We provide products and services to integrate technology and innovate 21st Century buildings
PRODUCT BROCHURE

REPUTABLE BRANDS ALL FROM ONE SUPPLIER
HVAC, BMS, ENERGY MANAGEMENT AND MORE...
ABOUT US
WHO WE ARE AND WHAT WE SPECIALISE IN

Science is the systematic study of the nature and behaviour of the physical and material universe. Technology is the practical application of scientific principles and knowledge. Integration is the “coming together” of different sciences and technologies. Within the controls industry integration also needs to encompass fully the requirements and social responsibilities of the client/end user. Integration has been at the core of our business model since inception. We specialise in connecting people and technology to provide innovative solutions within the building automation and energy management sectors.

Open Protocol interfaces for BMS systems, energy systems and connected buildings are now an inherent feature in everyday usage by a multitude of companies. With the ever-increasing visibility of the Internet of Everything we continuously strive to meet the demands of an evolving market, embracing technological advancement, and persistently reviewing and developing our product ranges and integration methods to provide innovative, contemporary platforms that can be implemented into a diverse range of business requirements to increase overall performance and productivity.

OUR VISIONS AND GOALS

WHY CHOOSE US?

We are leaders in delivering seamless integration via a variety of innovative discourses, from supplying and shipping an extensive range of flagship products, to installing and commissioning high level integration projects, we are driven to provide you with full support throughout the whole process. We have a specialised and experienced in house support team, available both online and over the phone at your convenience. Furthermore, we have invested into the construction of a state of the art training room, designed uniquely to deliver high quality certification courses to engineers, equipping them with the relevant skills required to progress in the industry. We have also initiated development within our operations, with the intention to generate innovative ideas into a reality. Ultimately, we endeavour to administer to all scales, requirements and demands of our customers, providing them with an all-encompassing service that takes technology to the edge of capability and beyond.
The benefits we provide

- We provide you with a trusted, experienced advisor that can help accelerate your product and market development initiatives, while also reducing risk through our comprehensive services, saving you overall costs and time.

- We are leaders in the deployment of the Niagara Framework and will assist you in strengthening your competitive advantage in the development and marketing of new Niagara-based solutions.

- We endeavour to provide end-to-end innovative integration, meaning you will benefit from direct access to our IT specialists and developers, offering unparalleled insight into the framework applicable to your project.

- You will gain knowledge and advice from a variety of manufacturers products that can be amalgamated together to easily communicate on a single platform.

- You will have access to our dedicated support team, who are experienced in a wide range of software and hardware, capable of answering any queries and efficiently resolving issues.

- You can benefit from our high tech training facility and a variety of courses to fully maximise both an engineer’s potential, and a systems capability.

- We work as a trusted resource on your projects, helping you build scalable, secure software solutions and reduce your time-to-market.

Our areas of expertise

With the development of the smart city and the connected building, technological advancements that employ open control systems and web services are providing a multitude of opportunities for many organisations, with a huge field of prospects to propel infrastructures into the future. One Sightsolutions are operating with a framework designed to connect systems using technology to its maximum potential.

The Niagara Framework provides the best open solution for data normalisation, and as such it means data being collected within a Niagara open platform can be utilised for Big Data, the Internet of Things or, as it is now termed, the Internet of Everything. One Sightsolutions are dedicated to providing flexible open source control solutions that enable effective innovation. In the HVAC industry BACnet has been highly adopted as the protocol of choice in open control systems, however, other common protocols are also being utilised in a big way. Hence an open system today should be compatible with any open protocol in a way that suits the application. One Sightsolutions provide many bespoke products that can achieve this flexibility by employing the Niagara Framework which has BACnet, Modbus, Lon, Mbus, oBIX, Mbus, OPC, SQL, MySql, ASCII, and many more open and proprietary drivers available. This disposition allows us to be at the forefront of technical progression and innovation, providing you with the most efficient and versatile solutions available.
Here at One Sightsolutions we feature our own range of BTL listed BACnet MS/TP or Modbus networked controllers that have proven integration with several BMS systems on multiple sites around the world.

Our networkable controllers offer flexibility and simplicity within any integration strategy to provide:

- Seamless integration and interoperability
- Real-time information management and control
- Lower costs and higher value
- Diverse control strategies
- Higher energy conservation

ABOUT OUR PRODUCTS | CONTROLLERS

The OSS-20 extends your BACnet or ModBus network when your application requires additional inputs and outputs on a physical controller. Combining the 20 inputs and outputs of the OSS-20 with your Building Automation System provides simple expansion of a new or existing controller and reduces unnecessary costs of additional components.

Use the on-board override switches to manually force the output states during the start up or service calls that demand immediate intervention on a controlled or operated peripheral. All outputs are supervised, therefore, if the output is “forced on” by the override switch, the output status is sent via the network. On-board LEDs help track and diagnose input or output activity during operation.

NOTE: THIS IS ONLY A SELECTION OF OUR PRODUCTS, THE FULL RANGE IS FEATURED ON OUR WEBSITE.
NETWORKABLE FAN COIL CONTROLLER | OSS-FC SERIES

The fan coil package consists of 2 parts, the thermostat and the OSS-FC controller module. The controller incorporates a configurable fan coil algorithm, variable three speed fan control and either modulating or digital heating and cooling outputs.

MAIN FEATURES INCLUDE:

- Fully configurable application specific controller
- Connects to room thermostat via 3 wires
- Native BACnet MS/TP or Modbus communication (selectable)
- 24, 120 or 240Vac
- Up to 11 inputs and 15 outputs

ABOUT OUR PRODUCTS | TOUCH SCREENS

Another product range we supply is a selection of touch screen displays, these are designed as control units that operate on android or windows interfaces. Their versatile operating system allows flexibility within customisation, giving you the opportunity to integrate your own graphics with ease. Our touch screens are available in two different models and sizes, one 10” and one 7”.

SYSTEMVIEW 7" ANDROID TOUCH SCREEN PC

This is a SystemView 7 inch with a slim and sleek profile for easy mounting. The device is equipped with an advanced processor for smooth and high-speed performance. This android tablet features a large capacitive touch screen for easy viewing. A perfect (low-cost) solution for rugged monitoring in cabinets or as a graphics viewer for web servers.

10" TOUCH SCREEN PANEL PC

The compact 10" Intel Duo Core Celeron CPU 037U, 1.80GHz industrial fanless panel PC is designed with a completely slender construction without any failure prone external fans. The fanless panel PC has a space-saving design that fits into a wide range of industrial and commercial applications to enable you to fully maximize your business potential.
OSS CHARTING MODULE

OSS Charting is a Niagara 4 module which provides a wealth of new chart widgets for your station graphics. Making use of modern web technologies such as HTML5, CSS3 and Scalable Vector Graphics results in charts and dials that look great in Workbench and in the web browser, and do not rely on the out-dated Java Applet. Giving high priority to the look and feel, data is displayed in clean, uncluttered charts with an engaging user experience that makes them engaging to interact with.

CHARTING OPTIONS

- Line Chart
- Scatter Chart
- Area Chart
- Stacked Area Chart
- Bar Chart
- Stacked Bar Chart
- Point Gauge
- Solid Gauge
- Point Meter
- Pie Chart
- Pie Chart Arc
- Gradient Pie Chart Arc

CREATIVE PRESENTATION

The wide variety of new history charts all feature sophisticated navigation options which can be enabled individually or in combination to suit your needs.

Multiple new point dials and pie charts let you display live point data to your users in eye-catching new ways.
Comprehensive charts showing multiple trends at a time can make use of an interactive feature which enables users to isolate and highlight trends for individual examination, also with full responsiveness to adapt to range of screen measurements. The numerous charting options available at ease can be combined to create engaging and sophisticated dashboards, giving you complete control over how you choose to demonstrate and analyse information.

Careful and configured layout throughout production ensures charts have maximum accessibility and interaction, resulting in seamless understanding and correlation between elements on screen.

**BENEFITS OF OSS CHARTING**

Information can flourish with the many benefits of OSS Charting, which include:

- Clean visualisation of performance measures
- Capacity to identify and amend negative trends
- Instantly measure efficiency and correlations between data allowing you to make more informed and educated decisions for your business.
TENANT BILLING OVERVIEW

OneSight solutions tenant billing software is designed to give users the ability to automatically manage energy consumption and billing sub-tenants. Furthermore, our tenant billing solution is built for the Niagara Framework. This in turn, allows the software to be compatible with many open and proprietary protocols. As a result, you will not need to alter your BMS system, because the module integrates seamlessly. Ultimately saving you time and costs. Even if subletting is not the main focus of your business, the software is the ideal tenant management tool to manage utility costs for the individuals, organisations or departments who occupy a part of the building.

SOFTWARE FEATURES

Firstly, the software is built on, and driven by the Niagara 4 Framework. As a result of this, it is flexible to changes or additions clients may have. Making customisation easier and faster.

Another advantage of the tenant billing program is that it requires no training to use. Its simple design makes it easy to edit and adapt to your requirements.

Additionally, because the software is built on Niagara 4, it can directly interface to meters, sub-meters and BMS, with no restrictions.

Subsequently, it’s compatibility and ability to communicate with a variety of protocols makes it easy to set up and install. Ultimately saving you time.

What’s more is the tenant billing software also provides a cost-effective alternative to hiring admin staff to manage the accounts.

Finally, because bills are automatically generated, the tenants can be sure the amount payable is an accurate figure. The bills also contain a detailed breakdown of each section, reducing the possibility of queries & disputes.

Tel: 01252 872738  
Email: info@onesight.solutions  
Web: onesight.solutions
In conclusion, the software is a flexible platform in which to control, monitor and distribute tenant billing. Ultimately, because the Niagara 4 framework drives the software, it is a considerably powerful tool for a cost-effective and straightforward solution to manage tenant billing in any business. Additionally, the tenant billing is easily modifiable to allow for it to meet diverse specifications. As a result, the process of billing tenants is entirely in the building owner's control.

Additionally, the software also provides an accurate summary of the energy and utility costs consumed by each tenant, with the ability to keep digital records and information in a logical manner. Furthermore, the bills are distributed in PDF format, with the ability to transfer data to Excel and other Microsoft office packages. Save time and costs while simultaneously reducing risk of inaccurate tenant billing, with the intuitive software, built for simplicity.

SIMPLE & EASY INSTALLATION

The tenant billing software links in with the Tridium Niagara Supervisor. Thus, if you already have a licence for Niagara, this software package can be installed, with ease as an add on. Furthermore, the system is accessed via a web server, meaning it is accessible remotely and on any platform that maintains a web connection.
The Niagara framework from Tridium is a software platform that integrates diverse systems and devices regardless of manufacturer, or communication protocol, into a unified platform. With standard IT network security measures in place, it can be easily managed and controlled in real time, over the Internet, using a standard web browser. By integrating today’s diverse building systems such as environmental controls, security, lighting, energy, video, fire and life safety, Niagara is creating better buildings - ones that are smarter, use less energy, are more efficient, have lower operating costs, are safer and contribute to a sustainable environment.

PRODUCTS | JACE 8000

The JACE forms the core of the Niagara Framework and has the ability to perform complex control logic, log historic data, report alarms and can communicate with any other JACE that is reachable over an IP network. Tridium has created an all-new hardware platform optimized for Niagara 4: the JACE 8000 controller. This next-generation controller features a global design that functions with legacy systems and has the ability to scale for future needs. The JACE 8000 controller offers significant improvements over previous generations. Such as:

• Powerful Niagara 4 hardware platform with easy software upgrade
• Modular hardware design for fast and easy installation
• Expandable with up to four option modules
• Native Wi-Fi capability
• 24VAC/DC—standard global power supply
• Standard open drivers included
• Intuitive user interface

PRODUCTS | NIAGARA ANALYTICS

Niagara Analytics is the only data analytics engine built on Tridium’s industry-leading Niagara Framework. Niagara 4.2 includes integration of Niagara Analytics 2.0, which takes the robust analytics capabilities of Niagara 4 to a whole new level. Together, these releases bring the benefits and efficiencies of data-driven performance to users. Niagara Analytics 2.0 can be utilised locally using real-time data in an embedded controller for energy optimisation, or for data analysis using historical information you’ve already saved, making your staff more effective and your buildings more efficient.
Niagara 4 builds on the legacy of the Niagara Framework in new and exciting ways. It’s less reliant on browser plug-ins, faster and easier to use. Now end users can directly access, analyse and act on a wide range of operational data. A truly open framework, Niagara 4 delivers a variety of notable improvements to help businesses take full advantage of the Internet of Things, including advanced visualisation and new search, security and navigation tools.

**Easier Integration**
Niagara 4’s new templating feature enables tags to be applied to devices quickly, and allows applications to be prebuilt against a set of standardised templates which then can be quickly created and reused.

**More Data at Your Fingertips**
With a simple point-and-click or drag-and-drop, users can instantly find and display critical information from their desktop, tablet or mobile device.

**Powerful Security**
Niagara 4 takes a “defence-in-depth” approach to IoT security. Niagara 4 is secure by default. Authentication requires users to choose strong credentials, and both data in motion and sensitive data at rest are encrypted.

**Faster Development**
Developers will find improved documentation, a rich open API library, BojaScript 2.0, semantic data modeling via tags and other ready-made tools to greatly speed and support development.

**All New User Interface**
Niagara 4 features a bold and intuitive new interface. Modern and easy to use, the platform utilises HTML5 to provide an array of rich features.

*NOTE:* THIS IS ONLY A SELECTION OF TRIDUM’S NEWEST PRODUCTS, SEE THE FULL RANGE ON OUR WEBSITE
iBuilding Energy is a comprehensive and intuitive energy monitoring and targeting suite, providing an impressive range of techniques for managing all aspects of energy related data. iBuilding Energy is fully web enabled and is available online or may be installed to site. Data may be automatically imported to the suite from data loggers, BMS and SCADA systems, production systems, electronic billing data and spreadsheets. iBuilding Energy already interfaces with most of the major manufacturers systems, so integration with existing equipment couldn’t be simpler.

VISUALISATION PLATFORM

iBuilding Energy’s aM&T/EMS (Monitoring and Targeting/ Energy Management System) suite is one of the most sophisticated and accurate, fully web based energy suites available in the industry today. iBuilding Energy is not only extremely user friendly, but is also able to produce an extensive range of powerful analysis tools and techniques, all encompassed in an intuitive user interface. This visualisation system is accessible via any web browsing platform, meaning it can be accessed remotely, and is suitable for users of any experience.

HOW IT WORKS | INSTALLATION

As previously mentioned the application has the advantage of being 100% web based and accessible via a standard web browser from any PC with a network connection. iBuilding Energy is installed onto a PC or Server running Windows and Microsoft IIS, it is then served like a standard website and requires no client side application to be installed by end users. It has the ability to accept data feeds from multiple sources including the oBIX (Open Building Information Exchange) protocol, meaning it can seamlessly interface with Tridium’s Niagara 4 Framework. Integration has never been easier.
iBuilding Energy contains an expansive selection of analysis modules which may be combined according to the specific requirements of your individual company. Additionally, the functionality is presented within 2 main user levels; Advanced and Express. The Advanced level provides complete access to the full iBuilding suite whereas Express presents an extremely simplified view, where users of any ability can access their data. This is both important in allocating internal access, but also extremely powerful if you are working in a facilities management, consultancy, large organisation or management style environment.

**KEY FEATURES**

- Web based aM&T package
- Integrates with Tridium’s Niagara AX & Niagara 4
- Powerful analytics and reporting
- Automated tenant billing
- A modular design for easy expansion
- Can be iBuilding cloud or site based

**AVAILABLE MODULES & FUNCTIONALITIES**

- Energy Analysis
- Tenant Billing
- Financial Analysis
- Reporting
- Data Exchange
- Calculated Meters
- Exception Reporting
- Dashboards
DGLux5 is an innovative IoT software solution that enables and visualises the (IoT) Internet of Things. This next generation IoT technology illustrates the internet of things by allowing users to easily interact with more data from more IoT devices and derive more value and intelligence to better manage cost and energy efficiency. Through customisable applications and big data dashboards, users are capable of managing, measuring, controlling and analysing big data from any IoT device anytime, anywhere.

One Sightsolutions understand the importance of data representation and have witnessed first hand how using DGLux as our chosen visualisation package can really take Niagara 4 to the next level. From publicly viewable energy consumption dashboards to a tailored DCIM solution with near photo-realistic 3D models, we believe that DGLux5 for Niagara 4 really sets the benchmark for data visualisation in the 21st century building automation and energy management markets.

ABOUT DGLUX 5

DGLux5 provides you with the best data visualisation tools you need to build applications or data dashboards without ever writing code. Implement horizontal and vertical layouts with your components to build elaborate, responsive applications or dashboards in minutes; or take advantage of the free positioning canvas with the freedom to create dynamic interactive applications.

Utilise the frame animator to create your own animations, or add interactivity to pages, objects, documents and graphics through using custom actions. Take advantage of the built-in, your own, or any third-party libraries to assemble high quality interactive graphics on the fly. Snapping points assist in the creation of complete visualisations much like placing puzzle pieces in their correct positions, simplifying the design process.

A fully customisable widgets and symbols library enables any object on the stage to be saved as a widget or symbol for unlimited reuse. Create new widget categories, new symbols, import third-party components and save all your assets with ease. With DGLux5, your applications are only limited by your imagination.
Project Assist 2.0 for Facilities is a drag and drop facility application builder. It allows users to easily create custom HTML5 interfaces in order to quickly gain complete insight into building performance and energy consumption. It delivers a fast, simple and intuitive user experience, offering full flexibility and customisation without writing any code nor diving into the full design and development environment of DG Logik’s flagship product, DGLux5.

ABOUT PROJECT ASSIST 2.0

Manage Style & Navigation
Customising the “look and feel” and user navigation for projects is extremely easy. DGLogik have exposed every style property necessary to create the best modern appearance. In addition, Project Assist 2.0 provides remarkable drag and drop flexibility in order to architect the navigation tree.

Manage Device Templates & Layers
Here, one defines locations and devices through campus, building, floor or equipment graphics and allows users to bind the relevant data points which should be associated with graphical representations whether it’s through an animated graphic, callout, chart or zone overlay.

Manage Schedules & Alarms
Managing schedules or adding special events in Project Assist 2.0 is as simple as dragging time blocks within the day or adding time blocks wherever is needed. When it comes to alarm management, quickly gain insight through Project Assist’s modern alarm console.

Generate Reports
Creating a report or revisiting a previously generated report is easier than ever with the Reports console. When creating, just choose a layout type, select one of the many widgets (such as charts or gauges), then drag and drop data onto the widgets.
4-noks®

ABOUT 4-NOKS

4-noks, are a brand of the Astrel Group. They specialise in designing and developing electronic systems for energy monitoring, control and saving. They provide innovative and eco-friendly solutions for photovoltaic systems, energy saving, smart home and smart building applications in the commercial, residential and industrial sectors. Their products include apps, cloud based monitoring services, software solutions for remote connections and smart user interfaces.

FEATURED 4-NOKS PRODUCTS

RANGE OF GATEWAYS | MODBUS RS485

The RS485 Modbus Gateway is part of an assortment of 4-noks ZigBee devices. It is designed to interface a PLC (Programmable Logic Control), or a PC with the 4-noks ZigBee device’s network via a RS485 serial interface and a standard protocol universally recognised, such the Modbus/RTU. The employment of the Modbus protocol allows for immediate use with all the commercial PLCs and also with most of the commercial SCADA’s for PC.

KEY FEATURES

- Protocol converter from Modbus/RTU to ZigBee
- Standard Modbus RS485 interface
- Coordinator function for a ZigBee network
- Local memory stores battery powered sensors data
- Transparent bridge for other Modbus devices
- External antenna
RANGE OF GATEWAYS | ZIGBEE TEMPERATURE AND HUMIDITY SENSOR

Featured here is the ZED-THI-M sensor from the 4-Noks Gateway range. This sensor is a ZigBee battery supplied device which measures the temperature and humidity simultaneously. It is also capable of regularly transmitting the collected information to one of the gateways of the 4-noks range. It’s possible to program the device to set alarms when it reaches certain limits, due to an exceeding value or a too small value. It is also possible to schedule the sampling timing and the sending modalities of the measurements in order to increase the duration of the battery.

PLUGS AND SWITCHES | ELECTRICITY METER PLUG

Featured here is the ZR-PLUG-XX-M passing plug which includes an electric energy meter and a relay to turn on and off loads up to 2,5 kW. You can insert the plug in a standard 230V socket and attach to it any kind of equipment. Once attached to a wireless ZigBee network you can remotely switch on and switch off the device and remotely measure the instant active power and the energy spent. Moreover, stand-by killer and override button functions are available. You can set a power limit under which the device is in stand-by killer mode and thus can be automatically turned off. With the override button the user can override the last command from the Gateway. Such tasks are carried out after simple Modbus commands are sent to network that transform them in wireless commands. The device is continuously supplied by a 230 Vca output, so it can also work as a repeater or a “father” device for battery supplied sensors.

SWITCH ENERGY METER | WALL STEADY DEVICES

Featured here is the ZR-SWITCH-M. This device is mounted to the wall and is connected to equipment directly or through a socket or a splitter. Once attached to a wireless ZigBee Connection network you can remotely switch on and switch off the device and remotely measure the real-time active power and the energy consumed. It is also equipped with stand-by killer and override button functions. This allows the user to determine a power limit which triggers the device to enter stand-by killer mode automatically turn off. The override button allows the user to override the last command from the Gateway. Such tasks are carried out after simple Modbus commands sent to ZB-Connection network that transform them in wireless commands. The device is continuously supplied by a 230 Vca output, so it can also work as a repeater or a “father” device for battery supplied sensors.

NOTE: The full range of 4-Noks products is available on our website.
Distech Controls are one of the major driving forces in HVAC controls across the world, providing a powerful and robust hardware & software platform. Offering an excellent range of identical I/O devices covering both Lonworks and BACnet, there is a controller to suit every application. When Distech’s controllers are combined with the Niagara 4 framework, you can really start to envision the power a Distech solution can provide.

At the core of the Distech ecosystem are the EC-BOS controllers and EC-NET supervisory software. These are based upon the Tridium Niagara 4 framework which means the Distech range takes full advantage of an already well established and extremely powerful integration platform.

Energy monitoring applications are also catered for extremely well due to the systems ability to connect directly with smart energy metering devices. Combine this with the capability to create dedicated in house dashboards and graphics along with a powerful exporting feature makes Distech a leading building controls solution.

The Distech range of HVAC controllers include the ECB and ECL series, designed for terminal control application, central plant & air handling units, VAV, chillers, pumps and cooling towers. Specific models also include integrated support for lighting and sun-blind control which are ideal for ‘smart room’ comfort control solutions. Both ECL and ECB controllers are also available with integrated ‘live’ LCD displays, making them a powerful, user-friendly and time saving solution that provides technicians and managers with convenient access to important system data in real time. We are also able to supply the Distech range of dedicated lighting & sun blind controllers such as the CTR range of configurable DALI controllers and the RCL range of sun blind controllers.
It's Time You Experienced

DISTECH ECLYPSE | CONNECTED IP AND WI-FI PRODUCT SERIES

ECLYPSE Connected BACnet/IP and Wi-Fi HVAC Controller Series, and ENVYSION responsive, web-based design and visualisation interface, provide powerful connectivity, advanced control, monitoring and analysis, for your Internet of Things building.

The ECLYPSE controller series utilise BACnet/IP and IT standards, delivering empowered IP connectivity and open integration with building management systems. Choose wired IP, Wi-Fi, or combine both on a same controller to suit the building’s infrastructure, architecture and layouts.

PRODUCT RANGE

EC-Net Web based Multi-Protocol Building Management Platform for all of your control, integration, monitoring and reporting requirements

EC-Net EnerVue configurable, graphics orientated Web-based energy management dashboard

Vast array of robust, leading technology HVAC, Lighting and Sunblinds/shades

Smart Room Control Solution for synergetic control of HVAC, Lighting and Sunblinds/shades

EC-Net Security fully scalable access control with electronic card access and CCTV solution

Allure Room Devices and sensors

Open-to-Wireless battery-less sensors & devices
ABOUT iSMA | INTELLIGENT SOLUTION MANAGING AUTOMATION

iSMA is the own brand of Global Control 5 Sp. z o. o. that includes comprehensive solutions for building automation. The possibilities of the iSMA systems are fully compatible with the emerging trends in the development of the industry’s efforts to automate processes, reduce costs, amalgamate multifunctional integration in a single tool and minimize human error factor. The core of the iSMA solutions is built on the Niagara Framework. iSMA products allow integrators to create competitive control systems of any installation in a building. The ability to integrate NiagaraAX and Niagara 4 Frameworks with the other systems gives building managers a flexible selection of versatile products.

I/O MODULES | MIX SERIES I/O

iSMA I/O modules included in the MIX series have been designed purposely for buildings that incorporate control systems using a JACE or iSMA-B-AAC20 devices (another iSMA product). In order to ensure high versatility and price performance, the MIX Series modules are equipped with the most commonly used types of I/O in building automation. The purpose of these I/O modules is to MIX of all types of I/O in one unit. This mix and match feature allows for the products to be compatible with all different systems, thus providing an alternative solution with increased flexibility.

TWO MODULE INTERFACES
Modules with interface RS485, and modules with interfaces 2x Ethernet and RS485. Devices with interfaces 2x Ethernet and RS485 have the added functionality of a “Modbus Gateway TCP/IP to Modbus ASCII/RTU”, enabling you to connect additional modules/devices that communicate via Modbus RS485. One major advantage of integrating an open communication protocol is the possibility to install them in both new and completed installations.

NO NEED FOR ADDITIONAL RELAYS
To even further increase versatility, all relay modules allow direct control of any of the systems components supplied with 230 VAC (max. 3A). As it does not require the use of additional relays, it therefore results in considerable savings. Addressing the modules is done via rotary switches, which facilitates and accelerates the process of commissioning the system, saving you time. There is also a built-in mini USB which allows for the initial configuration of the unit to be done without a power supply.

OPEN COMMUNICATION
In order to meet market requirements, the modules are factory equipped with the two most popular open communication protocols; Modbus (ASCII, RTU, TCP/IP) and BACnet (MSTP, IP), which are selected by the user using DIP switches.
**MIX SERIES | KEY FEATURES**

- A large number of all types of I/O
- All digital inputs work as fast counters up to 100 Hz
- Universal inputs have a 16-bit resolution which increases the accuracy of measurement
- A wide range of supported temperature sensors (NTC, PT1000 etc.)
- Automatic detection of the signal type in the case of universal inputs
- Digital outputs 230 VAC max. 3A allow direct control without additional relays

**I/O MODULES | MINI SERIES I/O**

The iSMA I/O modules MINI series has been designed to complement the I/O modules of the MIX series. Unlike the MIX series, the MINI line is dedicated to all the applications where hand operating switches are required. The built-in cooling and heating algorithms make them applicable as the standalone controllers. Additionally, the modules support time relay modes dedicated for present detectors. Similar to the MIX modules, the modules are factory-equipped with the two most popular open communication protocols: Modbus (ASCII, RTU, TCP/IP) and BACnet (MSTP, IP), which are selected using DIP switches.

14 MINI VARIATIONS | KEY FEATURES

- 1 x Fast Ethernet
- Built in Modbus Gateway TCP/IP to RS485
- Web Interface
- 14 different types
- Embedded lighting control algorithms
- All digital inputs work as fast counters up to 100 Hz
- Universal inputs have 16-bit resolution which increases accuracy of measurement
- A wide range of supported temperature sensors (NTC, PT1000 etc.)
- Digital outputs 230 VAC max. 3A or 8A allow direct control without additional relays
- Analog output with max. 20mA load allow direct control of relays (12 VDC) or SSR with PWM support

**NOTE:** THIS IS ONLY A SELECTION OF THE ISMA RANGE. SEE OUR WEBSITE FOR THE FULL COLLECTION
ABOUT CNS | THE IMPORTANCE OF LIGHTING

In the majority of commercial buildings, lighting accounts for up to 50% of the electricity used. With an intelligent lighting control system light levels can be automatically regulated or adapted to suit natural light levels. Occupancy control provides for automated lights on, off and dimming when the room is either entered or vacated. This can save as much as 60% of the energy consumed by lighting in addition to prolonged lamp life and better asset management seamlessly tied into client business applications - and this is where CNS comes in with eliteDALI.

ELITEDALI | FOR NIAGARA

The DALI Driver Software is a native driver, developed using the Driver Development Framework provided as part of the Niagara Framework. System Integrators already familiar with the standard device driver interface, will feel at ease with the elitedali User Interface. Standard functions such as creating new devices, adding devices, device discovery and matching devices are all included.

WHAT’S INCLUDED

Further enhanced functionality has been included specifically for the management of DALI Networks. This includes addressing and configuring DALI devices according to the DALI standard. This DALI Driver will support a full 64 Open Standard DALI devices on a single DALI network. All product and user information is fully documented and supplied with the licensed software, as part of the elitedali Connectivity Kit.

Utilising pre-configured components the System Integrator can build complex highly granular control strategies quickly and simply enabling Estate Managers, Building Supervisors, Facility Managers, Clients and Users to manage their own environment both locally and remotely.
Control Network Solutions’ eliteDALI for Niagara DALI driver enables Niagara System Integrator Partners to use their existing Niagara tools, skills and knowledge to:

- Connect up to 1,536 x DALI lamps, 24 x DALI networks to 1 x Niagara Platform only using Niagara for all DALI network and device commissioning, control, maintenance, management, visualisation and analytics.
- Use Niagara to discover and commission networks of DALI open standard light fixtures. No third party commissioning tools or processes required. Use with any DALI product manufacturer conforming to the DALI IEC 62386 standard.

### POWERFUL COMMISSIONING

MULTIDROP CONNECTIVITY KIT

eliteDALI Multidrop for Niagara offers all the functionality necessary to allow (from within the Web environment of Tridium’s Niagara Framework) commissioning, control, management and monitoring of DALI lighting networks just as for BMS and other systems.

Tridium’s Niagara Framework is a global convergent Open technology platform that seamlessly enables the commissioning, control, management and visualisation of disparate networked control devices in a web environment.

A JACE (Java Application Control Engine) is Tridium’s hardware component for the Niagara Framework. This is an embedded controller that allows a System Integrator to connect many different types of automation and control technologies inside one hardware platform.

### THE BENEFITS

- **Lower cost of installation** - Less hardware, better utilisation
- **Simpler network architecture** - Less cables, less network protocol, less to go wrong.
- **Easier & faster to commission** - Familiar environment, increasing automation, only one commissioning tool, easier to support and maintain
- **Future Proof** - Full exploitation of open standards on a platform that is understood and supported globally.
- **Total Integration** - Seamless integration with all other systems connected to Niagara Framework offering better user experience, lower energy costs.

Manages assets more effectively when used in conjunction with CNS’s elitedali MultiSensors
EasyIO deliver Energy Management Systems that increase the wellbeing of human beings, by optimising the interaction between human, building and work. For many years EasyIO have been serving the professional BMS market and are close to 100% support satisfaction. EasyIO provide open system solutions to all enterprise building and energy platforms. With EasyIO you will find a whole suite of legacy drivers, utilising IT standards and solutions, combining the use of converged corporate and internet connectivity. Low costs, high energy savings, less devices and software, multiple protocols, easy integration and wireless are key.

ABOUT EASYIO

EasyIO deliver Energy Management Systems that increase the wellbeing of human beings, by optimising the interaction between human, building and work. For many years EasyIO have been serving the professional BMS market and are close to 100% support satisfaction. EasyIO provide open system solutions to all enterprise building and energy platforms. With EasyIO you will find a whole suite of legacy drivers, utilising IT standards and solutions, combining the use of converged corporate and internet connectivity. Low costs, high energy savings, less devices and software, multiple protocols, easy integration and wireless are key.

CONTROLLERS AND HMI | PRODUCT FEATURES

**BRING YOUR OWN DEVICE**
Built-in HTML5 webserver hosting your graphics. Android, iPad & Smartphone friendly. Build your graphics how you want them.

**METERING**
Connect energy-meters using our built-in technologies. Even all our universal inputs can read pulses. Electricity, water and gas meters are easy to connect.

**ROOM DISPLAY**
The multifunctional full colour room display is free programmable. This means you can use it for every room, no matter the complexity of the system.

**DATA**
Let the content find you. The controller can push your data, email and can handle HTTP request. EasyIO have a built-in SQLite database & management tool. The SD-card (max 16Gb) gives you the ability to store onboard 80 Million history records.

**HVAC CONTROLS**
The programmable controller is ready to handle every kind of HVAC. Our huge HVAC library opens up every project. Optimisers will make sure your system will start and stop at the right moment using no more energy than needed. Schedulers on board with holiday calendar, accessible through our HTML5 webpages.

**WIRELESS ENOCEAN**
Through the optional external gateway, you can use wireless and battery less technology. Control your room with wireless sensors, light switches, window contacts, light relays, sunblind relays, actuators and more.

Tel: 01252 872738
Email: info@onesight.solutions
Web: onesight.solutions
EasyIO’s FG+ series of Open Automation Controllers are the new range of Internet ready Field Controllers. They comprise of combined Area Controller capabilities and features, as well built in I/O and huge data logging capacity, all packaged as the future solution for the Internet of things in Energy and Building Facility Control. The controller also supports multi concurrent protocols and services such as BACnet, Modbus, TCOM, Web Services and both Server and Client services.

The FG+ series changes the way that we will deploy Building Automation, especially in multiple facilities and locations whereby a starter package can be deployed quickly and cost effectively without any additional hardware or middleware. Here at One Sightsolutions we see this range of FG+ Controllers as allowing us and the industry to extend their reach deeper and wider into all kinds of Energy Performance Solutions.

Another exciting feature, is the openness, and its web friendly tools to enable 3rd Party Tools to be deployed in addition to the Workbench that we are all familiar with today. This platform will meet the needs of simple controls requirements and complex HVAC plants, such as Chiller Sequencing and Roof Top Control.

The EasyIO-FW14 is a free programmable controller ideal for all kind of applications such as fan coils, AHU’s, room applications, stand-alone applications, etc. Ideal also for vertical markets such as schools and retail to have extended IO for the FG+ series without any downtime during install as the network can be wireless. This will definitely open the small and medium building market where shorter downtime and save on labor and hardware are key.

The FW-14 has 14 points of I/O and is priced to meet most high volume applications and price points. The FW-14 is a microprocessor based controller consisting of 14 inputs/outputs (I/O) to accommodate general and specific applications featuring SOX, TCOM, FGP2P and BACnet MSTP communication protocols. The available resources inside the controller are not limited to the 14 I/O so you will be surprised by its high power.

The FW-14 comes with one standard RS485 driver to support BACnet MSTP communication. It also comes with a ethernet port to program the Sedona application and for configurations.

**NOTE:** THIS IS ONLY A SELECTION OF EASYIO PRODUCTS, SEE THE FULL RANGE ON OUR WEBSITE.
Ontrol is a major System Integrator in Turkey and Eastern Europe that designs and manufactures controllers, sensors, valves and actuators to their own demanding specifications. All their products come from 50 years of experience as installers and reflect their experience and understanding of what is needed on site under demanding conditions.

Due to early involvement with, and dedication to the Niagara Framework, Ontrol are committed to providing solutions that play well within the Niagara ecosystem. Ontrol’s flagship product, the R-ION colour touch-screen controller, is freely programmable in WorkplaceAX, and supports several communication protocols simultaneously including BACnet, Modbus, Sox, Dali and MP-bus with optional WIFI versions.

ONTROL PRODCUTS | R-ION SEDONA ROOM CONTROLLER

R-ION series products are programmable room controllers, ideal for managing a wide range of individual building products such as fan-coil units and VAV boxes. Extremely flexible customization options are available thanks to a configurable colour touchscreen, with full programmability and custom logo placement options. In addition to basic fan-speed and temperature settings, lighting controls can easily be integrated, as well as custom application specific functions.

SEDONA FRAMEWORK

Developed by Tridium, the Sedona Framework is the industry’s first, open source development framework that provides a complete software platform for developing, deploying, integrating, and managing pervasive device applications. It brings the power of programmable control and the Internet down to edge devices. The Sedona Framework distributes decision making control and manageability to any device and brings intelligence and connectivity to the network edge and back.
R-ION controllers support various industry standard protocols simultaneously. The main supervisory system communication (Port 1) is serial RS485 or wireless IP depending on basic version:

- WiFi versions support Sox protocol, BacNET IP (slave), ModbusTcp (master and/or slave)
- Serial versions support BacNET MSTP (slave) and Modbus RTU in either master or slave configuration.

Optionally, one or more of the following auxiliary communication ports may be available:

- Belimo MP-Bus port
- DALI (Digital Addressable Lighting Interface) port
- Second RS485 port (Modbus & DMX drivers available)

R-ION CONTROLLERS | KEY FEATURES

Two-piece interlocking design greatly simplifies installation on the wall-unit side, as the IO module can be located close to the terminal unit being controlled, with only comms wiring into the wall unit. Other features include:

- 3.5” resistive color touch-screen
- Freely programmable
- Fully customizable graphics
- Powered by Sedona Framework
- WiFi option
- Belimo MP-Bus option
- DALI (Digital Addressable Lighting Interface) option
- DMX driver available
- Low profile, only 10.5 mm thick
- Optional Input/output modules optimised for terminal units
The fan coil package consists of 2 parts, the thermostat and the OSS-FC controller module. The controller incorporates a configurable fan coil algorithm, variable three speed fan control and either modulating or digital heating and cooling outputs.

MAIN FEATURES INCLUDE:

- Fully configurable application specific controller
- Connects to room thermostat via 3 wires
- Native BACnet MS/TP or Modbus communication (selectable)
- 24, 120 or 240Vac
- Up to 11 inputs and 15 outputs

**FC-SERIES FAN COIL UNIT CONTROLLER**

For One Sightsolutions OSS FC-Series and VAV controllers

**FEATURES:**

- Built-in temperature sensor and optional humidity and CO2 sensors
- Used to configure and operate the EVCB VAV controllers and EFCB Fan Coil controllers
- Selectable Fahrenheit or Celsius scales
- Network service port via on-board mini USB connector
- Approximate size 127mm x 82mm x 15mm (5” x 3.25” x 0.6”)

**TDU SERIES LCD ROOM DISPLAY**

- Optional PIR motion detection sensor
- 3.5” LCD Display
- Slim design
- Universal wall-mount design

**SPECIFICATIONS**

**Temperature sensor**
- Range: 10°C to 40°C [50°F to 104°F] | Accuracy: +0.4°C [0.8°F] | Display resolution: +0.1°C [O.2°F]

**Humidity sensor (select models)**
- Range: 10 to 65%RH | Accuracy: +3.5% RH | Display resolution: 0.1%

**CO2 sensor (selected models)**
- Operating principle: Self-calibrating, Non-Dispersive Infrared (NDIR) | Response time: 2 minutes by 90%
- Range: 400-2000 ppm (+30 ppm +3% of reading; accuracy requires a min. 3 weeks of continuous operation)

**Electrical connection**
- 3 wires to controller and two wires to BACnet/Modbus network 0.8mm2 [18 AWG] minimum

**Power supply**
- 24Vac or 24 Vdc

**Power consumption**
- 1VA

**Relative humidity**
- 5 - 95% non-condensing

**Temperature ratings**
- Operating: 0°C to 50°C [32°F to 122°F] | Storage: -30°C to 50°C [-22°F to 122°F]
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**TDU10 Series**
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**TDU40 Series**
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**TDU70 Series**
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