iSMA CONTROLLI

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

Solutions

ic.tech

2026

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.

iSMA CONTROLLI

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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.

Cloud & Analytics

BACnet IP / Modbus TCP/IP

IP

Building Management System

CYBERSECURE CONNECTION

iSMA Supervisor

MAC36PRO

iSMA-B-J9

powered by niagara framework

HMI Panels

HMI Industrial

HMI Commercial

HVAC & Plant Control

UAC28-IP

AAC20-LCD

AAC20

Comfort Management

nano EDGE ENGINE

ZAC24-IP-D

TP-ONE

VAV14-IP

CP-VAV

RAC18-IP

TP

FCU-LL

CP

Gateways

MG–IP

Wireless Modbus RTU

W0202

W0202

I/O Modules

MIX38-IP

24I-IP

4U4O-H-IP

12O-H

4U4O-H

BACnet MS/TP / Modbus RTU/ASCII

RS485

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.

ASHRAE BACnet® Modbus

PICVs & Energy Valves

MVC503R
VLX3P

MVE504S-2-RS
VLX8

EBV80

Control Valves & Actuators

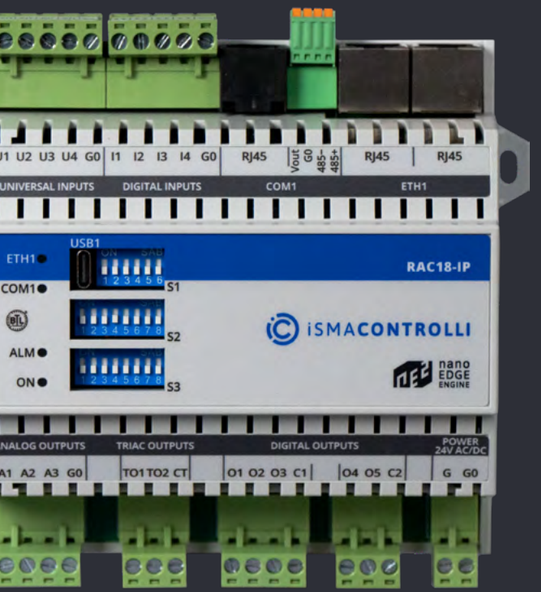
MVR24C2
VLX2P

MVC503R
VLX3P

MVE506
3TIA65

MVC503
VMB3T

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.

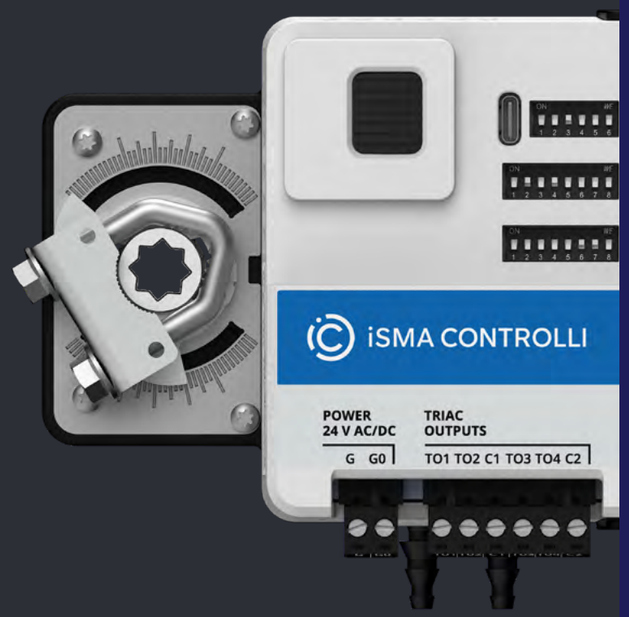
The nano EDGE ENGINE offers the freedom to create optimized applications in an efficient way, thanks to the wide range of libraries available. Users can choose from a set of drag and drop components composed into libraries designed specifically for building automation. This flexibility allows each user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

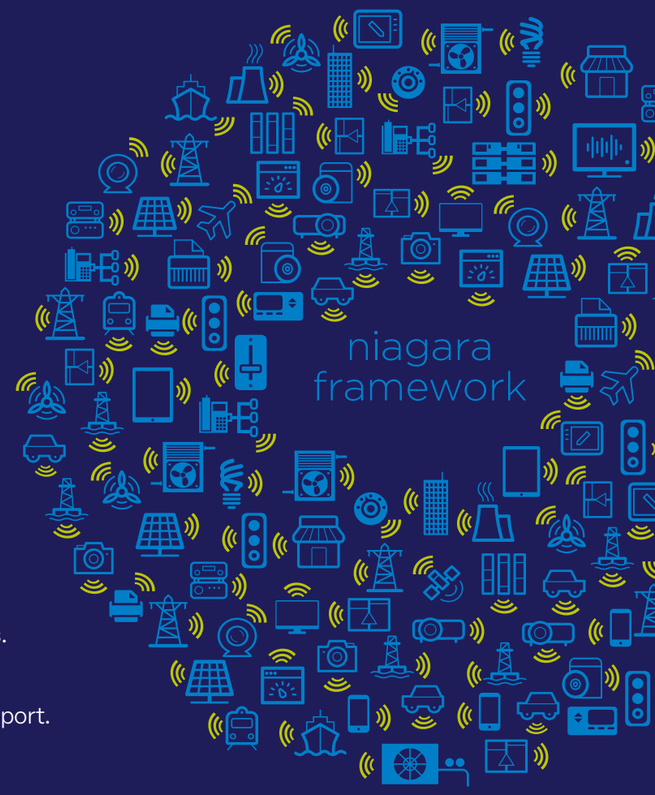
It serves as a central console for connecting real-time operational data to the people and systems that manage workflows in smart buildings, data centers, industrial processes, smart cities, and other aspects of business enterprises.

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.

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.



Niagara 4 - features & 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.

iC Connect

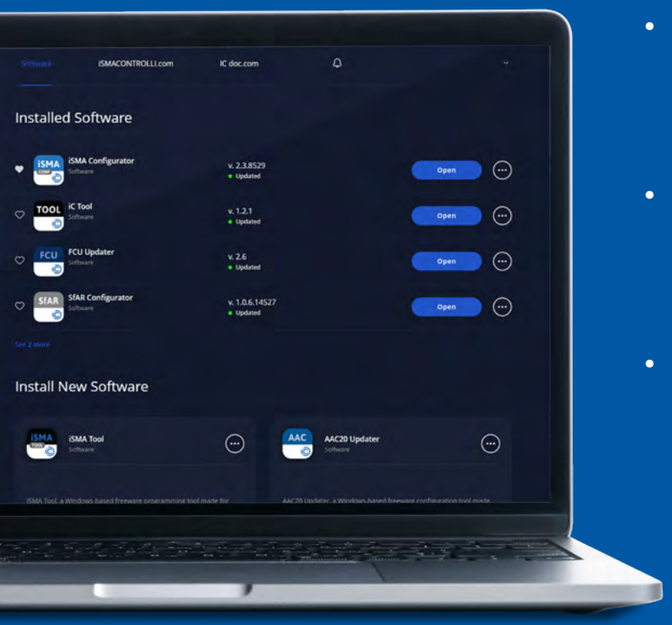
The all-in-one client platform for Windows.

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.

iSMA CONTROLLI

iC Niagara 4 Suite

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.
- Niagara-enabled controllers with nano EDGE ENGINE embedded.
- Tool for VAV14-IP configuration, commissioning, and balancing.
- 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.
- All-in-one Niagara Cloud Support: Recover, Remote, and Data Services.

TRIDIUM 2026 PLATINUM DISTRIBUTOR

TRIDIUM 2026 GOLD OEM

Cloud & Analytics

Sign up for Supervisor, MAC36 or JACE
iC Niagara Cloud **90-day trial**

iC Niagara Cloud

Niagara Cloud Suite™ is a scalable cloud-based solution that provides secure, remote building management services. This offering provides new integration, connection, and deployment capabilities, building on Tridium's current model of an open and extensible integration with devices, services, and applications.

Niagara Cloud Suite™ offerings.

Niagara Remote™ is a service from the Niagara Cloud Suite™ that addresses the need for remote access to Niagara stations.

Niagara Recover™ helps Niagara Framework® users safeguard their deployments from data loss. It maintains a current copy of Niagara station data in the event of a planned or unplanned outage that would otherwise interrupt operations and/or continuity of data collection.

Niagara Data Service™ builds upon the openness and extensibility of Niagara Framework® to support the systems integration and solution development services of our partners, as well as the strategies and software choices of end-users.

SkySpark Analytics

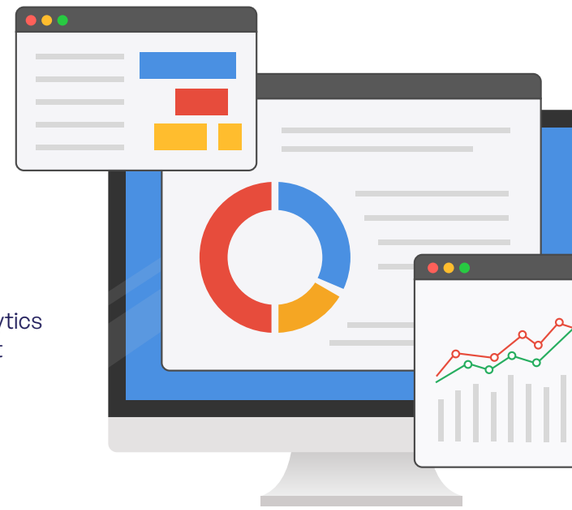
SkySpark is a comprehensive software platform for connecting, storing, analyzing, and visualizing data from smart devices and equipment systems. It helps you find what matters in the vast amount of data produced by today's smart systems.

Get your data.

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



01.
Building
Management System

iC Niagara Supervisor

Niagara connects & translates data from nearly any device or system.

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.

powered by
niagara framework®

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 an optimized performance and cost reductions that can help businesses be more competitive and more profitable.

Over a 1.5 milion instances worldwide. Scaling at increasing velocity.

With over a 1.5M 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.

Intuitive user interface.

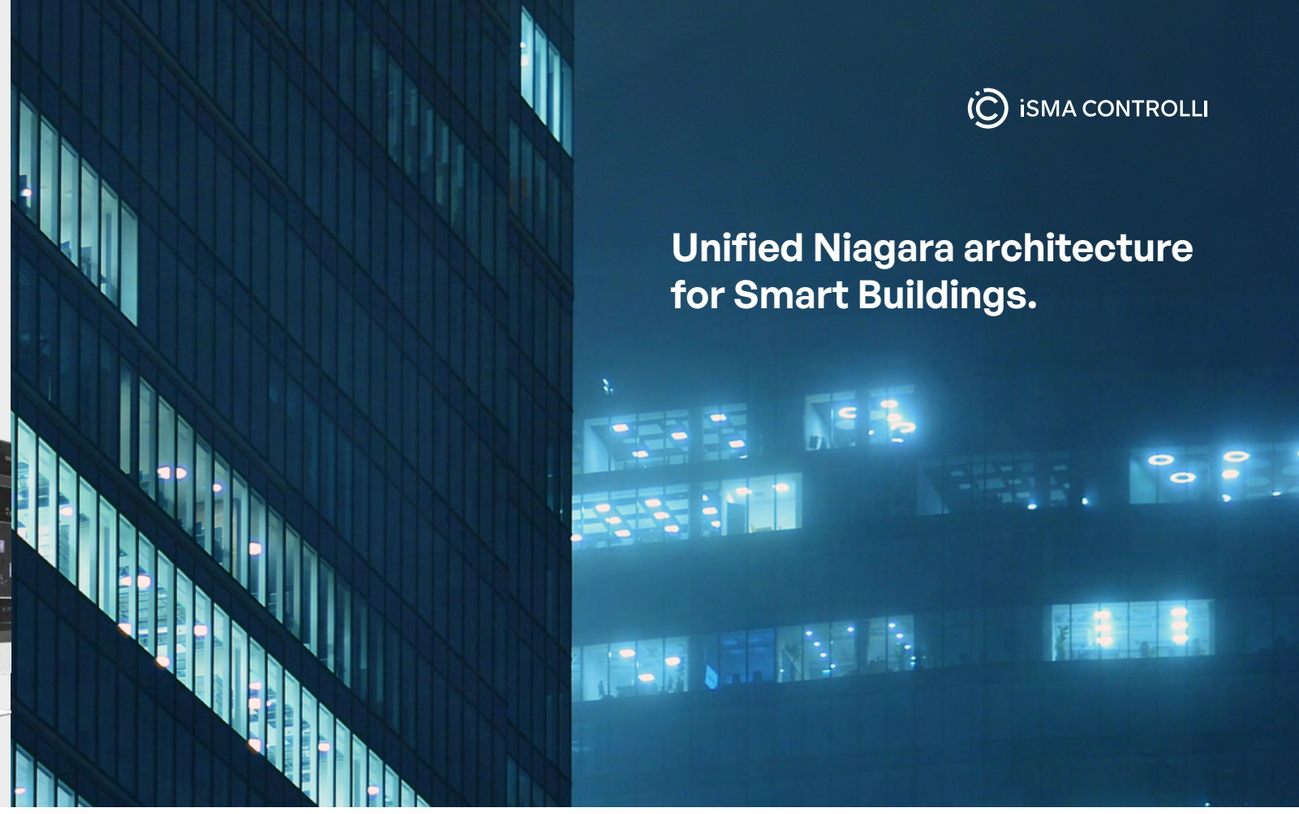
Niagara 4 features a bold and intuitive new interface. Modern and easy to use, the platform utilizes HTML5 to provide an array of rich features.

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. Among its cyber security certifications, Niagara Framework® has achieved FIPS 140-2 Level 1 conformance - an essential certification for mission-critical and highly regulated contexts like banking/ finance and government/military work.



iSMA CONTROLLI

Unified Niagara architecture for Smart Buildings.

One Platform. Endless Possibilities.

With full integration into the Niagara Framework® interface, users can leverage not only the standard capabilities of powered by Niagara supervisory systems and master controllers, but also seamlessly manage the entire nano EDGE ENGINE controller portfolio.

Unified Niagara Architecture extends the power of the Niagara Framework® by enabling streamlined commissioning, intuitive programming, and centralized control of nano EDGE ENGINE devices, all within a single, familiar environment.

Discover our offering of:

01 Powered by Niagara Framework Controllers

MAC36
Master Application Controllers

JACE
Integration Controllers

02 Niagara-enabled Controllers

RAC18-IP
Room Application Controllers

ZAC24-IP-D
Zone Application Controllers

VAV14-IP
Variable Air Volume Controllers

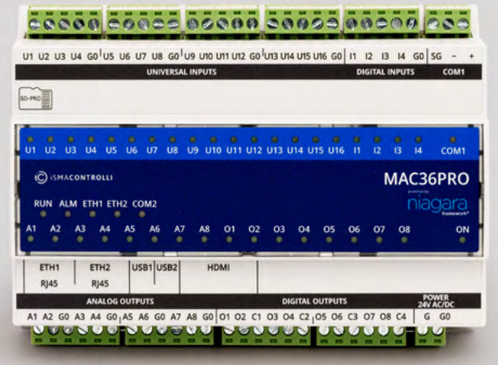
UAC28-IP
Unitary Application Controllers

Controllers
powered by Niagara

iSMA CONTROLLI

Master Application Controllers

powered by niagara framework®



MAC36PRO.
Niagara Framework at the edge.

Simplify your control architecture with the MAC36PRO an all-in-one building controller that combines 36 onboard I/Os, IP and serial connectivity, HDMI visualization, and the power of the Niagara Framework® into a single, secure platform.

With LTE/4G connectivity, Niagara Cloud support, and an embedded WireGuard VPN client, it enables secure multisite deployment, ideal for remote or network-isolated facilities. Designed with IEC 62443-compliant cybersecurity, it delivers reliable IT/OT integration while reducing system complexity, deployment time, and long-term maintenance costs.

AHR EXPO INNOVATION AWARDS 2022 WINNER

MAC36PRO

Get ready for a performance boost.

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, e-mail notifications, and more.

Performance. Redefined.

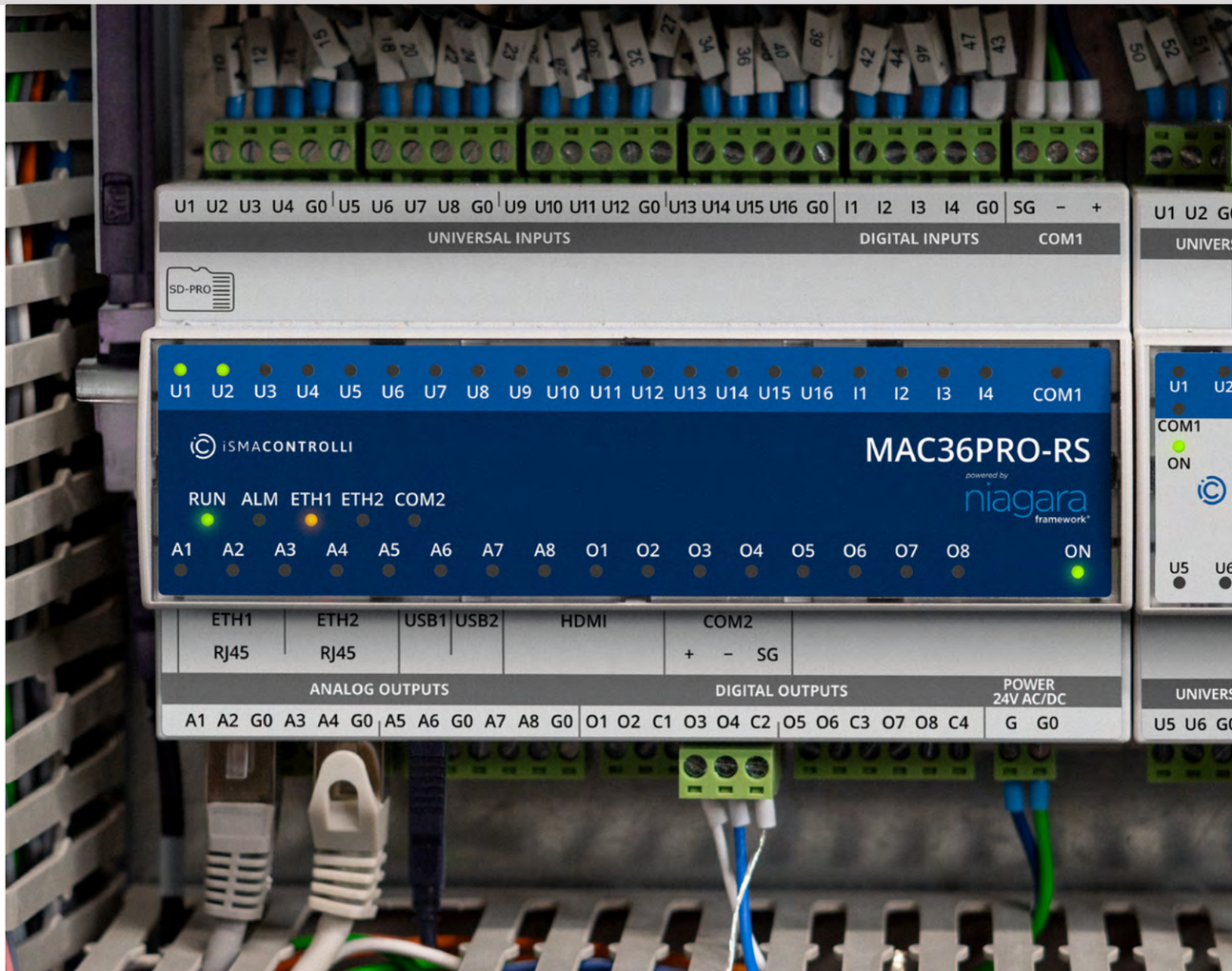
The MAC36PRO is a next-generation controller designed to serve as the central hub for building automation in small and medium-sized facilities.

This controller is ideal for retail chains, gas stations, office buildings, schools, and any location where a scalable and secure multisite solution is required. It can directly control air handling units, boiler rooms, and chillers, making it a practical solution for both HVAC systems and complete building integration.

With built-in VPN and LTE capabilities, the MAC36PRO introduces funcional innovations to the Master Application Controller segment, simplifying deployment, accelerating setup, and improving long-term operational efficiency.

Performance meets connectivity with **remote access** options.

niagara remote™ WireGuard VPN LTE/4G



Controllers
powered by Niagara

powered by niagara framework®

iSMA-B-J9

Modular & expandable controller, optimized for Niagara 4.

The iSMA-B-J9 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. Native Wi-Fi capability streamlines installation, reduces wiring, and enhances flexibility.

The controller is expandable with option modules that directly attach to the controller for additional communications ports, including types for LonWorks®, IO R modules, RS232 and RS485 networks. Its modular design ensures easy installation, seamless integration, and efficient deployment, allowing system integrators to focus on engineering solutions rather than assembling components.

In larger facilities, multisite applications and large-scale control system integrations, Niagara 4 Supervisor can be used with JACE controllers to aggregate information, including alarms, and historical and real-time data, to create a single, unified application.

Perfect duo — Controller & HMI Panel

Controllers powered by the Niagara Framework®, paired with high-performance HMIs, deliver maximum efficiency in demanding applications.

Discover a truly open and scalable solution for comprehensive control, advanced process visualization, and intelligent energy management.

Whether deployed in commercial buildings or industrial environments, the HMI panels provide a reliable platform for controller interfaces, system supervision, and operational control. Working seamlessly with controllers such as the MAC36PRO and iSMA-B-J9, and enhanced by the built-in iC SmartView platform, HMI panels offer a scalable solution for both modernization projects and new installations.

With a high-quality touchscreen display, a wide range of sizes, global operability, and compatibility with virtually any web-based controller, the HMI panels form a versatile and future-ready BMS visualization platform.

Android Touch Panels
for Smart BMS

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

Seamless setup & operation with a 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 an easy installation on any surface.

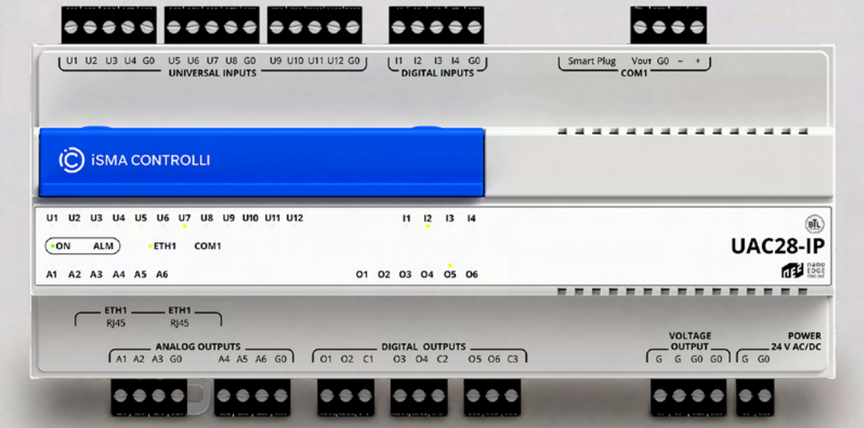
Industrial Panels

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 touch screens 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.

HVAC Controllers



Quality Confirmed by
BACnet Testing Laboratories

UAC28-IP

Streamline your HVAC control with UAC28-IP.

28 inputs/outputs perfectly suited to control most types of unitary AHUs, heating and cooling substation, cooling towers, and various HVAC applications.

Advanced control with standardized HVAC function blocks.

The controller features an application that complies with the ASHRAE 36 Guideline, offering standardized, high-performance operational sequences for AHU systems. It is built using a dedicated set of HVAC function blocks. The blocks can be further used for controlling various HVAC equipment including chillers, cooling and heating systems.

Versatile real-time programming solutions to suit your needs.

Comprehensive real-time programming, management, and commissioning via the Niagara Workbench. iC Tool, advanced, free-of-charge commissionning and programming tool for nano EDGE ENGINE controllers.

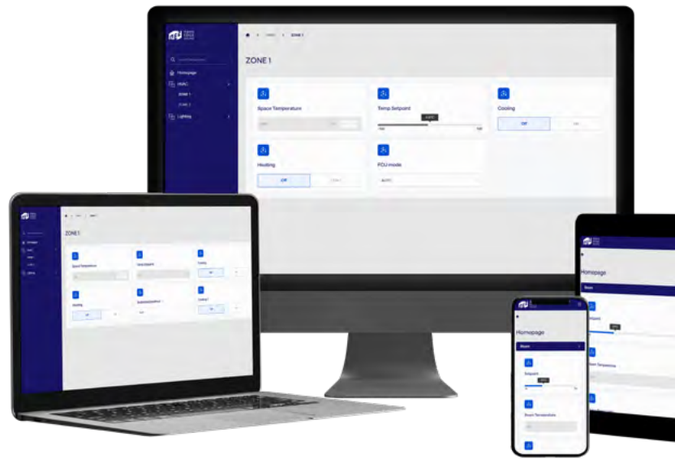
nanoWebUI™

A modern HTML5 web user interface that presents live controller data, automatically generated during controller programming. Our time-saving nanoWebUI™ leverages the Haystack HTTP API and creates a fully functional, responsive UI the moment a control logic is deployed.

No manual web development skills required.

nanoWebUI™ provides a structured real-time visualization, enabling effective monitoring and direct control of system data.

The web interface is easily accessible from an HMI panel or a standard web browser on PC and mobile devices.



HVAC Controllers

Powered by sedona FRAMEWORK™

AAC20 Controllers

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.

Quality Confirmed by
BACnet Testing Laboratories

Scalability & flexibility.

To ensure the maximum flexibility and scalability AAC20 is equipped with two RS485 ports and two Ethernet ports working in a switch mode allow for a daisy chain connection.

Both features facilitate expanding the system with I/O modules, which simplifies the cabling process and reduces engineering time.

Data logging with instant access.

The device is suitable for fast response environments thanks to its instant start-up, real-time clock (RTC), and powerful onboard Cortex-M4 processor. A microSD card slot allows alarms and trend logs to be collected and read in real time.

iSMA CONTROLLI

Application web server.

The pre-configured fully customizable HTML5 web server with a multiuser 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 web server to user needs.

Local HMI with a built-in LCD display.

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

Versatile integration platform.

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.

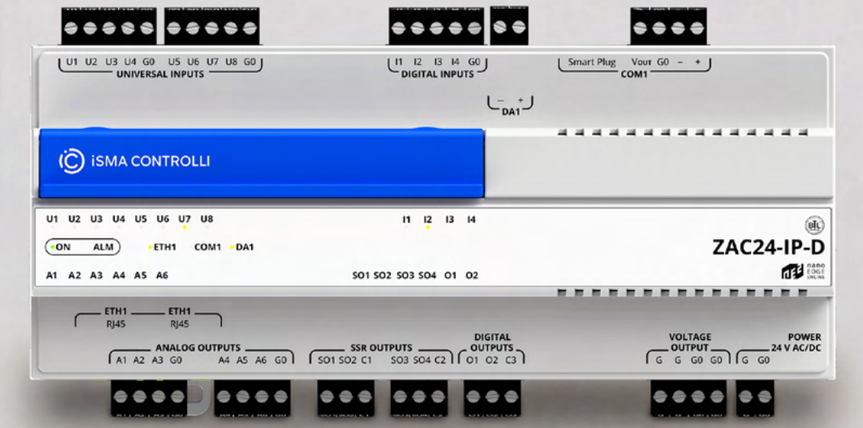
M-Bus
AAC20-M and AAC20-LCD-M are equipped with a built-in M-Bus interface for direct integration of up to 20 M-Bus meters.

Inputs & 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.

BACnet Modbus

Zone & Lighting Control



Quality Confirmed by
BACnet Testing Laboratories

ZAC24-IP-D

One controller. Unified HVAC, blinds, and lighting control.

With 24 I/Os, ZAC24-IP-D is perfectly suited to directly control two building zones. It features a DALI-2 interface for lighting control, and silent relay outputs for blinds control, which won't disturb tenants' peace, combining zone, lighting, and blinds management in a single versatile device.

Bringing DALI-2 lighting & HVAC control seamlessly into the Niagara Framework®.

Niagara-enabled, with nano EDGE ENGINE embedded, a freely programmable ZAC24-IP-D is provided with a set of tools for faster, hassle-free commissioning of any DALI lighting system directly within Niagara Framework® or iC Tool, advanced, free-of-charge commissioning and programming tool.

N4 TOOL

Zone control	DALI-2 light control	Comfort control
control entire space with premium glass wall panels	up to 64 control gears and 64 input devices	with 24 onboard I/Os

TP-ONE

Control the entire zone from a single point.

The single panel that combines comfort control with multiple lighting and blind control options. With just ONE panel, users can manage all automation functions within a room, creating a comprehensive and intuitive control hub for modern smart rooms. This solution significantly simplifies cabling, reduces installation time and labor costs, and enhances the overall character of the room.

Smart control at your fingertips.

Touch Point 2.0 panels are a native user interface for the ZAC24-IP-D controller, forming a powerful platform for unified room automation. Dedicated function blocks ensure simplified engineering, resulting in faster system deployment.

The ready-to-use zone application for ZAC24-IP-D combines Touch Point 2.0 control functions, including comfort, lights, and blinds. Room control from a single panel minimizes on-site configuration effort and ensures consistent operation across rooms and zones.

Quick to install, simple to expand.

Thanks to the **Smart Plug™** interface, the ZAC24-IP-D controller is easily expandable with **up to 10 wall panels**. The interface shares both power and data communication through a single smart connection, significantly reducing wiring complexity and installation time.

The panels can be daisy chained thanks to onboard two RJ45 Smart Plug™ connectors, enabling flexibility in interior planning and future modernizations.

Zone Controllers

Ultimate flexibility in the VAV control.

Out-of-the-box support for 216 VAV box types.

VAV14-IP

Enhanced energy efficiency.

Maximize your energy efficiency with our advanced built-in application, featuring cutting-edge adaptive control algorithms designed to deliver exceptional energy savings.

Communication reliability.

Thanks to a built-in switch with a fail-safe protection and a daisy chain connection, the VAV14-IP ensures an uninterrupted data transmission through the device, even during power supply interruptions.

Esthetically structured cabling.

Revolutionize your space with "CABLE GRID", designed organized solution for managing wires, preventing tangles, and reducing the risk of damage or accidents.

Flexibility & scalability.

VAV14-IP application can easily be adjusted or modified according to the building requirements changes without a need to pay additional maintenance or licence fees.

Integration & connectivity.

Effortlessly integrate with Building Management Systems (BMS) and IoT platforms using our auto-exposure functionality, ensuring smooth and seamless connectivity.

Quality Confirmed by
BACnet Testing Laboratories
UL Solutions

Efficient application for VAV boxes.

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

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

CP-VAV-DISP-W

CP-VAV-DISP-B

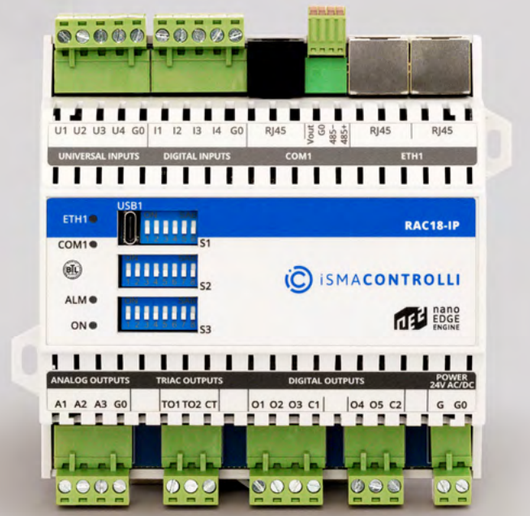
Configuration & balancing.

- Niagara 4 with dedicated service.
- iSMA Configurator free-of-charge yet powerful tool.
- Control Point, a dedicated room wall panel for operation and local commissioning, either directly from the panel or via the USB port.

Programming.

- Directly with Niagara 4 and up thanks to dedicated extensions.
- iC Tool, advanced programming tool for nano EDGE ENGINE controllers.

Zone Controllers



RAC18-IP

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

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

Versatile I/O types for light HVAC applications.
I/O types tailored for diverse HVAC applications, ensuring seamless integration and monitoring in modern buildings. Built-in Ethernet switch includes a fail-safe mechanism for reliable daisy-chain connections, while seamless RS485 and IP integration over BACnet and Modbus simplifies connections for I/O modules and other field devices.

nanoWebUI™
HTML5 web user interface that presents live controller data, automatically generated during controller programming. The controller also supports data tagging with Haystack 4.

Plug & Play Wall Panels.
The Smart Plug™ offers a seamless connection, providing power and communication for iSMA CONTROLLI wall panels.

Quality Confirmed by
BACnet Testing Laboratories
UL Solutions

FCU Controllers

Unique 2-in-1.

Configurable and freely programmable controller for a fan coil unit switch pre-loaded tailor-made FCU application, configurable via DIP switches or adjustable via free-of-charge programming software.

Powerful configurable application.

To minimize time and simplify the commissioning process, the FCU controller is delivered with a built-in application, which supports the most popular types of fan coil units. Dedicated DIP switches allow for adjusting parameters of the application.

Open communication.

Powerful FCU controllers are equipped with two RS485 interfaces with open protocols, BACnet MS/TP and Modbus ASCII/RTU, enabling integration of up to 128 devices on onebus.

Inputs & outputs suitable for a wide range of FCU applications.

Dedicated special and digital inputs are designed to work with the most commonly used sensors. Relay, triac, and analog outputs are suitable for controlling various types of fans, actuators, heaters, and coolers.

Out-of-the-box support for 256 FCU types.

Wall Panels

Multiprotocol integration.

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

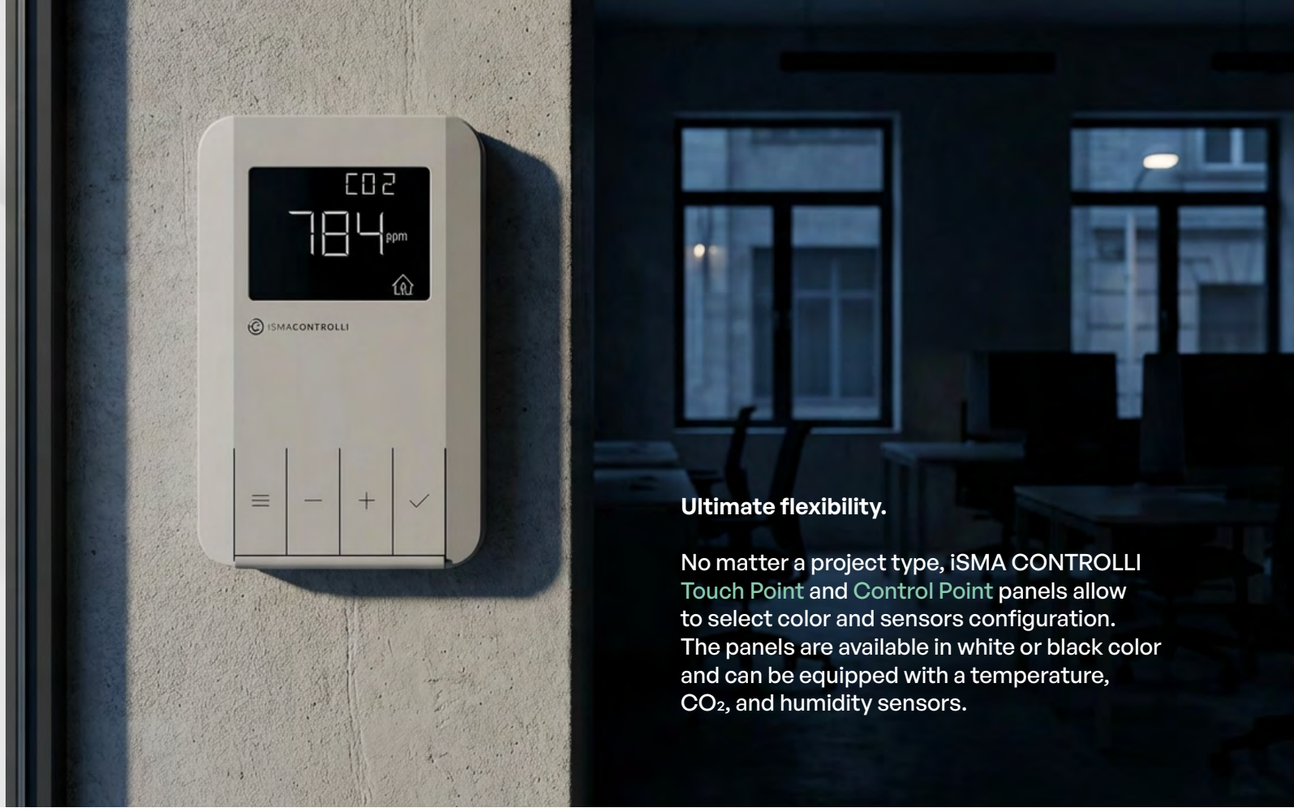
Seamless installation & configuration.

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.

Plug & Play comfort management solution.

Reduced engineering costs when 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.

BACnet Modbus



Ultimate flexibility.

No matter 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_2, and humidity sensors.

Touch Point 2.0

Space control focused on user experience & design excellence.

With simplicity in mind, Touch Point 2.0 features clear icons, readable and responsive control buttons, and a screen integrated into a refined notch. Its slim profile, elegant finish, and carefully crafted details allow the wall panels to blend seamlessly into both residential and commercial interiors.

Wide range of applications.

Depending on the building's requirements, Touch Point 2.0 room operating units 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-DISP-B-2

TP-VAV-DISP-B-2

TP-NS-B-2

Control Point

Open & customizable.

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

EU & US boxes.

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

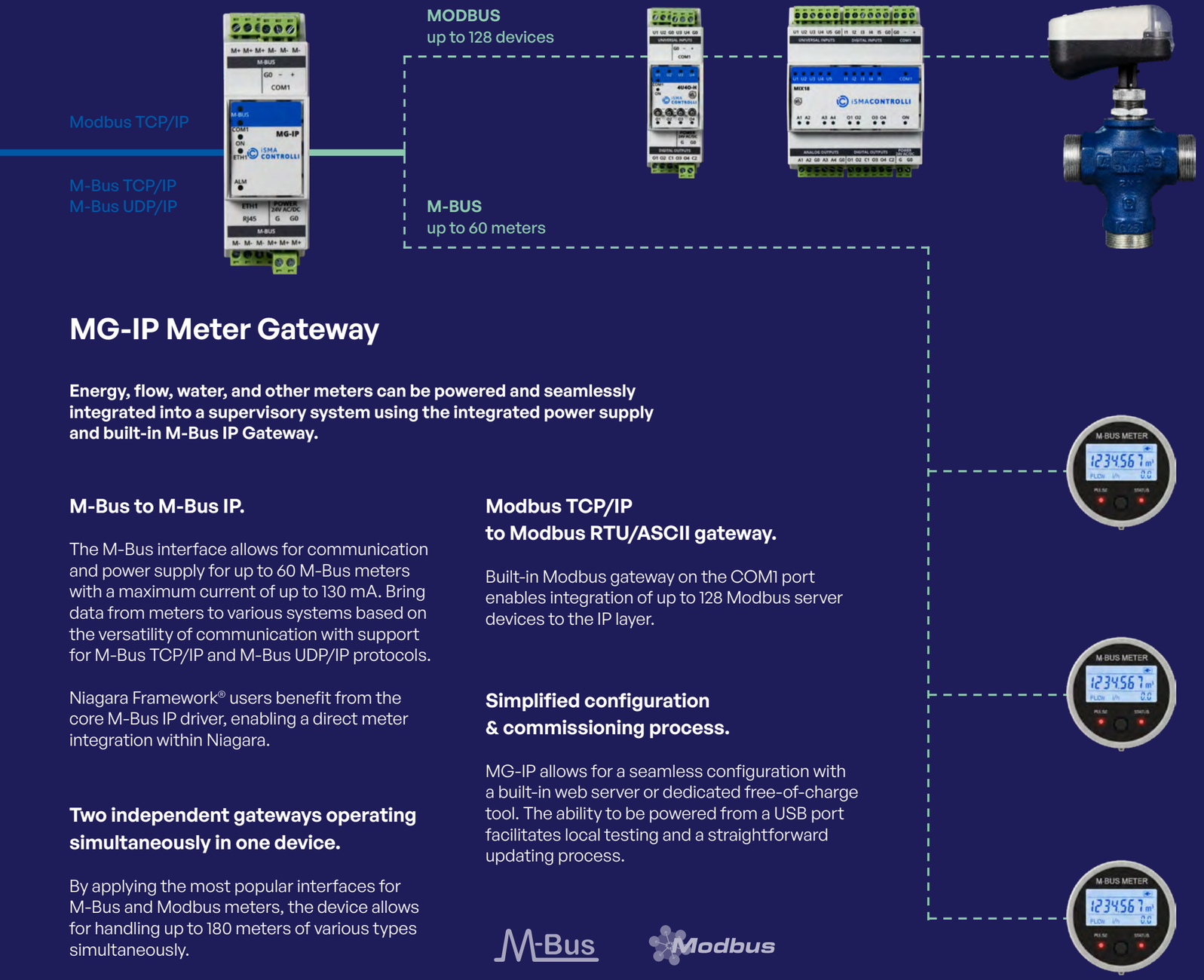
Commissioning & balancing VAV system.

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

CP-DISP-W

CP-VAV-DISP-B

Metering & Wireless Gateways



MG-IP Meter Gateway

Energy, flow, water, and other meters can be powered and seamlessly integrated into a supervisory system using the integrated power supply and built-in M-Bus IP Gateway.

M-Bus to M-Bus IP.

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. 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.

Niagara Framework® users benefit from the core M-Bus IP driver, enabling a direct meter integration within Niagara.

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.

Modbus TCP/IP to Modbus RTU/ASCII gateway.

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

Simplified configuration & commissioning process.

MG-IP allows for a 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.

Two 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.

Two digital outputs.

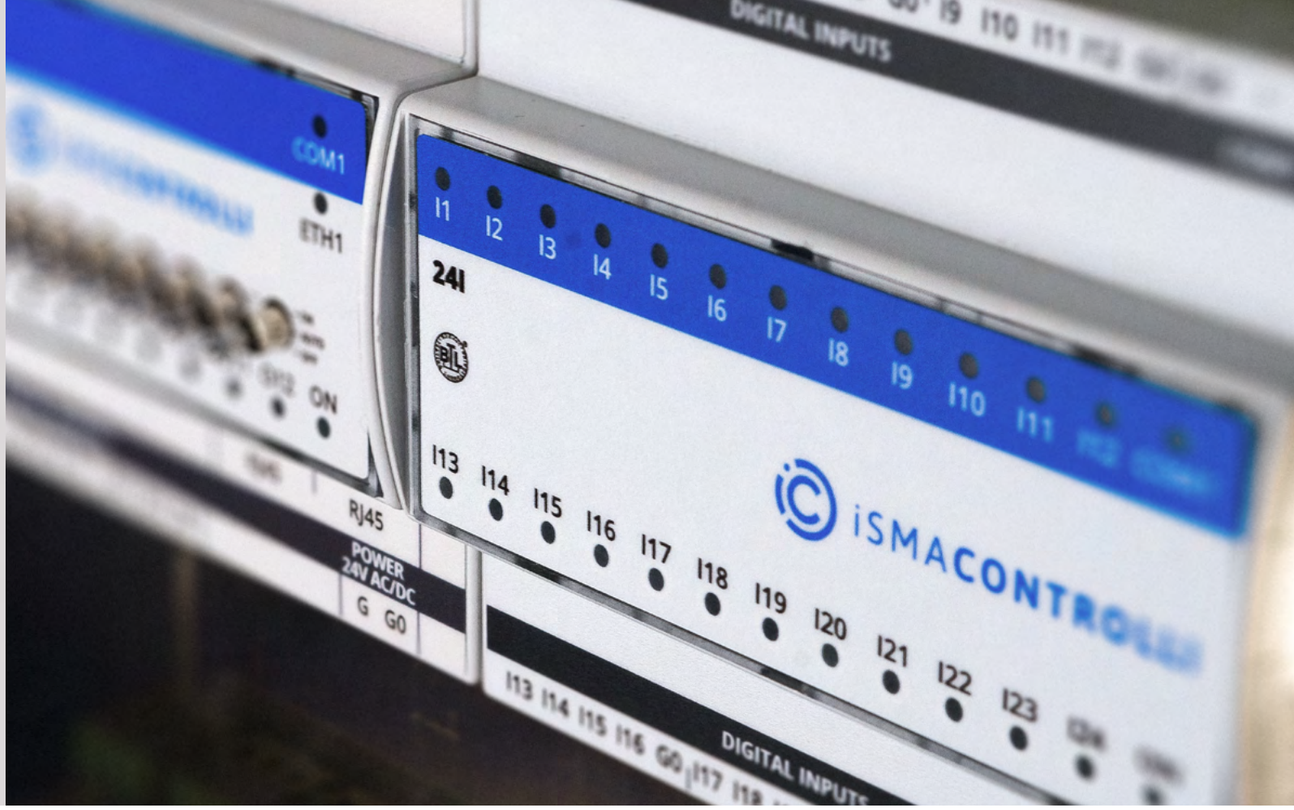
Equipped with normally open 3 A relays.

Built-in HVAC and light applications.

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

Multiprotocol I/O Modules

BACnet Modbus



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 & 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.

Powered 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 modules 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, meeting 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

Modbus I/O Modules

SfAR-S

Slim Modbus I/O modules.

The S-line consists of slim modules offering 6 to 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/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 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 and outputs. Each module is equipped with an 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 & communicate.

Each module in 1M-line is 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 & 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 & Energy Valves

iSMA CONTROLLI

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.

Energy Valve combines an electronic PICV functionality with an integrated Energy Function, using supply and return temperature sensors to enable real-time thermal power control and energy monitoring.

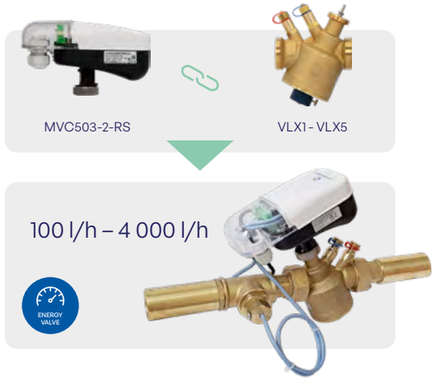
In addition to maintaining constant flow through high-resolution differential pressure sensors, the valve measures supply and return temperatures and calculates instantaneous thermal power based on the current ΔT and flow rate. This allows for a precise thermal power regulation, ΔT optimization, and full energy monitoring via BACnet MS/TP or Modbus RTU.

BACnet Modbus

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.



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 ΔP measurement.

Energy Valves

Balance & 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.
- Built-in energy monitoring and ΔT control.
- Combination of a valve, an intelligent actuator and 2 temperature sensors.

Applications

- Air Handling Units and large HVAC coils requiring thermal power control.
- Heating groups and substations with energy metering needs.
- Variable-flow systems with ΔT optimization.
- Chilled/hot water production plants with performance monitoring.
- Commercial buildings requiring energy-transparent HVAC operation.

FCU & Zone Valves

Compact **Zone Valves** for FCU Applications, designed to provide a 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.

Micra®

Brass 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.
- Better modulating control thanks to 5.5 mm stroke.
- Multiple connection types: Flat, Conic, Conex.

Piuma

Composite 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.

Electro-mechanical actuators

In more demanding hydraulic installations, Zone Valves can be equipped with electro-mechanical actuators, providing better modulating control, the best accuracy and operating time.

Electro-thermal actuators

Our comprehensive range of **Electro-thermal actuators** provides a silent, maintenance-free control for FCU, radiant manifolds, and PICVs.

From the versatile MVX with adjustable modulation to the zones and PICVs dedicated MVR, MCA, and MVP series, these solutions ensure seamless compatibility with **Libra**, **Micra®**, and **Piuma** valves.

Designed for rapid installation and low energy consumption, they offer a precise hydronic management for both residential and commercial HVAC systems. This portfolio combines compact esthetically with robust performance, delivering the perfect balance of efficiency and long-term durability.

MVX
Compact actuator available with proportional control

MCA
Adjubstable actuator

MVR
Standard versatile actuator

MVP
Composite acutator for Piuma valves

- Wide range electro-thermal actuators designed for Zone Valves and PICVs.
- Available with M30 x 1.5 and M28 x 1.5 connection.
- On/Off and proportional control models.
- Forces up to 170N.
- Available in 24 V and 230 V versions.

Zone Valves together with electro-thermal actuators provide a cost-effective solution, with the On/Off, PWM, or modulating control.

Globe Valves

Engineering precision for every flow.

iSMA CONTROLLI globe valves are designed to bridge the gap between versatile HVAC systems and the most demanding industrial processes.

Our portfolio covers the full spectrum of modern flow control requirements with unmatched reliability.

Versatility in connection.

We provide a wide range of body types to ensure a seamless integration into any piping infrastructure:

- **Threaded connections** — ideal for terminal unit regulation and compact installations.
- **Flanged versions** — the standard for robust, large-scale commercial and industrial systems.
- **Grooved connections** — offering quick and secure installation for modern HVAC requirements.

From HVAC to industrial applications.

Our valves are not just for standard buildings. We deliver solutions that scale with your needs:

- **Commercial HVAC** — precise regulation for heating and cooling comfort.
- **Heavy-duty industrial loops** — engineered for high-performance cycles and process automation.

- **Wide application scope** — designed to handle everything from simple water circuits to complex industrial systems.

Specialized performance & durability.

When the conditions get tough, our valves stay in control:

- **Extreme media** — dedicated versions for steam and diathermic oil.
- **High pressure & temperature** — robust construction rated up to PN40 and wide operating temperature ranges.
- **Industrial strength** — built to withstand the rigors of demanding environments where failure is not an option.

iSMA CONTROLLI

HVAC Application

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

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

2-3TBB.T
DN: 15 – 50
Temp: 2 – 120 °C
Kvs: 2.5 – 38

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

VSB.T, VMB.T
DN: 20 – 40
Temp: 5 – 95 °C
Kvs: 5.5 – 18

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

2FGB.B
DN: 65 – 150
Temp: -10 – 150 °C
Kvs: 63 – 300

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

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

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

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

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

2-3TBB
DN: 15 – 50
Temp: -10 – 150 °C
Kvs: 0.2 – 38

2FGA.B
DN: 200
Temp: -10 – 200 °C
Kvs: 500

2-3FSA
DN: 25 – 80
Temp: -10 – 230 °C
Kvs: 4 – 100

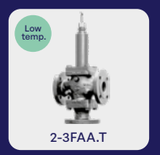
2FAA.B
DN: 25-150
Temp: -10 – 230 °C
Kvs: 10-300

2-3FAA
DN: 25 – 125
Temp: -10 – 230 °C
Kvs: 1.6 – 140

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

2-3TIA
DN: 20 – 65
Temp: -10 – 150 °C
Kvs: 6.3 – 63

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



2-3FAA.T
DN: 25 – 125
Temp: -20 – 230 °C
Kvs: 4 – 250

2-3FAA.P
DN: 15 – 125
Temp: -10 – 350 °C
Kvs: 4 – 250

3FSA.S
DN: 25 – 80
Temp: -10 – 300 °C
Kvs: 4 – 100

2-3FIA
DN: 25 – 100
Temp: -30 – 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.

Network Actuators

MVE-2-RS & MVE.S-2-RS

The MVE-2-RS Network HVAC actuator is a multiprotocol, high-precision linear actuator designed for PICVs and Globe Valves in advanced hydronic applications.

It integrates energy monitoring and temperature control capabilities, enabling ΔT optimization, power limitation, and full thermal energy calculation when used with compatible sensors.

High-force intelligence for central plant control.

Key features

- One actuator platform for PICVs, Globe Valves and energy control applications.
- Full energy-monitoring functionality without external controllers.
- Safe operation in critical systems thanks to emergency fail-safe capability.
- Flexible installation in BMS architectures using BACnet MS/TP, Modbus RTU, or analog control.
- High positioning accuracy and stable modulation with BLDC drive.
- Fast commissioning with auto calibration and intuitive configuration tools.

Applications

- AHU coils, fan coils, and district-heating substations.
- Globe Valves in hydronic heating and cooling loops.
- Custom Energy Valve setups with ΔT and power limitation functions.
- Large stroke valve installations requiring wide stem travel.
- Applications where fail-safe function is required.

MVC-2-RS

The MVC-2-RS Compact Network Actuator brings an intelligent control to PICVs and Globe Valve Applications in modern hydronic systems.

Thanks to a native BACnet MS/TP and Modbus RTU communication, MVC-2-RS integrates seamlessly with any Building Management System, providing real-time data, diagnostics and full remote configurability.

Compact smart control for terminal units.

Key features

- Reduces controller workload by executing control loops directly in the actuator.
- Enhances building energy efficiency through ΔT control, power management, and temperature limiting.
- Provides precise and stable valve modulation, improving coil performance, and comfort.
- Cuts commissioning time thanks to automatic calibration and simple configuration tools.
- Enables continuous monitoring of actuator status, valve behavior, and sensor data.
- Ideal for modern, data-driven HVAC systems requiring granular energy insight.

Applications

- PICVs and Globe Valves in hydronic heating and cooling circuits.
- Terminal units, zone coils, reheating, and dehumidification coils.
- Applications requiring temperature or ΔT control at the valve level.
- Installations requiring secure operation with fail-safe capability.

Linear & Rotary Actuators

Linear Actuators

- A 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.

MVH
Globe valve actuators with spring return

MVE
Electric actuators with emergency fail-safe function

Compact HVAC Actuators

- A comprehensive selection of high-performance linear actuators, engineered for seamless integration with PICVs and Zone Valves.
- Advanced models featuring integrated electronic fail-safe functions to guarantee system protection.
- M30x1.5 connection for rapid, rock-solid mounting, and maximum compatibility.
- Force up to 300 N, ensuring precise control even in demanding compact hydronic applications.

MVC
With electronic fail-safe function

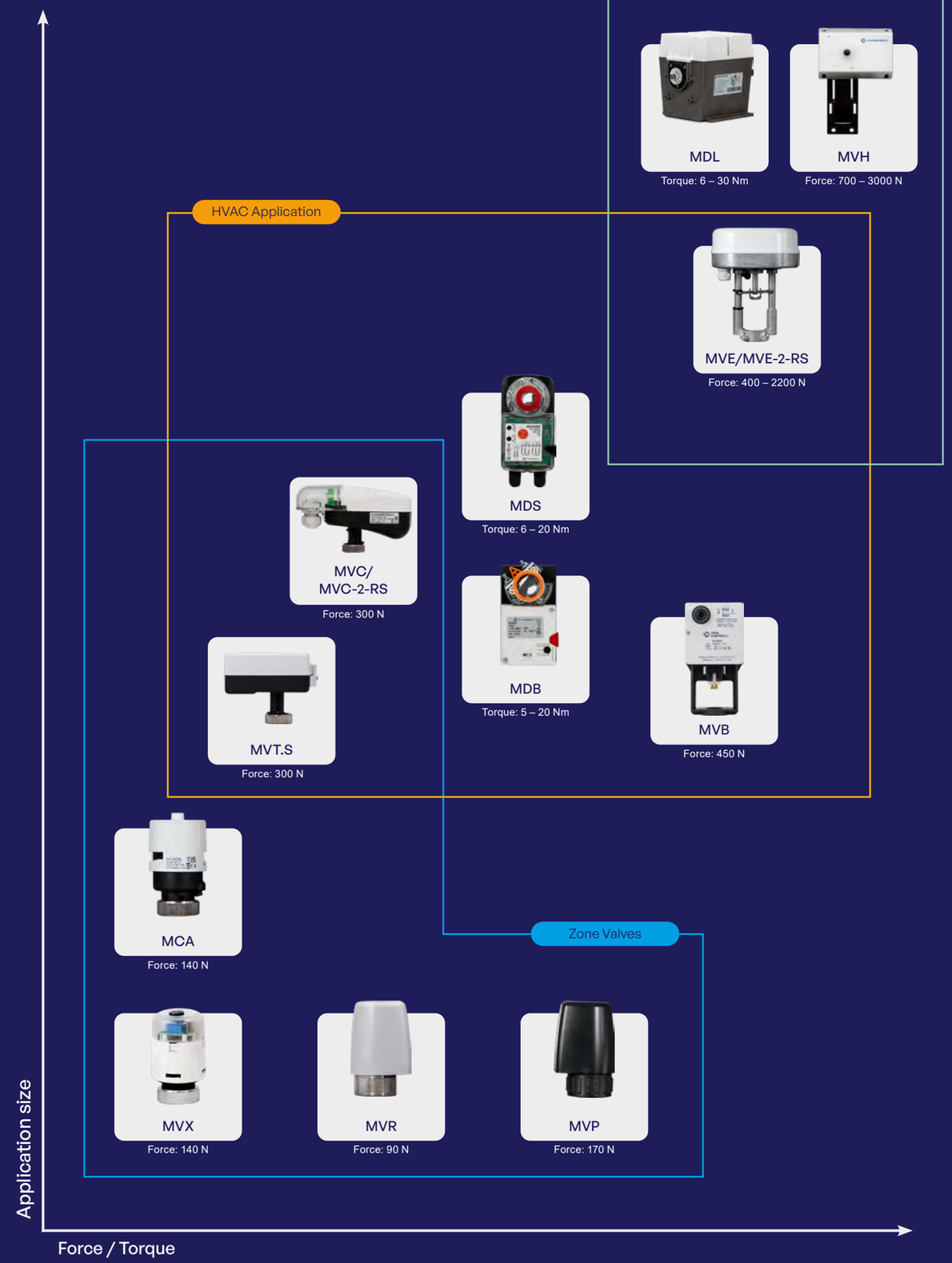
MVT.S
Compact HVAC actuators

Rotary Actuators

- Rotary actuators from 5 to 30 Nm.
- Secure critical installation with emergency fail-safe during a power outage.
- Flexible control options including On/Off, floating, or proportional signals.

MDL
Rotary actuators

MDS
With emergency fail-safe function



Actuators Linkage Kits

Not every upgrade requires a full replacement.

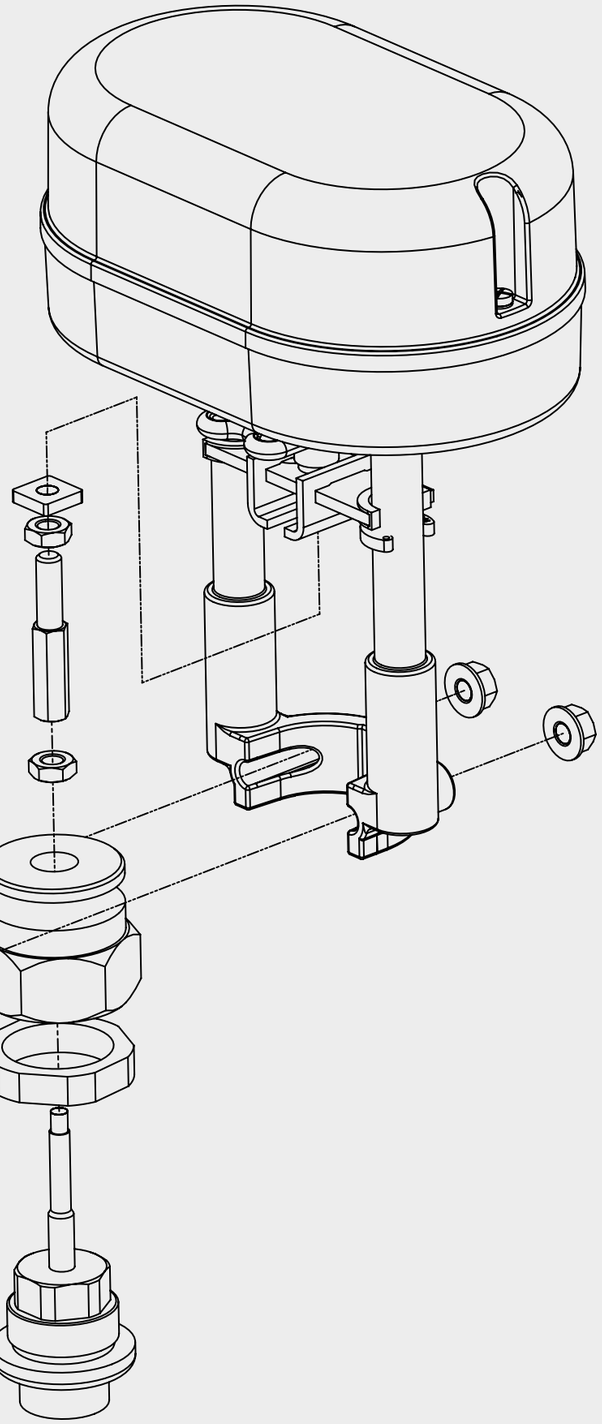
Our **Linkage Kits** are designed to connect iSMA CONTROLLI modern actuators with other manufacturer's valves, making them the perfect solution for retrofit projects.

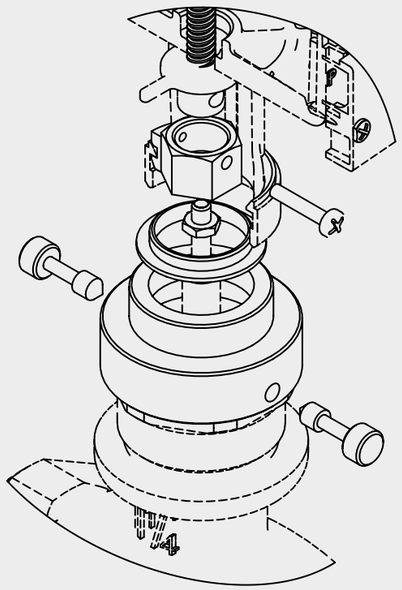
Retrofits

By ensuring a precise mechanical compatibility, these kits provide a maximum flexibility across diverse HVAC systems without the need for costly valve body replacements.

This robust solution bridges the gap between legacy infrastructure and advanced control technology, unlocking higher energy efficiency and smarter operation from your existing installations.

It is the most cost-effective way to extend the life of your system while adding new control capabilities.





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.

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.

System Architecture

Learn more at ic.tech

iSMA CONTROLLI

CYBERSECURE CONNECTION

iSMA Analytics | FOXS | SkySpark | BACnet/SC | MQTT | Cloud Applications

Supervisory & Plant Control

iSMA Supervisor

iSMA-B-J9

MIX38

MAC36PRO

PD10

MIX18

UAC28-IP

AAC20-LCD-M

PA15

BACnet IP Modbus TCP/IP | BACnet IP Modbus TCP/IP | Modbus TCP/IP | M-Bus IP Modbus TCP/IP | BACnet IP Modbus TCP/IP | M-Bus | Modbus

Zone Control & Integration

ZAC24-IP-D

RAC18-IP

4U4O-H-IP

Modbus Gateway

FCU-LL

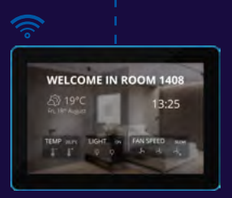
MG-IP

VAV14-IP

Quick Connect

16DI

8DI8RO



PA-LED

Smart Plug™

TP-ONE

TP-NS

Smart Plug™

TP

Smart Plug™

CP

Modbus Gateway

M-Bus

Smart Plug™

CP-VAV

DALI-2 | Digital Signal | Analog Signal | Digital Signal | Analog Signal | Digital Signal

Field Control

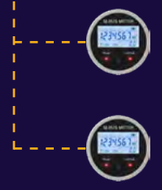
up to **64** control gears and **64** input devices

Piuma
VPT25P + MVP

Energy Valve
EBV80

MVR24C2 + VLX2P

Network Actuator
MVC-2-RS + VLX3P



Up to **60** M-Bus meters

MVE506 + 3TIA65

Up to **20** M-Bus meters

Micra®
MVX + VMX13P

Product Groups

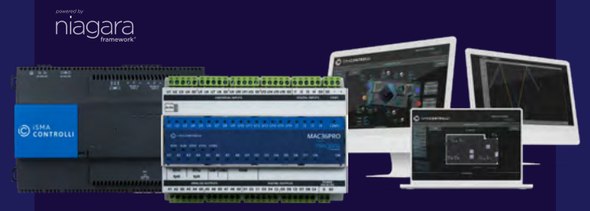
iSMA CONTROLLI

Cloud & Analytics

iC Niagara Cloud

Analytics Software

Building Management System



Integration Controller

Master Application Controllers

iC Niagara 4

Gateways

Wireless Gateways

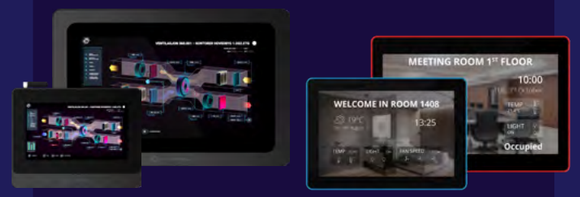
Metering Gateways

I/O Modules

Multiprotocol I/O Modules

Modbus I/O Modules

HMI Panels



Industrial Panels

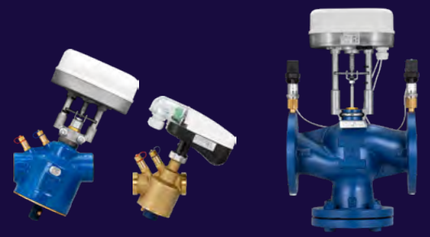
Commercial Panels

HVAC & Plant Control

AAC20 Application Controllers

Unitary Application Controllers

PICVs & Energy Valves



Libra

EBV

Actuators

Linear Actuatros

Rotary Actuators

Comfort Management

Zone Controllers

Wall Panels

Control Valves

Zone Valves

Ball Valves

HVAC & Industrial Globe Valves

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