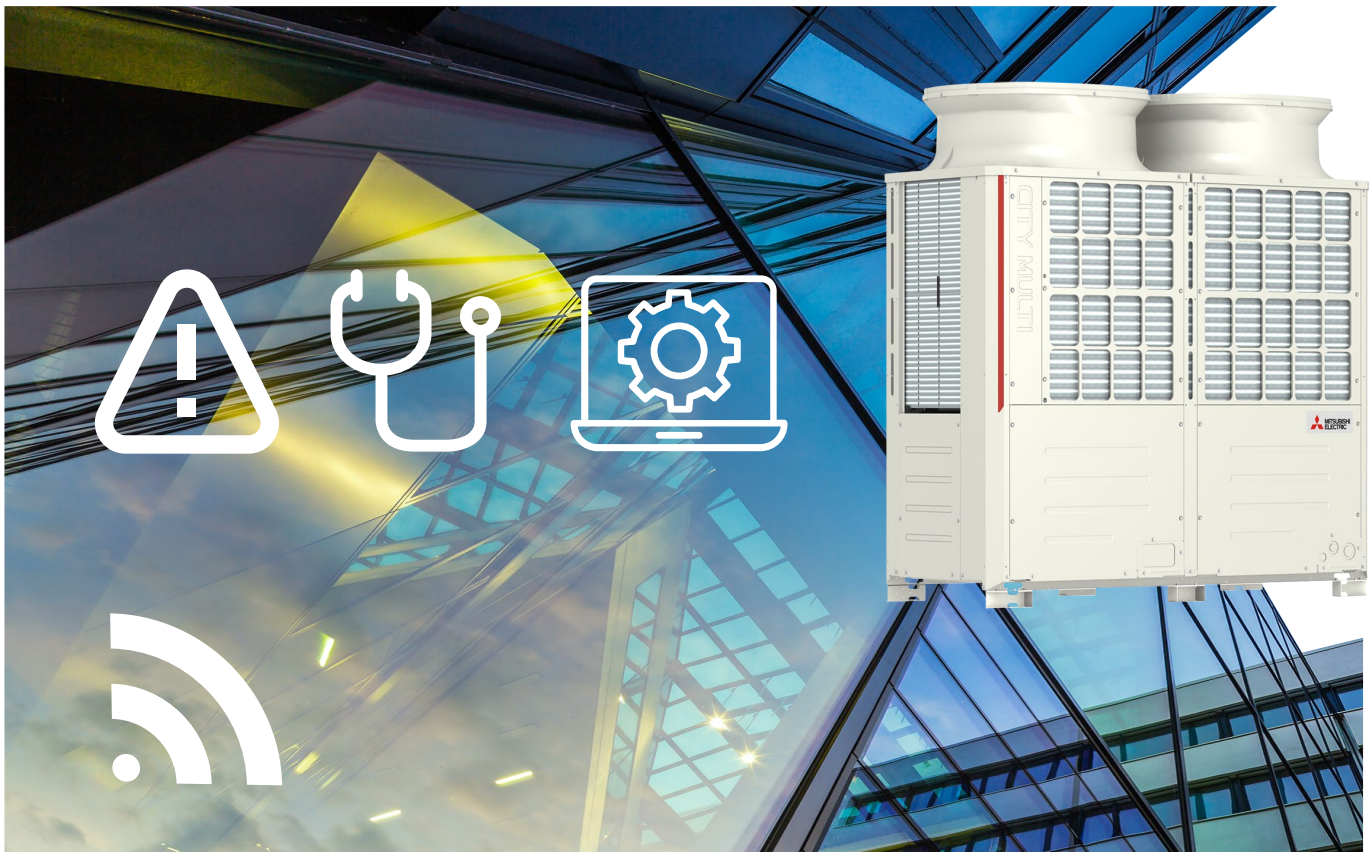
Mitsubishi Electric provides market leading solutions to cool, heat, ventilate and control commercial and residential buildings

As a major manufacturer of these pivotal technologies, we hold the UK's energy challenges close to our heart.

By developing the most innovative and energy efficient technology, we are committed to helping the nation achieve its climate goals.

les.mitsubishielectric.co.uk

MITSUBISHI ELECTRIC
Changes for the Better
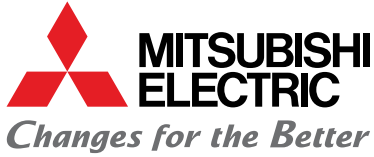
email: Melcloudenquiries@meuk.mee.com

website: Melcloud.com

Note: The fuse rating is for guidance only and please refer to the relevant databook for detailed specification. It is the responsibility of a qualified electrician/electrical engineer to select the correct cable size and fuse rating based on current regulation and site specific conditions. Mitsubishi Electric's air conditioning equipment and heat pump systems contain a fluorinated greenhouse gas, R410A (GWP:2088), R290 (GWP:3), R32 (GWP:675), R407C (GWP:1774), R134a (GWP:1430), R513A (GWP:631), R454B (GWP:466), R454C (GWP:148), R1234ze (GWP:7) or R1234yf (GWP:4). *These GWP values are based on Regulation (EU) No 517/2014 from IPCC 4th edition. In case of Regulation (EU) No.626/2011 from IPCC 3rd edition, these are as follows. R410A (GWP:1975), R32 (GWP:550), R407C (GWP:1650) or R134a (GWP:1300).

Effective as of February 2024

Green
Gateway

www.greengateway.mitsubishielectric.co.uk

Mitsubishi Electric UK's commitment
to the environment