

# Solutions

ic.tech

Experience new levels of control, comfort, energy efficiency, and cloud management with intelligent solutions for small, medium, and large buildings.



**enertronic**  
PROYECTOS Y  
SUMINISTROS S.A.

**iSMA CONTROLLI**

# iSMA CONTROLLI redefines the building automation industry by using the latest technology at the forefront.

As a global brand, we find it important to empower professionals with cutting-edge solutions that enhance comfort, security, sustainability, and efficiency.

Our products are designed to be simple and intuitive, with maximum flexibility, seamlessly integrated into new and existing projects.

Join us in transforming buildings into better places to live and work. See the difference simplicity can make.

**Simplicity in technology.**

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# Simplicity in technology.

We create technologically advanced products and innovative solutions that simplify the user experience throughout the entire lifecycle of a building.

## Decades of experience.

With a history dating back to 1936, we offer expertise in product development and manufacturing, providing reliable building automation solutions.

## Centers of excellence.

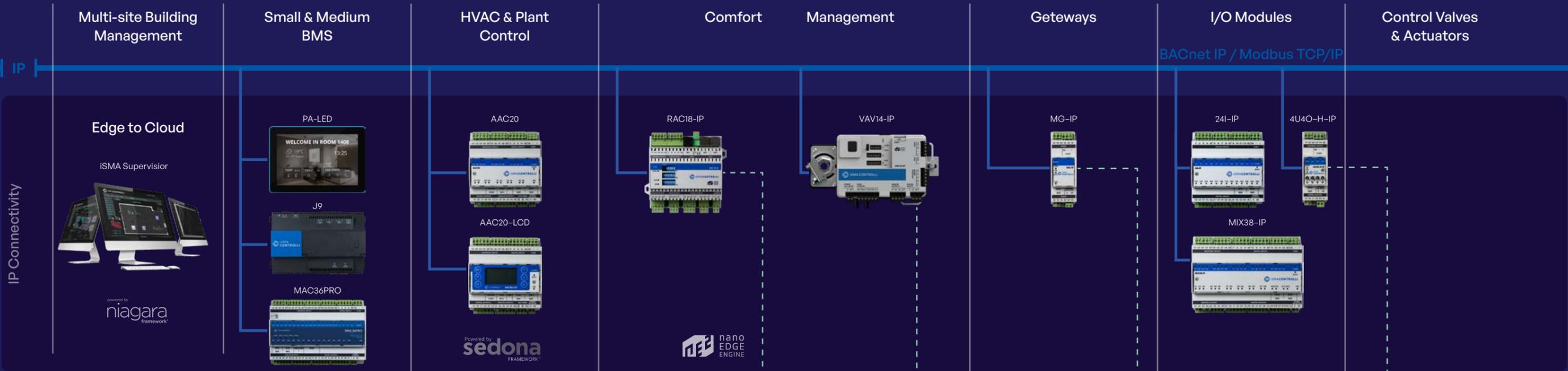
Our operational centers in Genoa and Gdansk specialize in mechanical engineering, electronic design, and software development.

From concept to delivery, our design process ensures high-quality, advanced solutions tailored to modern needs. Production, R&D, technical support, and warehousing are all managed within our company.

## Designed in the EU, delivered worldwide.

Our European-designed products are trusted globally, combining advanced engineering with reliability.

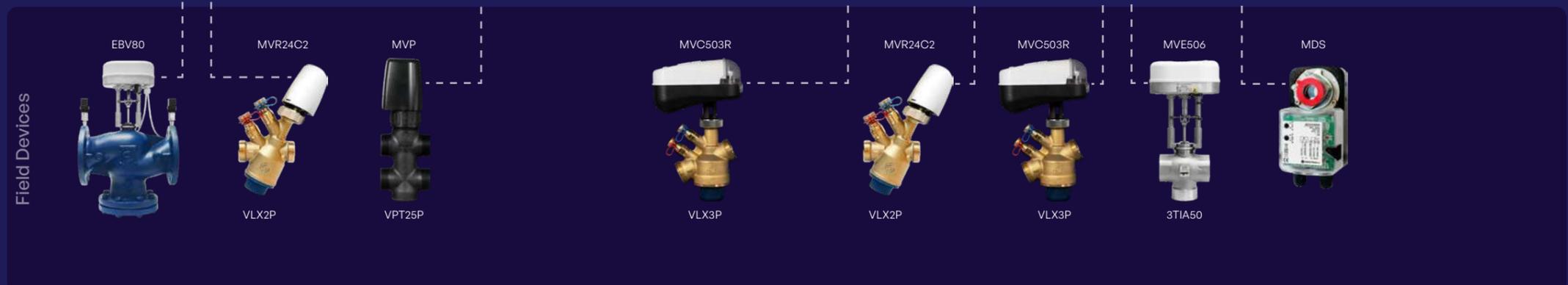
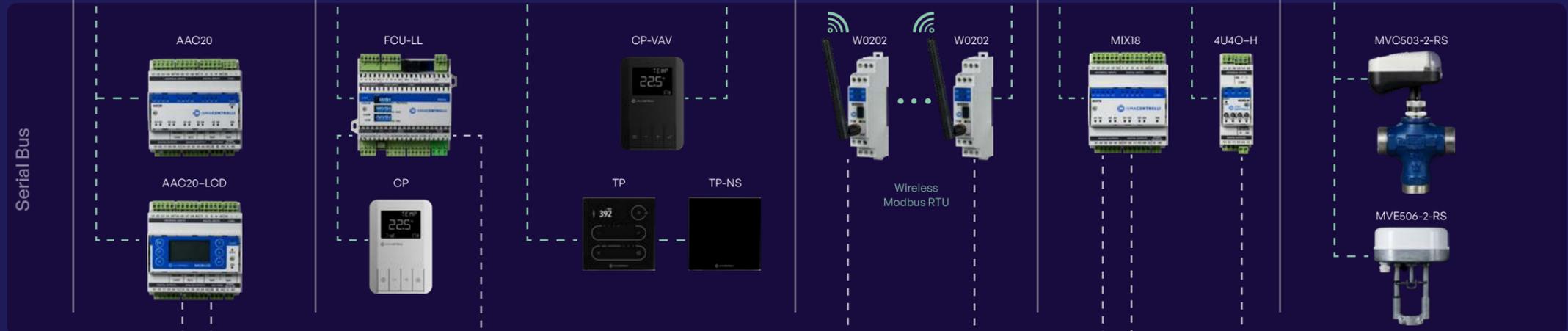




## Solutions Overview Application Example

Experience new levels of control, comfort, energy efficiency, and cloud management with Intelligent Building Automation solutions for small, medium, and large buildings.

The wide range of solutions bring innovative products from the field to the cloud level and leverage the flexibility and integration possibilities thanks to the BACnet and Modbus protocols.



# nano EDGE ENGINE



The **nano EDGE ENGINE** is an embedded software platform dedicated to EDGE Devices with microcontrollers, making them IoT-ready building devices with smart functionalities.

### Real-time programming on your terms.

Program from scratch or customize your controller application instantly, in real time, with a graphical interface that allows you to create applications using block programming on a wire sheet.

Choose from the portable, free of charge iC Tool, which allows for programming and managing multiple connected devices, and the Niagara Framework® extension, which allows programming directly from Niagara Workbench.

### Modularity provided by libraries.

The nano EDGE ENGINE offers the freedom to create optimized applications in an efficient way, thanks to the wide range of libraries available. Users can choose from a set of drag and drop components composed into libraries designed specifically for building automation. This flexibility allows each user to freely decide the final purpose of the controller in the BMS.

### Platform ready for time-sensitive applications.

Designed from the ground up for building automation, nano EDGE ENGINE enables the creation of systems with multiple logic strategies running on a single controller. Cycle-driven applications execute at lightning speed, supporting cycle times as low as 100 ms.

### It is all about data.

Our platform streamlines data exchange with BMS and cloud systems through a native auto-exposition mechanism for multiple protocols, including BACnet and Modbus.



# Niagara Framework



### What is Niagara Framework®?

Niagara Framework® is a comprehensive software infrastructure that addresses the challenges of creating device-to-enterprise applications.

It serves as a central console for connecting real-time operational data to the people and systems that manage workflows in smart buildings, data centers, industrial processes, smart cities, and other aspects of business enterprises.

Niagara provides the critical, cyber-secure device connectivity and data normalization capabilities needed to acquire and unlock operational data from device-level and equipment-level silos. The control engine at the core of Niagara enables users to not just monitor data flows but to create logic sequences that affect control programming based on data observation.

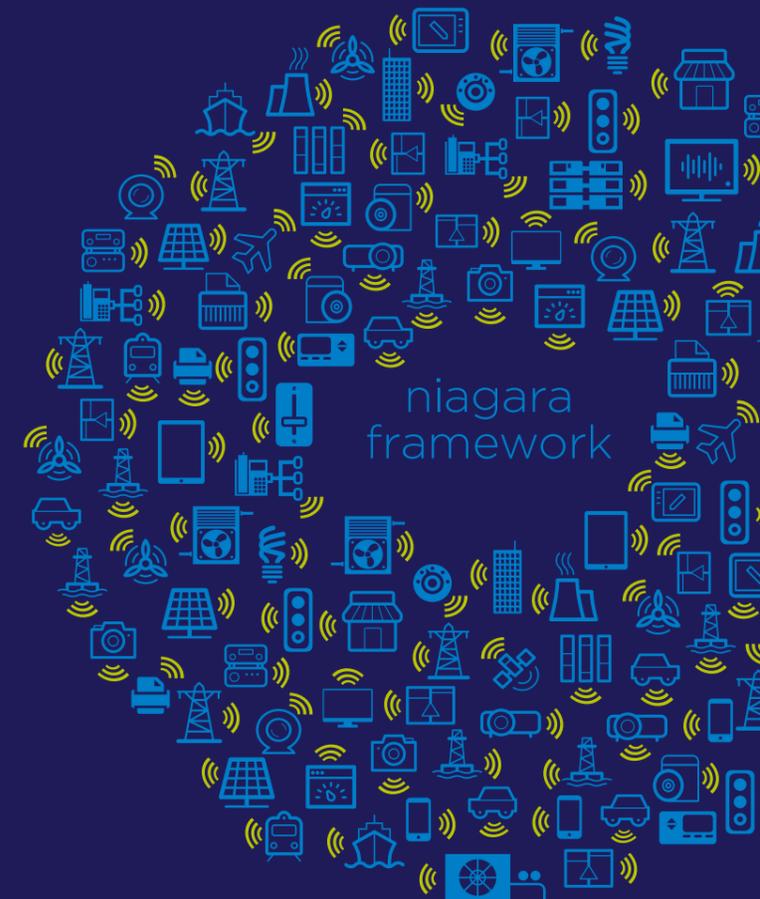
Systems integrators use the data management and user presentation applications built into Niagara to manage histories, schedules, and alarms. They can create custom user interfaces for end users with the tools built into Niagara, or purchase graphical UI templates and components from the many Niagara partners that specialize in graphics and dashboarding.

### Niagara 4 - features and advantages:

- An advanced, modern user interface. Intuitive and customizable.
- More data at your fingertips to find, visualize, and take control of your operations.
- Powerful security.
- Faster, more powerful development and support.
- Easier integration and device management.

**iSMA CONTROLLI is the leading provider of Niagara Framework-based solutions in the market since 2009. The collaboration with Tridium has allowed to offer tailored solutions that perfectly meet the unique needs of clients. We are an OEM Partner, Niagara Developer, and Portability Partner, demonstrating technical expertise and a deep understanding of the Niagara Framework.**

**iSMA CONTROLLI is an Authorized Niagara Training Partner offering local and remote Niagara 4 Technical Certification Trainings.**



# iC Connect

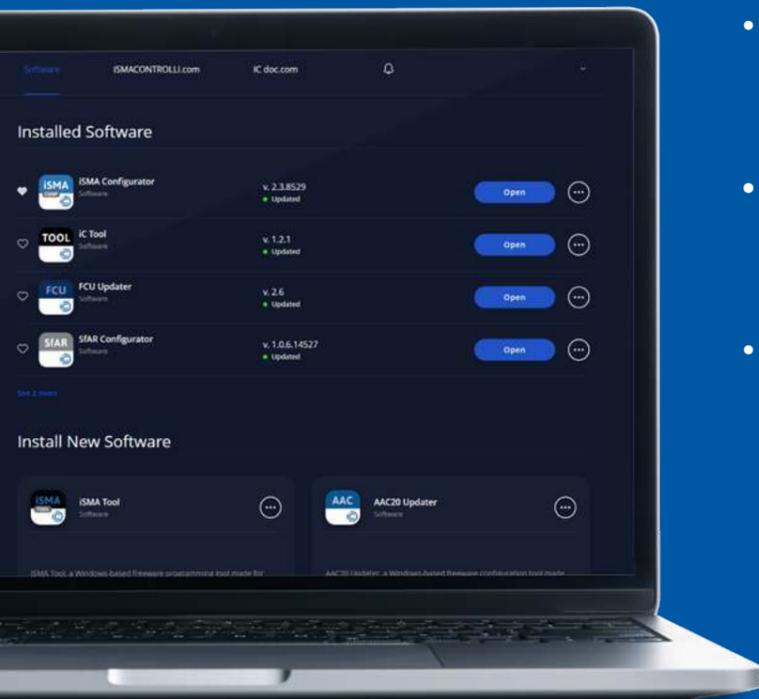
The All-in-One Client Platform for Windows.



Enter the iSMA CONTROLLI world of building automation with iC Connect and gain access to hundreds of products, software and documentation to create comprehensive solutions for buildings of any size - from small facilities to large complexes.

**All the knowledge in one place.**

iC Connect is a platform for iSMA CONTROLLI partners, offering free access to software and documentation 24/7 from anywhere in the world. Whether you're looking for the latest product updates or essential tools, iC Connect ensures you always have access to the knowledge and resources you need.



- **Software Library Management.** Easily download, update, and organize all iC Software in one centralized location.
- **Latest software update notifications.** Stay informed about the latest software updates and decide when to upgrade.
- **Comprehensive Documentation Access.** In a matter of moments, find all the product materials you will ever need.

# iC Workbench

Simplified solutions for Niagara Framework® users.



Take advantage of a full range of controllers, gateways and I/O modules fully programmable and configurable using Niagara 4. Since 2009, iSMA CONTROLLI has been a leader in Niagara Framework-based solutions, delivering a complete environment designed to maximize the capabilities of Niagara while integrating the unique functionalities of our innovative products.

**Freedom of choice.**

iSMA CONTROLLI provides the full Niagara solution within its own OEM iC Workbench, but allows the products to be used worldwide, using any Niagara Workbench. To facilitate this, all modules that extend the functionality of the iC products in Niagara Framework are available independently as part of the iC Niagara Expansion Pack, a free tool that enables the expansion of Niagara functionality with the unique features of iSMA CONTROLLI products.

Key Features:

- **Open access** licensing on all Niagara Hardware and Software products.
- **Frequent updates** to ensure access to the latest Niagara features.
- **MAC36 controllers** powered by Niagara with 36 I/Os and a full-stack Niagara.
- **A range of Niagara-enabled controllers** with nano EDGE ENGINE embedded.
- **Tools for easy integration** of configurable FCU and VAV controllers.
- **Ready-to-use device templates** for BACnet and Modbus networks.
- **3D and 2D Graphic libraries** for HVAC systems.
- **Streamlined configuration** of Android HMI Panels.
- **Easy management** and firmware upgrades of RS485 devices.



# BMS & Analytic Software

## 01. Multi-site Building Management



### iSMA Supervisor

#### Connecting Minds and Machines.

Tridium's Niagara Framework® has fundamentally changed the way devices and systems connect to people - and the way people can control and optimize those machines.

#### Niagara 4 - Open 4 Performance.

From buildings and data centres to manufacturing systems and smart cities, the Niagara Framework improves strategic decision-making, allowing for optimized performance and cost reductions that can help businesses be more competitive and more profitable.

#### Over a Million Instances Worldwide.

With over a million instances worldwide, Niagara is quickly becoming the operating system of the Internet of Things.

Its open API, open distribution business model, and open protocol support give you the freedom to choose how you work, what you build, and with whom you partner. Niagara enables you to connect and control devices, while normalizing visualizing, and analysing data from nearly anywhere or anything.

#### Key Functionalities and Features:

- Intuitive User Interface.**  
 Niagara 4 features a bold and intuitive new interface. Modern and easy to use, the platform utilizes HTML5 to provide an array of rich features.
- More Data at Your Fingertips.**  
 Integrators can provide an interface that empowers users to do more on their own. Because devices, systems, and data points can be tagged in Niagara 4, users can easily conduct a station-wide search of the most important elements in their operation.
- Powerful Security.**  
 Niagara 4 takes a "defence-in-depth" approach to the Internet of Things security. Niagara 4 makes user permissions completely configurable and easy to assign.



### SkySpark

SkySpark is a comprehensive software platform for connecting, storing, analyzing and visualizing data from smart devices and equipment systems. It helps you find what matters in the vast amount of data produced by today's smart systems.

#### Get your Data.

SkySpark works with data of all types – whether via a live link to an automation system or smart meter, connection to a SQL database, import of historical data from Excel files, or a web service feed from an utility.

#### Give your Data Meaning.

SkySpark uses the industry standard Project Haystack for semantic tagging of data. With proper tagging, analytics applications can quickly consume data from equipment devices and interpret patterns in operational data to identify faults, deviations, and trends.



# Scalable Solutions for Small and Medium-Sized Buildings

**Cloud-enabled controllers powered by the Niagara Framework with HMIs for maximum efficiency in small and mid-sized applications.**

Discover truly open and scalable solution for comprehensive control, process visualization, and energy management. Unleash the power of integration, visualization, and IoT connectivity with devices powered by the Niagara Framework, a truly open software platform for building automation.

Ensure user comfort and long life of your facility, reduce energy costs, and shape the modern future of your buildings.



## Hybrid IoT and Integration Controllers

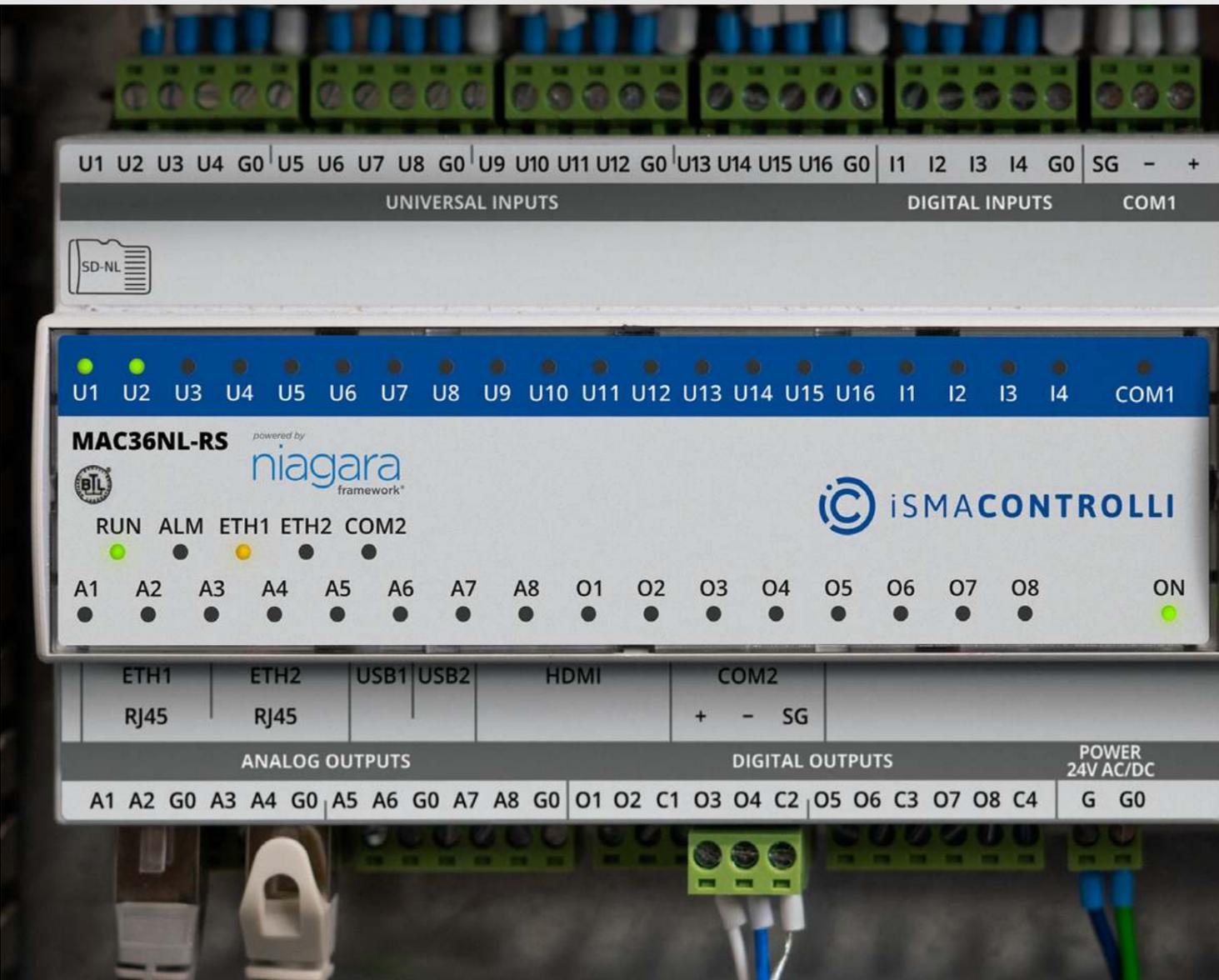
### MAC36PRO – Niagara Framework at the Edge.

The extreme power of the quad-core controller, combined with 36 onboard I/Os, dual independent Ethernet ports, up to two RS485 ports, an optional M-Bus interface, and the latest Niagara 4. MAC36 provides all the essential tools for an efficient and scalable building management system for both retrofits and new installations, including real-time HVAC control, security, programming, alarming, scheduling, trends, email notifications, and more.



### iSMA-B-J9 – Controller optimized for Niagara 4.

The JACE 9000 serves as a powerful IoT hub for building applications, making it an essential component in BMS projects for connecting and controlling both new and legacy systems. Its modular design ensures easy installation, seamless integration, and efficient deployment, allowing system integrators to focus on engineering solutions rather than assembling components. Native Wi-Fi capability streamlines installation, reduces wiring, and enhances flexibility.



# Android Touch Panels for Smart BMS



**Discover a range of industrial and commercial HMI touch panels for modern IP-based systems with web applications.**

### Seamless Setup & Operation with Dedicated Software.

iSMA CONTROLLI HMI Panels are factory equipped with iC SmartView platform, enabling Kiosk Mode capabilities, facilitating easy logins and access to Niagara stations and other HTML5 web servers, remote control using built-in web-server, Niagara Service and **RESTful API**, seamless import and Export of settings and more.

## Commercial Panels

Android PA-LED 10" and 13" panels are the perfect solution for modern interiors of residential and commercial buildings. The panels not only add an attractive look to the building space, but also significantly enhance its usability with unique features. The built-in multicolor LED bar allows for direct interaction with building users through visual communication.

### Simplified installation with PoE support.

PA-LED panels offer a user-friendly design allowing installation in both landscape and portrait modes, that seamlessly integrates into any environment. Supporting both Power over Ethernet (PoE) and DC power supply, our panels come equipped with metal mounting brackets for easy installation on any surface.

## Industrial Panels

Available in 7", 10" and 15" sizes and with an aluminum casing made of the highest quality materials, and IP65 front panel the iSMA-D-PA industrial touchscreens offer robustness and responsiveness. This results in an excellent user experience and long service life.

### Flexible Connectivity & Global Compatibility.

Featuring an RJ45 port for Ethernet together with Wi-Fi connectivity, the industrial panels ensure flexible access. A UL-certified power adapter supports 110–240 V AC and includes EU, US, or UK plug options for global compatibility.



# Advanced Application Controllers

03.  
HVAC & Plant  
Control



AAC20

AAC20-LCD-M

AAC20-LCD-D

## Customizable Web Server

The pre-configured fully customizable HTML5 webserver with multi-user support, effectively visualises and enables control setpoints, alarms and schedules, with access from an HMI panel or web browser. A dedicated toolset simplifies adjusting the webserver to user needs.

## Local HMI with a built-in LCD display.

The fully programmable LCD display with role-based access makes the controller useful in various HVAC scenarios.



## Direct Digital Control

Freely programmable DDC controller with a modern programming tool, a variety of integration interfaces, and 22 onboard I/O's make it suitable for a wide range of building automation applications.

## Real-time Meter Management

AAC20-M and AAC20-LCD-M are equipped with an M-Bus interface that allows for real-time measurements of water, gas, electricity, or any other types of consumption meters.

## Effective Building Management with DALI Interface.

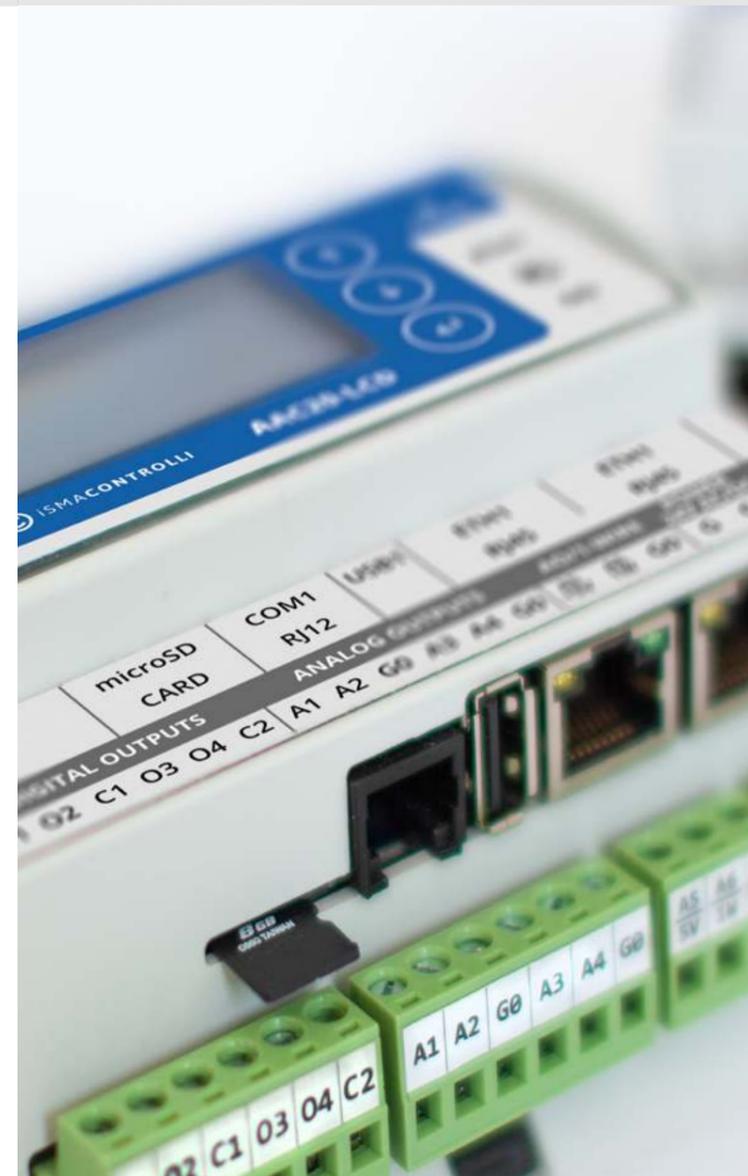
AAC20-D and AAC20-LCD-D are equipped with a DALI interface that allows for direct integration of up to 64 DALI ballasts.

## Integration

- **BACnet IP and BACnet MS/TP.** Interoperable over IP and serial bus with any modern BMS system.
- **Modbus TCP/IP and Modbus RTU/ASCII.** Modbus is one of the most used protocol in industrial electronic devices.
- **1-Wire.** Interface for DS18B20 temperature sensors.
- **M-Bus.** AAC20-M and AAC20-LCD-M are equipped with a built-in M-Bus interface for direct integration of up to 20 M-Bus meters.
- **DALI.** AAC20-D and AAC20-LCD-D allows for direct integration of up to 64 DALI ballasts.

## Inputs and Outputs

- **8 Universal Inputs.** Support for temperature sensors and voltage, resistance, current, and dry contact measurements on each universal input.
- **4 Digital Inputs.** Dry contact inputs, 100 Hz fast pulse counter.
- **6 Analog Outputs.** 0-10 V DC control, PWM modes, and a maximum load of up to 20 mA.
- **4 Digital Outputs.** Equipped with normally open 3 A relays.





VAV14-IP



RAC18-IP



FCU-LL

## VAV14-IP Niagara Enabled VAV Controller

### Unique 2-in-1.

Configurable and freely programmable VAV controller with built-in damper actuator and differential pressure sensor. Fail-safe Ethernet port, quick-connector socket for wall panels and 13 I/Os makes it versatile controller for variety of applications.

### Ultimate flexibility in the VAV control.

VAV14-IP solves the complexity of advanced VAV systems and their integration with building management technologies, with its unique configuration and commissioning flexibility. For custom applications, it is also possible to change the algorithm or program the controller from scratch using Niagara Framework or free-of-charge iC Tool.

### Efficient application for VAV boxes.

To minimize time and simplify the commissioning process, the VAV14-IP Controller is equipped with a pre-loaded application, which supports the most popular types of VAV boxes.

### Various ways of commissioning the VAV system.

iSMA CONTROLLI provides installers, system integrators, and programmers with unique tools and software for configuring, commissioning, balancing and programming the VAV14-IP Controller.

**Support for 216 VAV  
box types**



## RAC18-IP Niagara Enabled Room Application Controller

The RAC18-IP is a freely programmable, Niagara enabled controller equipped with 18 I/Os, ideal for room, zone and light HVAC applications.

### Future-proof Architecture.

Suitable for infrastructure of new buildings with native support for IP communication with BACnet and Modbus protocols. The fail-safe Ethernet switch ensures IP communication continuity even in case of a power failure.

### Seamless programming and integration.

The USB-C port facilitates local programming and allows the controller to be powered from a computer. RAC18-IP supports real-time programming over IP using free of charge iC Tool or with a dedicated Niagara Framework® extension.

On-board RS485 port with spring terminal and smart plug for seamless connection of iSMA CONTROLLI wall panels or integration of any BACnet/Modbus device on a serial bus.

## FCU Controllers

### Unique 2-in-1.

Configurable and freely programmable controller for fan coil units.

### Powerful Configurable Application.

To minimize time and simplify the commissioning process the FCU controller is delivered with a built-in application.

### Quality and Reliability Confirmed by Certificates.

The experience in developing high-quality products and the BTL certification confirm the excellent performance of communication using the BACnet protocol.

**Quality Confirmed by  
BACnet Testing Laboratories**



# Wall Panels

04.  
Comfort  
Management

### Multiprotocol Integration.

With two of the most popular communication protocols, BACnet MS/TP and Modbus RTU/ASCII, Touch Point and Control Point panels works across various systems, allowing integration with new and existing installations.



### Plug & Play Comfort Management Solution.

Reduced engineering costs while used with iSMA CONTROLLI FCU and VAV controllers, thanks to the integrated Smart Plug sockets, providing both power and communication from controller to the panels.

### Seamless Installation and Configuration.

The panels offer effortless configuration using network protocols or a built-in USB-C port, even without an external power supply. iSMA Configurator makes complete configuration possible in a matter of seconds.

### Ultimate Flexibility.

No matter of a project type, iSMA CONTROLLI Touch Point and Control Point panels allow to select color and sensors configuration. The panels are available in white or black color and can be equipped with a temperature, CO<sub>2</sub>, and humidity sensors.

# Touch Point

### Cutting Edge Design.

High-end technology packed in just a 14 mm thick panel makes it one of the slimmest devices on the market. Glass front panel with interactive icons makes the Touch Point fits perfectly into any modern interior.

### Multiple Version Available.

Depending on the building's requirements Touch Points are suitable for FCU, VAV, heating, and cooling systems, thanks to versions with or without fan control buttons. The TP Series is complemented by Network Sensors, ideal for monitoring of indoor environmental conditions.



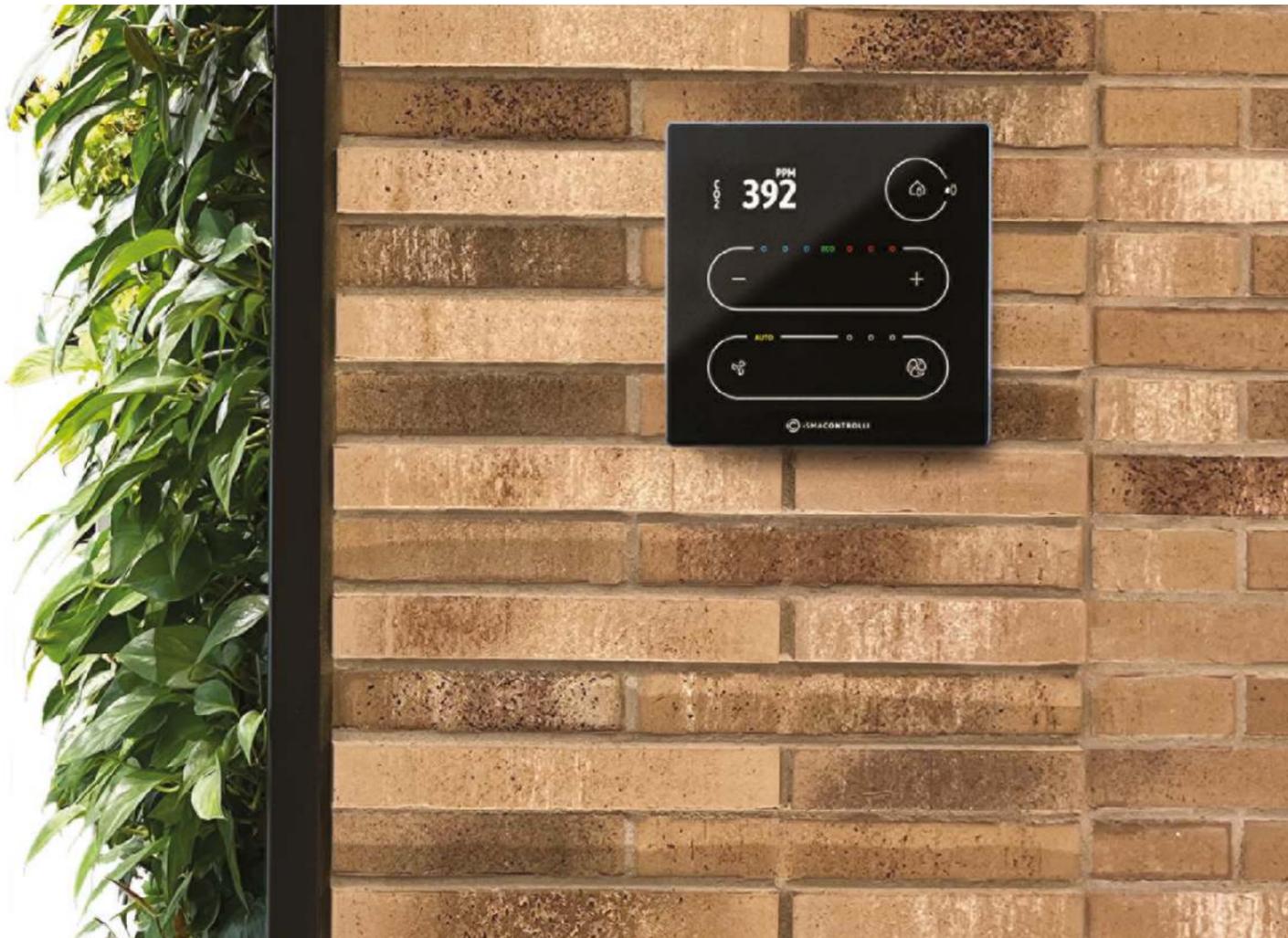
TP



TP-VAV



TP-NS



# Control Point

### Open and Customizable

Not only default values like temperature can be displayed but also alarms, blinds, and lightings thanks to the open network interface.

### EU & US Boxes

Control Point panels are engineered to be installed on EU and US junction boxes.



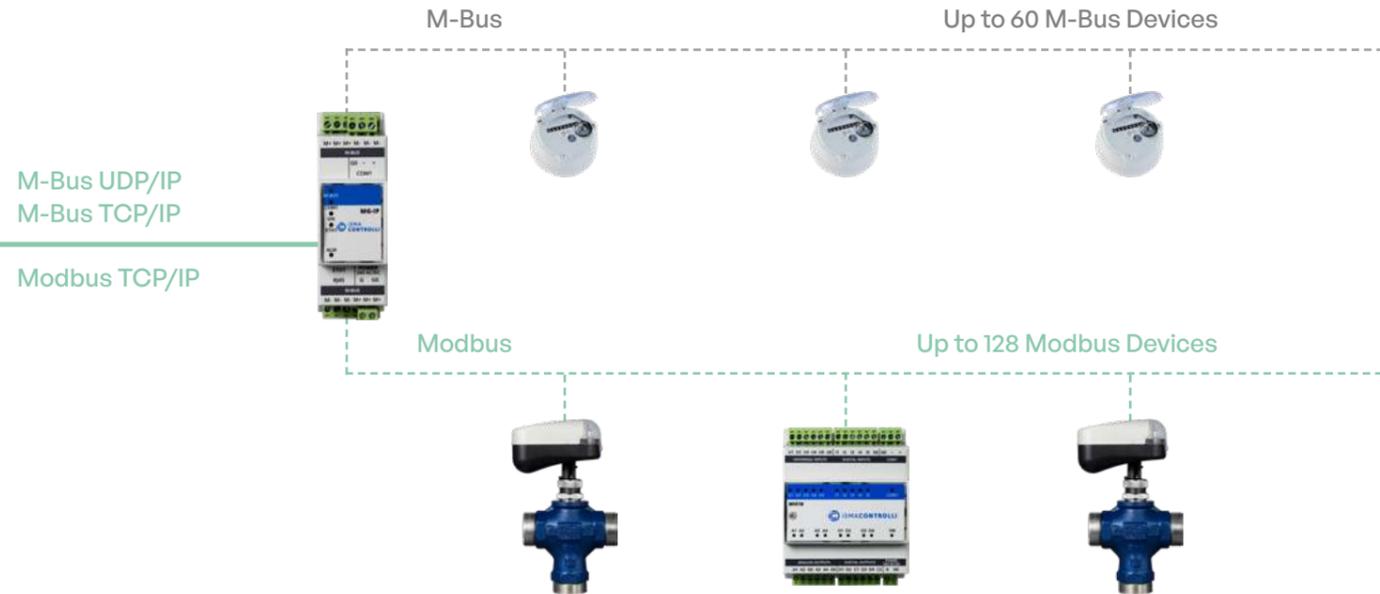
CP-DISP-W

CP-DISP-VAV-B

### Commissioning and Balancing VAV system

Together with VAV Controller it allows for optimal operation and plug-and-play installation enabling both commissioning and balancing of a VAV system.

# Metering & Wireless Gateways



### M-Bus Interface.

The M-Bus interface allows for communication and power supply for up to 60 M-Bus meters with a maximum current of up to 130 mA. This way up to 60 energy, flow, water, and other types of meters can be powered up and integrated with M-Bus protocol to a master controller.

### M-Bus to M-Bus IP.

Bring data from meters to various systems based on the versatility of communication with support for M-Bus TCP/IP and M-Bus UDP/IP protocols.

### Modbus TCP/IP to Modbus RTU/ASCII Gateway.

Built-in Modbus gateway on the COM1 port enables integration of up to 128 Modbus slave devices to the IP layer.

### Two Independent Gateways Operating Simultaneously in One Device.

By applying the most popular interfaces for M-Bus and Modbus meters, the device allows for handling up to 180 meters of various types simultaneously.

### Simplified Configuration and Commissioning Process.

MG-IP allows for seamless configuration with a built-in web server or dedicated free of charge tool. The ability to be powered from a USB port facilitates local testing and a straightforward updating process.

### Wireless Modbus.

Eliminate the need to run RS485 cables with the wireless technology offered by the W0202 module. This powerful device acts as a bridge for Modbus RTU/ASCII devices.

### 2 Special Inputs.

Take advantage of the special inputs with support for the most popular types of temperature sensors, ability to read voltage, resistance, current, and dry contact measurements with a fast pulse counter saving up to 100 pulses per second directly to the EEPROM memory.

### 2 Digital Outputs.

Equipped with normally open 3 A relays.

### Built-in HVAC and Light Applications.

Light, cooling, and heating configurable algorithms make the module applicable as a standalone controller.



W0202



W0202

Wireless Modbus RTU



## System Integrators' I/O Modules of Choice.

Choose from our range of MINI, MIX, and MAX I/O modules, offering 4 to 38 inputs and outputs for local or distributed control. Supporting selectable BACnet and Modbus protocols in a single module over either RS485 or IP, these modules provide unmatched flexibility and easy integration for any building. Streamline your installations with one of the most versatile and scalable solutions on the market.

## Wide range of BACnet and Modbus I/O Modules.

Group of 22 types of I/O modules from 4 to 38 inputs and outputs, suitable for local or distributed control of any building. Support for the most popular open protocols - BACnet and Modbus, both via RS485 and IP, makes them one of the most versatile products on the market.

## Seamless Configuration.

The protocol and other parameters can be configured in a matter of seconds thanks to onboard DIP and rotary switches.

## Powering with USB Cable.

The ability to be powered from a USB port facilitates local testing and a straightforward updating process.

## iSMA Configurator.

Portable software dedicated for device configuration and firmware upgrade.

## Dedicated Niagara Framework Modules.

Seamless integration of multiprotocol I/O in the Niagara Framework using a dedicated module.



## Communication

### Serial Connectivity.

RS485 multiprotocol I/O modules are equipped with two most popular open protocols in building automation, BACnet MS/TP and Modbus RTU, selectable with a DIP switch.

### IP Connectivity.

IP-based multiprotocol I/O modules support both BACnet IP and Modbus TCP/IP, with support for both static and DHCP addressing, facilitating the needs of modern building automation systems.

In addition to standard I/O module functionality, IP multiprotocol I/O modules can serve as a **Modbus TCP/IP to Modbus RTU/ASCII Gateway**, with an onboard COM1 port, enabling the creation of a cost-effective IP system for new installations or retrofits.

### Web-based Configuration.

Built-in web server enables not only a seamless device configuration without any additional tools, but also enables a preview of all I/O states and device specification, all with a password-protected access.

**Quality Confirmed by**  
BACnet Testing Laboratories  
UL Solutions





## SfAR-S

### Slim Modbus I/O Modules.

The S line consists of slim modules offering 6-16 inputs and outputs in 12 combinations. Each module is equipped with an optoisolator between the inputs/outputs, power supply, and RS485.

### Open Communication Protocols.

SfAR I/O Modules are equipped with Modbus RTU and ASCII to facilitate interoperability in both industrial and building systems. The modules can be integrated over a Modbus TCP/IP network with a dedicated SfAR-S-ETH gateway supporting up to 128 modules on an RS485 bus.

### Quick Connector System.

To simplify an installation, the modules have been equipped with the Quick Connector system. Using a dedicated SfAR-S-LINK cable allows for connecting of up to 10 modules.

## SfAR-1M

### The Smallest Distributed I/O Modules.

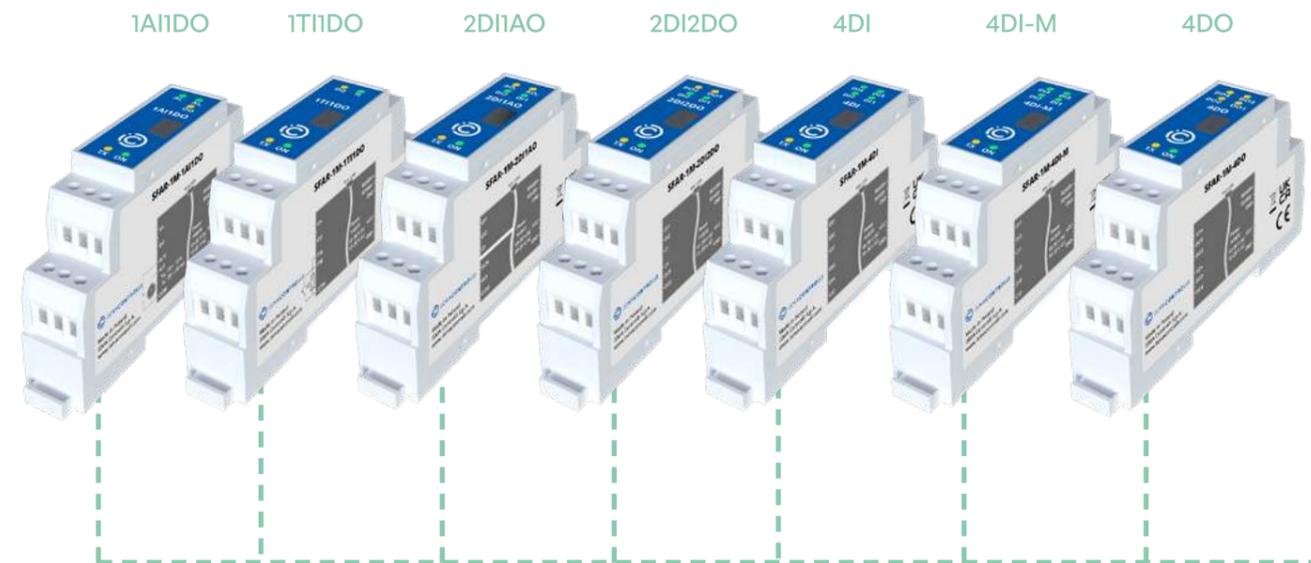
The 1M-line consists of 7 types of ultra-compact I/O modules with 2 to 4 inputs/outputs. Each module is equipped with opto-isolation between I/O's, power supply, and RS485 onboard. It is a perfect choice for distributed systems with devices scattered over a large area.

### Made to Control and Communicate.

Each module in 1M-line communicates over Modbus RTU/ASCII and is created for a specific purpose, such as switching fans (1TI1DO), lights (1AI1DO), controlling pumps (4DO), counting pulses from flow meters (4DI-M) or connecting inverters to a Modbus network (2DI1AO).

### Simple Configuration and Commissioning.

Each module is equipped with a set of LEDs used to indicate the status of I/Os, power supply, and RS485 communication. Configuration of the modules is carried out with our free software, the SfAR Configurator. A built-in mini USB allows for performing a primary configuration of the unit without an additional power supply.



## PICVs and Energy Valves

Pressure Independent Control Valves are used in heating, ventilation, and air conditioning systems to regulate the flow of heating or cooling medium maintaining the constant flow rates within a specified differential pressure range. PICVs ensure improved comfort and energy savings acting as both flow control and pressure regulating valves. Depending on the size of the installation, iSMA CONTROLLI provides two lines of PICVs.



### Libra Dynamic Pressure Independent Control Valves

- For Fan Coil Units, chilled ceilings, and zone control, providing a range from DN15 to DN50.
- Hydronic installations from DN15 to DN50 with a flow range of 100 - 12 500 l/h.
- Wide range of actuators available.

### Energy Valves Balance and control valves with energy function

- Full range from DN15 (100 l/h) to DN150 (177 000 l/h).
- Flow rate and energy control to the battery.
- BMS communication via BACnet and Modbus.
- Built-in energy monitoring and  $\Delta T$  control.
- Combination of a valve, an intelligent actuator and 2 temperature sensors.

### EBV Electronic Pressure Independent Control Valves

- For Air Handling Units, boiler and chiller plants.
- Hydronic installations from DN65 to DN150 with a flow range of 12 000 - 177 000 l/h.
- Precise electronic flow control with  $\Delta P$  measurement.



## Zone Valves

Compact Zone Valves for FCU Applications, designed to provide reliable, precise control over heating and cooling in various environments. With advanced technology and durable construction, these valves are the perfect solution for managing zones in commercial and residential systems.



### Piuma Composite Zone Valves

- Available versions: 2-way, 3-way, 3-way with 4-ports; DN15 - DN25.
- Kvs: 0.25 - 6.
- 2,5 mm stroke for cost-effective solutions - V.X series.
- Better modulating control thanks to 5.5 mm stroke - V.XT series.
- Multiple connection types: Flat, Conic, Conex.

### Micra® Brass Zone Valves

- Available versions: 2-way, 3-way, 3-way with 4-ports; DN15 - DN20.
- Kvs: 1.6 - 2.5.
- Lead-free, ROHS, and REACH directives compliant.
- Made of high-performance composite with the same strength of material as brass.
- No thermal insulation needed.



### Wide Range of Actuators

- Zone Valves together with thermoelectric actuators provide a cost-effective solution, with the On/Off, PWM, or modulating control.
- In more demanding hydraulic installations, Zone Valves can be equipped with electromechanical actuators, providing better modulating control. These actuators provide On/Off, 3-position, or modulating control signals and provide the best accuracy and operating time.

# Globe Valves

A wide selection of 2-way and 3-way control valves with threaded, flanged, and grooved connections, designed for room, zone, and HVAC applications.

HVAC Application



**2TGA.B, 2TGA.BT**  
DN: 20-50  
Temp: -5°C to 120°C  
Kvs: 5-30



**2-3TBB.T**  
DN: 15-50  
Temp: 2°C to 150°C  
Kvs: 2.5-33



**VSB, VMB**  
DN: 20-50  
Temp: -10°C to 150°C  
Kvs: 6.3-40



**VSB.T, VMB.T**  
DN: 20-50  
Temp: 5°C to 95°C  
Kvs: 6.3-25



**VSBP.M, VMBP.M**  
DN: 20-50  
Temp: -5°C to 95°C  
Kvs: 6.3-36



**2FGB.B**  
DN: 65-150  
Temp: -10°C to 150°C  
Kvs: 63-100



**2-3FGB**  
DN: 25-150  
Temp: -10°C to 150°C  
Kvs: 4-300



**VSB.F, VMB.F**  
DN: 20-50  
Temp: -10°C to 150°C  
Kvs: 6.3-40



**2-3FGB.L**  
DN: 25-65  
Temp: -10°C to 150°C  
Kvs: 63-300



**2-3TGB.B**  
DN: 15  
Temp: -5°C to 140°C  
Kvs: 0.4-4



**2-3TGB.F**  
DN: 15  
Temp: -5°C to 140°C  
Kvs: 0.4-4



**2-3TBB**  
DN: 15-50  
Temp: -10°C to 150°C  
Kvs: 2-38



**2FGA.B**  
DN: 150-200  
Temp: -10°C to 230°C  
Kvs: 300



**2-3FSA**  
DN: 25-80  
Temp: -10°C to 230°C  
Kvs: 4-63



**2FAA150B**  
DN: 150  
Temp: -10°C to 230°C  
Kvs: 500



**2-3FAA**  
DN: 25-125  
Temp: -10°C to 230°C  
Kvs: 1.6-250



**2FGA**  
DN: 15-150  
Temp: -10°C to 200°C  
Kvs: 0.6-140



**2-3FAA.T**  
DN: 20-65  
Temp: -25°C to 150°C  
Kvs: 6.3-63



**2FSA.B**  
DN: 25-80  
Temp: -10°C to 230°C  
Kvs: 4-100



**2-3TIA**  
DN: 15-125  
Temp: -10°C to 350°C  
Kvs: 1.6-100



**2-3FAA.P**  
DN: 15-125  
Temp: -20°C to 350°C  
Kvs: 1.6-250



**3FSA.S**  
DN: 25-80  
Temp: -10°C to 230°C  
Kvs: 4-100



**2-3FIA**  
DN: 25-100  
Temp: -30°C to 180°C  
Kvs: 3.5-138

Industrial Application

A wide range of control valves, designed for heavy-duty HVAC applications and industrial processes. Valves for high-pressure applications and for fluids at very low or high temperatures, such as superheated water, steam, and heat transfer oil.



iSMA CONTROLLI, with over **85 years of experience** in manufacturing Control Valves provides a comprehensive range of Globe Valves that combined with a wide range of actuators create a unique solution for almost every HVAC and industrial application.

## Butterfly Valves VFA

Valves designed for heating, cooling, and hydraulic distribution systems, suitable for fluids in Group 2 (water, superheated water, steam). They can be servo-controlled using MDA Rotary Actuators or MDL Industrial Rotary Actuators.



## Ball Valves VSS-VSD, VSC-VDC

### Motorized Ball Valves with Characterized Flow Control.

A range of high-performance brass ball valves featuring chrome-plated brass balls and electric rotary actuators with a high IP rating.



- 2-way and 3-way valves (mixing/diverting) with high Kvs values.
- Tight close-off and close-off pressure up to 10 bar.
- Valve bodies rated for high pressure, PN32 and PN40.
- High ingress protection IP65 on most actuators.

# Linear & Rotary Actuators

## Linear Actuators for PICVs and Globe Valves.

- Wide range of linear actuators designed for HVAC and industrial processes.
- Linkage kits designed for retrofits, supporting various valves available on the market.
- Outdoor and indoor installation thanks to IP65 in selected models.
- Secure critical installation with emergency fail-safe or spring return during a power outage.



**MVH56E/A**  
Globe valve actuators  
with spring return



**MVE.R**  
Electric actuators with  
emergency fail-safe function



**MVE-2-RS**



**MVC-2-RS**

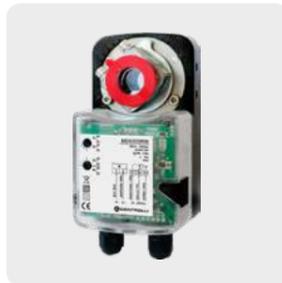
## Network Actuators.

Optimized, standalone control  
with BACnet and Modbus support.

- Make the most of your PICVs and change them into Energy Valves.
- Feed your BMS with crucial insights about the real energy used by your system.
- Select BACnet MS/TP or Modbus RTU with an option for a proportional control signal in one device.
- Secure critical installation with emergency fail-safe during a power outage.



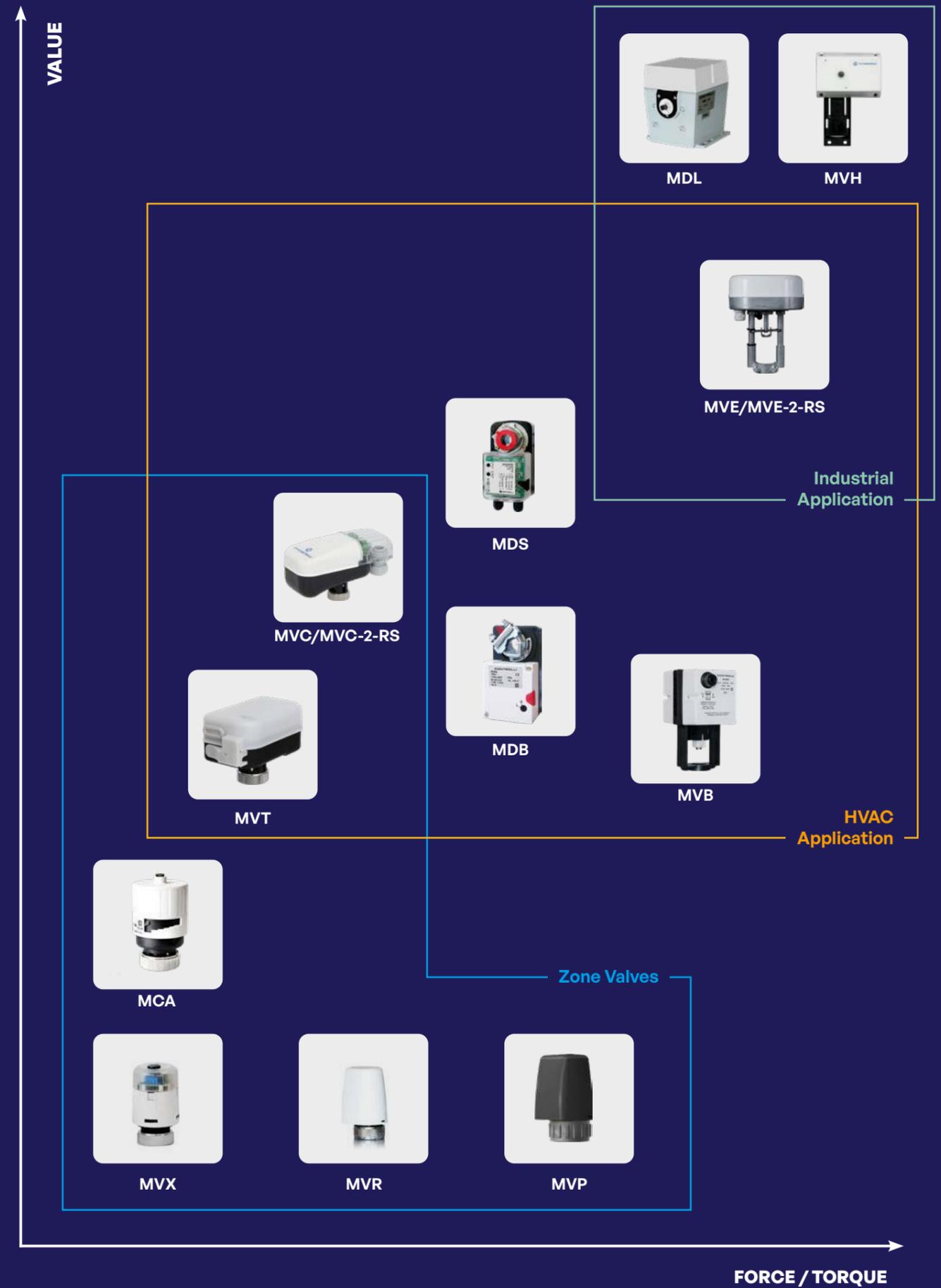
**MDB**  
Rotary actuators

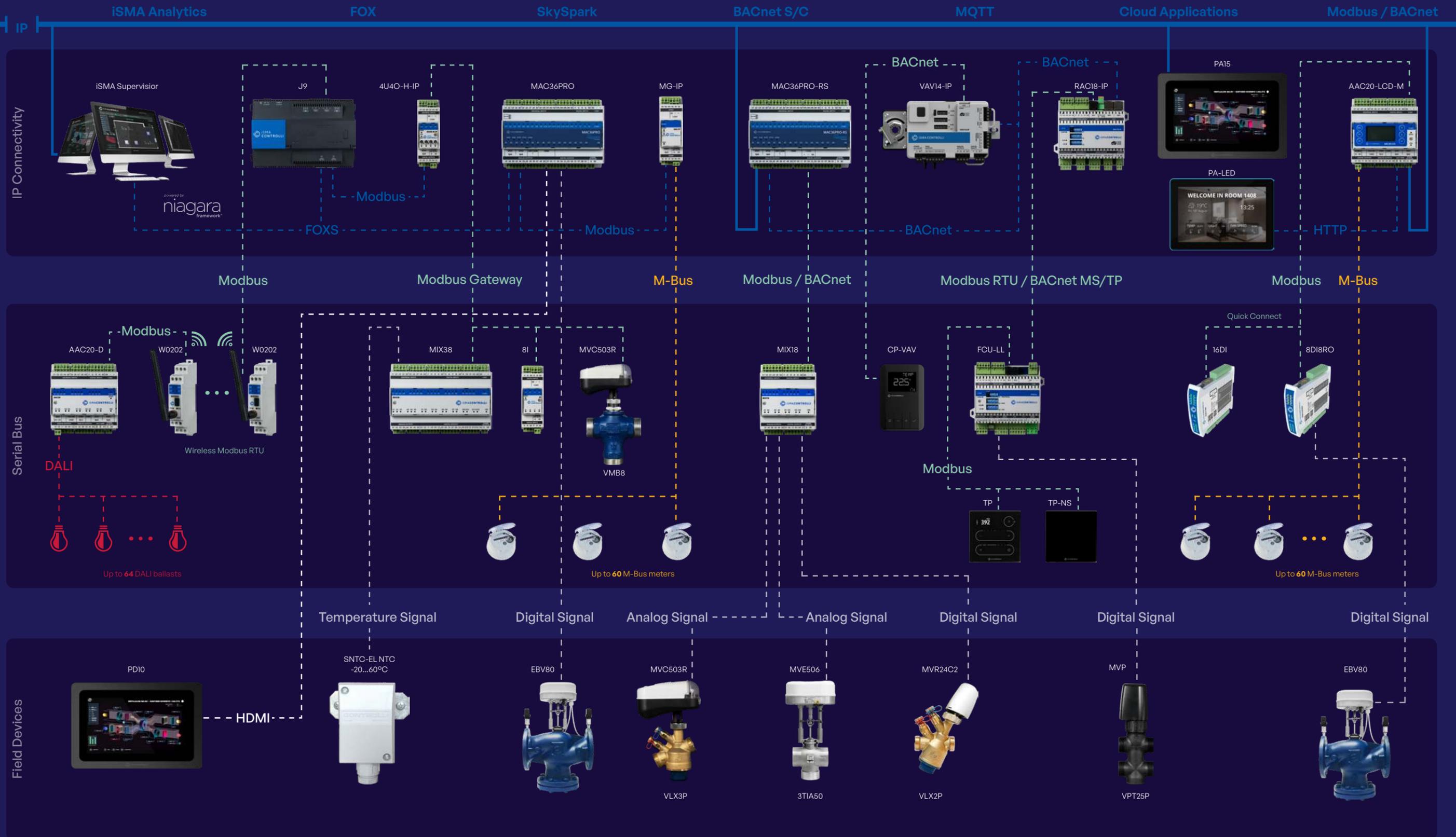


**MDS**  
Actuators with emergency  
fail-safe function

## Air Damper Actuators.

- Rotary Actuators for dampers from 5 to 20 Nm.
- Secure critical installation with emergency fail-safe during a power outage.





## Multi-site Building Management



BMS Software



Analytics Software

## I/O Modules



Multiprotocol I/O Modules



Modbus I/O Modules

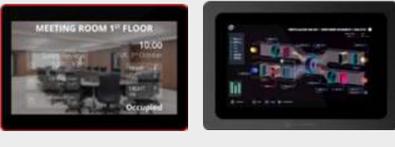
## Small & Medium BMS



Integration Controllers



Hybrid IoT Controllers



HMI Panels

## Control Valves & Actuators



PICVs



Zone Valves

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Ball Valves



Butterfly Valves



Globe Valves

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Linear Actuators

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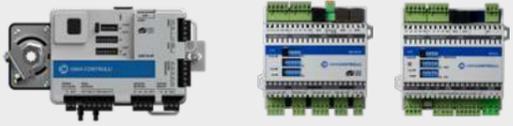
Rotary Actuators

## HVAC & Plant Control



Advanced Application Controllers

## Comfort Management



Zone Controllers



Wall Panels

## Gateways



Metering Gateway



Wireless Gateway

## Solutions

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