Intesis®
BY HMS NETWORKS

Gateway solutions
for building and home integration

- Cloud solutions

HMS

Intesis — connecting buildings and homes

Intesis gateways for building and home automation covers all relevant standards and technologies, and includes the market's most comprehensive portfolio for HVAC integration with solutions for all major AC-brands.

Highly reliable, robust, easy to configure and install, the Intesis protocol translators, AC interfaces, and cloud solutions are widely used for system integration. Users benefit from efficient commissioning and uninterrupted operation.

Intesis by HMS Networks

Intesis is a part of HMS Networks, market leader in solutions for industrial communication and the Industrial Internet of Things, IIoT. The Intesis brand is HMS central brand for Building Automation products and solutions. The other main markets for HMS are Manufacturing, Power, Energy, Transportation, Infrastructure and Logistics.

About HMS Networks

With millions of installed products worldwide, HMS Networks is the leading supplier of solutions for Industrial ICT (Information & Communication Technology).
We enable valuable data and insights from industrial equipment, allowing our customers to increase productivity and sustainability.

- Employees: > 700
- Locations: in 16 countries
- Distributors: > 50 countries
- Brands: Anybus, Ewon, Intesis, Ixxat
- Customers: Device manufacturers, machine builders, system integrators, end users
- Year founded: 1988

High quality standards

Intesis products are subject to extensive testing and certification processes to ensure the highest quality standards. Also, additional tests are implemented for specific markets.

100% tested

Every single product manufactured by Intesis is tested to ensure the highest quality standards.

UL listed

Intesis products contain UL marked components and the production line is subject to periodic UL audits. It is with pride that we put the UL mark on all main Intesis products.

Global coverage

In addition to rigorous internal quality tests, Intesis products are also certified by independant testing labs to fulfill national legal requirements on different markets.

Protocol certifications

All implementations of standard protocols in Intesis products are performed rigorously according to each protocol specification. Full interoperability is then ensured thanks to testing and certification by external accredited laboratories.

Solutions for every project

Modern buildings include equipment from many different vendors that need to communicate in highly advanced networks.

System integrators, BMS vendors, HVAC manufacturers and professionals in the automation market all over the world have one thing in common — they trust Intesis products in their building automation integration projects.

Cloud solutions

Intesis long experience of Building Automation protocols and communication solutions for HVAC integration brought to the cloud for straight-forward remote device management.
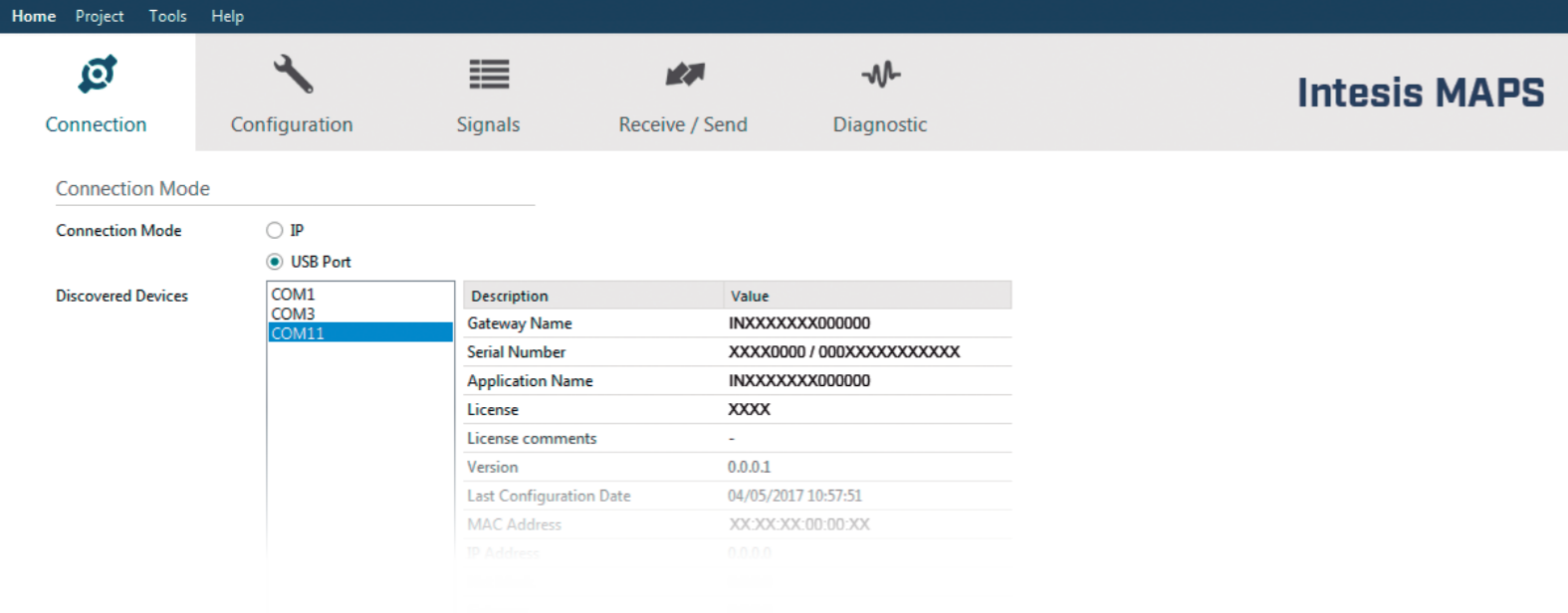
No matter what building automation protocol or AC brand...

...Intesis has the communication solution!

Intesis MAPS — a software tool for fast and easy configuration
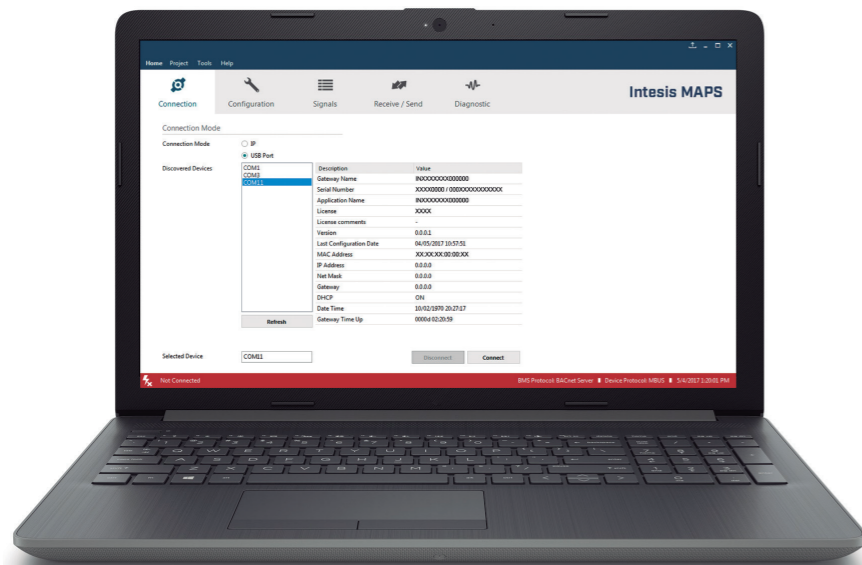
Multi Addressing Point Solution

Intesis MAPS

Powerful configuration of all Intesis protocol translators for fast and straight-forward commissioning.

Intesis MAPS enables easy configuration of all possible protocol combinations available in the Intesis protocol translator portfolio, offering a simple and consistent way to program all your devices, regardless of the protocols used. Upon launching MAPS, the user selects the right template for the protocol translator and the configuration procedure can start.

Intesis MAPS provides device templates which import data automatically. Conversions such as scaling and offset are supported to allow the desired data transformation. MAPS also enables advanced diagnostics and troubleshooting by the user.

Project templates
For every gateway there is a template providing a step by step setup guide for both protocols in the gateway.

Product templates
Product templates are provided for automatic import of all device data, removing the need for manual work.

Device scan
By using the scanning functionality, users can find devices in the field and import all their data automatically.

Data conversion
Data can be transformed into the desired format, e.g. adjusting offset, scaling or converting from degrees Celsius into Fahrenheit.

Diagnostics
Problems and errors can be detected and solved with Intesis MAPS diagnostics.

Secure and safe configuration
MAPS configuration projects are protected by passwords to prevent unauthorized manipulation of projects and installations.
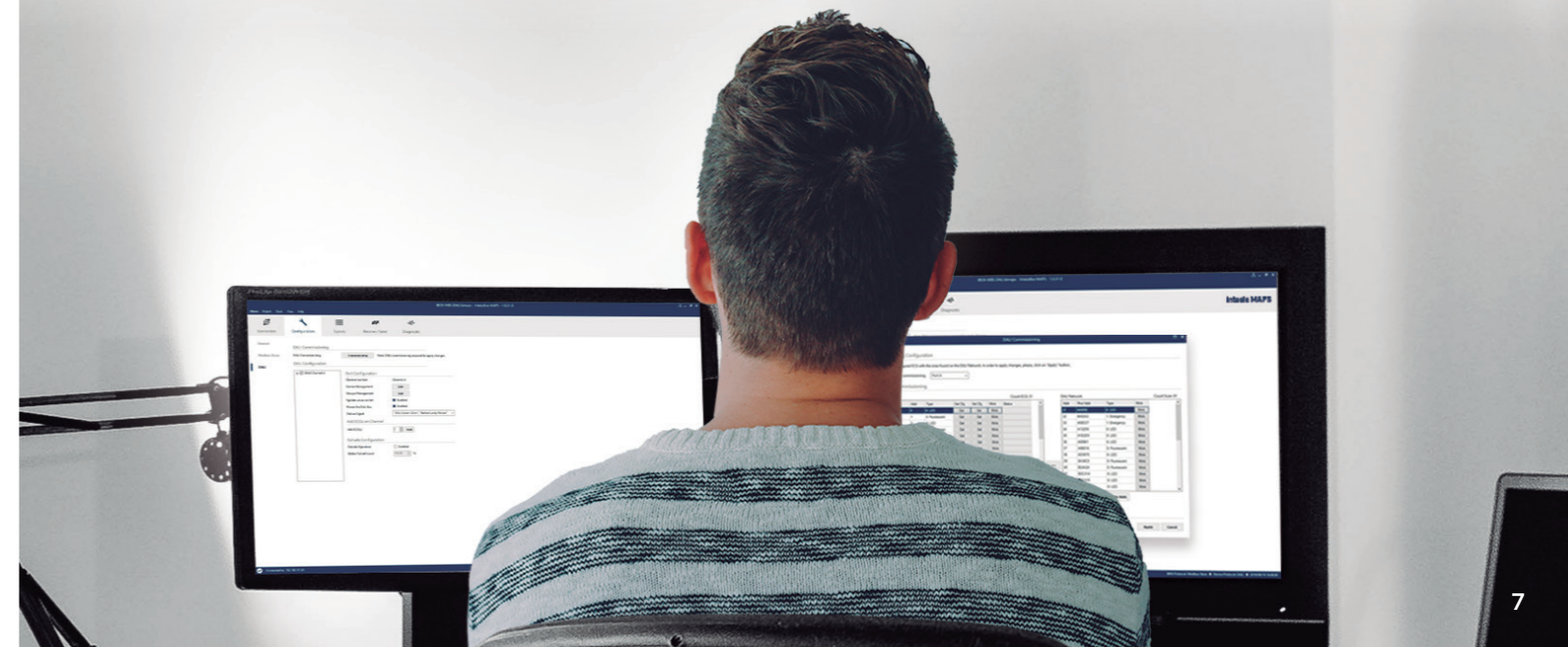
Recovery
Users can save the gateway configuration project to file for e.g. recovery purposes or in case of gateway replacement.

Update information
The tool informs whenever there is a new software version available for the gateway or MAPS itself.

Taking care of your projects in advance

Get ready to start your project even if you are not on site

Intesis MAPS offers you the possibility of starting your projects even without the Intesis device. Simply start creating your configuration file from the device manufacturer manual and/or the BMS or SCADA engineer information.
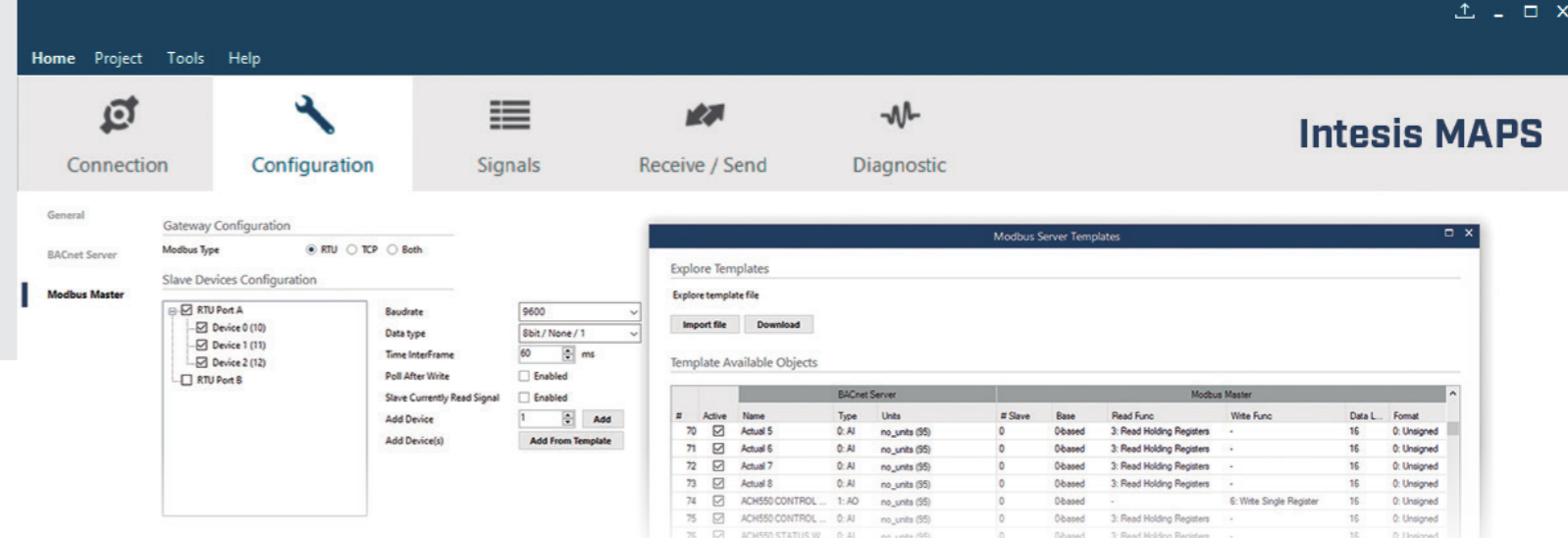
Get everything ready before commissioning

Check your configuration, simulate communications, use our templates, consult our manuals, attend our webinars and get the most of our team experience in a powerful tool. Everything in its right place for a smooth commissioning process.

Template functionality

Thanks to our template functionality you can import already existing templates from third party devices* and include them in your project with a simple click of the mouse. Moreover, you can create your own templates and use them in any of your projects.

* Requires Internet connection.

Fast, save and secure commissioning and troubleshooting

Even if you are not on site, remote connections are available to the gateway through IP*, which ensures the possibility of testing the project during the commissioning stage. You can also troubleshoot any possible issue you may face from your office.

Save money and time with less travelling

A remote connection drastically reduces the need for travelling since commissioning or troubleshooting can be done from anywhere.

Using the Diagnostic section along with the remote connection, you will be able to ensure your projects are up and running on time and with all guarantees.

With four simple steps you will be ready to go:

1 **Create your configuration project**
Use our templates, import options and our documentation to easily create your configuration projects.

2 **Enable communications**
Enable an EtherNet/IP connection to the gateway and we are ready to start communication with the gateway.

3 **Download the configuration**
Download your configuration project from your remote location.

4 **Test and/or troubleshoot**
Once connected and with the configuration downloaded, you will be able to start testing and troubleshooting anything you need connected to the Intesis device.

*Check with your IT department for more information about external communication configurations.

Now, everything is up and running and you can do commissioning and troubleshooting from anywhere

Cloud solutions

Intesis has long experience of building automation protocols and communication solutions for HVAC integration brought to the cloud for straight-forward remote management. Control and monitor any building device, anywhere, anytime.

Cloud Solutions

Driven by the fast adoption of internet technologies globally, demand is growing in the building and home automation markets for smart cloud-based device connectivity solutions.

With Intesis cloud solutions powered by HMS Hub™, customers are able to perform secure remote cloud-based monitoring and control of previously non-connected devices. Packaged as easy-to-deploy end-to-end solutions, Intesis cloud solutions include all needed elements to get you going!

Native application
End-user-oriented Android and iOS app for mobile device management.

Web dashboard
Professional web based device management tool developed for real-time control and monitoring of the installation.

Flexible and adaptable
Adaptable cloud solutions for any project size, need and location, such as residential buildings, schools, bank offices, shops, public buildings and more.

Distributed projects
Ideal for projects with distributed installations. Allows multiple sites to be controlled from the same dashboard.

User and permission management
Grant access for other users and set permissions based on individual needs.
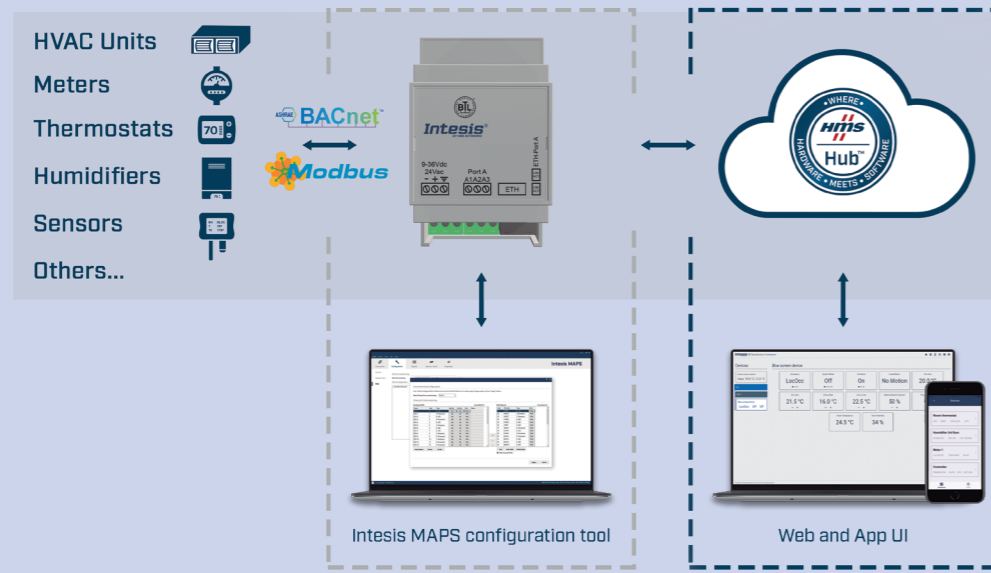
Quick installation
Easy-to-install devices and intuitive configuration tools for fast project commissioning.

Cloud-based device management

Intesis ST Cloud Control—remote management of BACnet and Modbus devices

HVAC Units
Meters
Thermostats
Humidifiers
Sensors
Others...

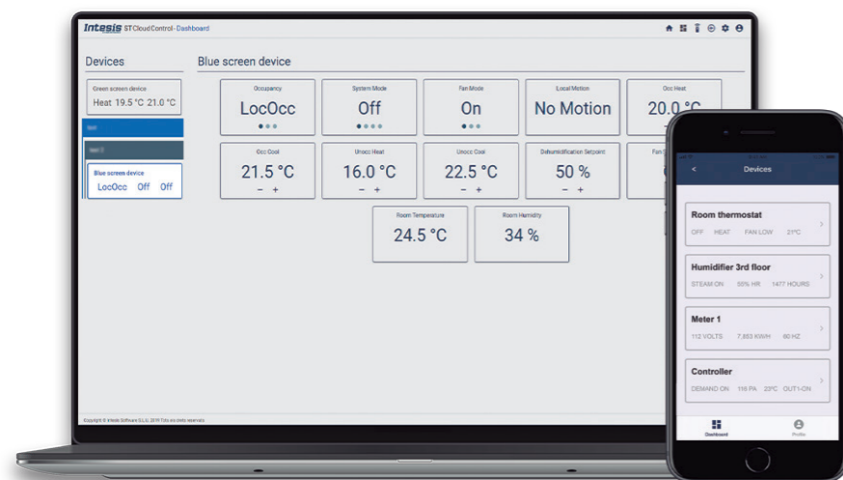Intesis MAPS configuration tool

Web and App UI

Intesis ST Cloud Control is a cloud-based solution from HMS which enables easy monitoring and control of any BACnet or Modbus device from an end user oriented app and a web based dashboard.

Users simply install the ST Cloud Control gateway in the desired location and use Intesis MAPS for PC-based configuration. Here, the widgets can be created (e.g. Booleans, Operating Modes, Dimmers, Analog Values, Error Signals, etc.), mapping them with the BACnet objects or Modbus registers of choice.

Once the gateway is configured and assigned to a user, all devices and widgets will appear automatically in the app and web interfaces, presented in a dashboard.Each user is allowed to create their own, customized dashboards, in which devices and widgets can be renamed and reorganized according to personal preference.

Intesis ST Cloud Control uses HMS Hub™ for communication between connected devices and the the cloud interface. HMS Hub is an industrially proven edge connectivity solution by HMS Networks, which is now also brought to the building management arena to ensure safe and secure transformation of information.

Manage and control any BACnet or Modbus device from an app or web interface

With ST Cloud Control you are able to connect all types of BACnet or Modbus devices to the cloud, for an intuitive and centralized remote device management through an app or a web interface using a common dashboard.

Gateway features
- BACnet IP/MSTP or Modbus TCP/RTU connectivity
- Up to 32 devices can be connected to each gateway
- Up to 12 widgets per device
- Easy device configuration using Intesis MAPS

Next level service
- Industrial grade connectivity now for Building Automation
- Fast and scalable real time edge connectivity over HMS Hub™
- Full data control and protection
- Secure and remote updates during the application lifetime

System Features
- Monitor and control all devices in an intuitive way
- Comes with a native iOS and Android app and a web interface
- Create scenes and interact with multiple concurrent devices
- Calendar that shows the daily planned installation commands
- Notifications keep you updated about system status
- Device sharing and user permissions management
- Multiple site management from a common dashboard

BACnet or Modbus	ORDER CODE	DEVICE VERSION
BACnet or Modbus	INSTCMBG0040000	4 D.V.
	INSTCMBG0080000	8 D.V.
	INSTCMBG0160000	16 D.V.
	INSTCMBG0320000	32 D.V.

Make conventional BACnet or Modbus devices smart with Intesis ST Cloud Control

ST Cloud Control—Make BACnet and Modbus thermostats smart

The demand for cloud control of building automation devices is constantly increasing, and the conventional device manufacturers are losing business against smart devices.

Creating and maintaining an IoT infrastructure is a complex task, often distracting device manufacturers from what they are good at. ST Cloud Control provide cloud connectivity to any BACnet or Modbus device.

ST Cloud Control provides a cloud-based, easy-to-install solution which turns any BACnet or Modbus device into smart one. This reduces the time to market of smart devices, while offering a general solution for all brand products.

The flexibility and scalability of the platform allows to integrate as many variables as needed of an unlimited number of devices, and also provides a user friendly Android and iOS app for the customers to have on hand control.

Benefits
- Reduce time to market
- Reduce infrastructure and maintenance costs
- Increase the user's comfort
- Increase the energy savings
- Reduce the configuration time

ST Cloud Control—Establish a central control point for your installation

Since BACnet and Modbus are two of the most used protocols in the buildings, the number of devices using those protocols is increasing day by day.

In many installations, using a BMS is not the most convenient solution due to configuration complexity and price. However, a management tool is needed.

ST Cloud Control fits perfectly in automation projects with buildings in different locations (petrol stations, shop chains, rental apartments…) or with small automation needs (schools, small hotels, worker camps…).

In these installations the local management is highly appreciated, while a general installation view of all sites from a common dashboard is a must to apply different energy saving or maintenance policies.

Using ST Cloud Control, you will be able to connect any Modbus and BACnet devices to the cloud for an intuitive and centralized management.

Thanks to the web-based dashboard there is no need to install or configure any additional software, simplifying the project commissioning.

Using any web browser, all devices can be managed both locally and remotely, while the android and iOS app provide control and monitoring.
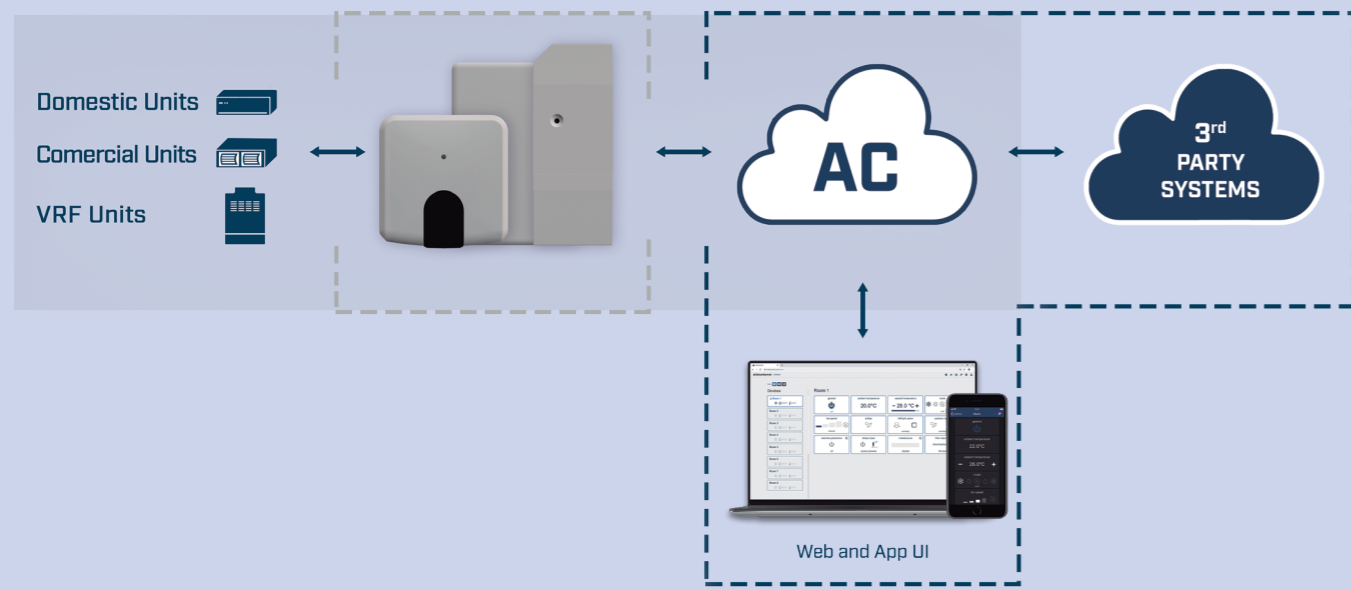
Benefits
- Monitor and control the status of all connected devices locally and remotely
- Provide different access permissions to each user
- Minimize the commissioning time
- Improve maintenance efficiency
- Improve the performance of your installation

Intesis AC Cloud Control—HVAC IoT solution for building and facility management

Domestic Units
Comercial Units
VRF Units

AC

3rd PARTY SYSTEMS

Web and App UI

AC Cloud Control is an HVAC IoT solution created by Intesis for building and facility management. A cloud-based remote-control system, that allows comfortable and intuitive control of air conditioners and heat pumps from a smartphone, tablet, smart watch or from a simple internet browser.

The AC Cloud Control gateways, developed together with the major AC manufacturers, offer cloud connectivity to a wide range of compatible AC units. No cables are needed for cloud connectivity, as the devices use Wi-Fi technology to bring all the data to the cloud.

The bidirectional communication between Intesis devices and the AC unit, ensures the end user can keep using the manufacturers remote controller if desired, while keeping the cloud system updated with the real status of the HVAC units.

Once the communication in between the device and the cloud system is stablished, the AC unit can be easily managed. All devices can be connected to a common dashboard regardless of the air conditioner or heat pump manufacturer, offering a new smart functionalities ensuring energy savings and unit maintenance.

The devices can be managed using a web-based dashboard, so no additional management tool needs to be be installed. User friendly Android and iOS apps are available.

More advanced integrations are also available thanks to the professional Full REST API, available for cloud to cloud communication. The API is used for many cloud integrations like Google Assistant, Amazon Alexa or IFTTT among others.

Integrate any air conditioning system and control it from anywhere

AC Cloud Control Functionalities

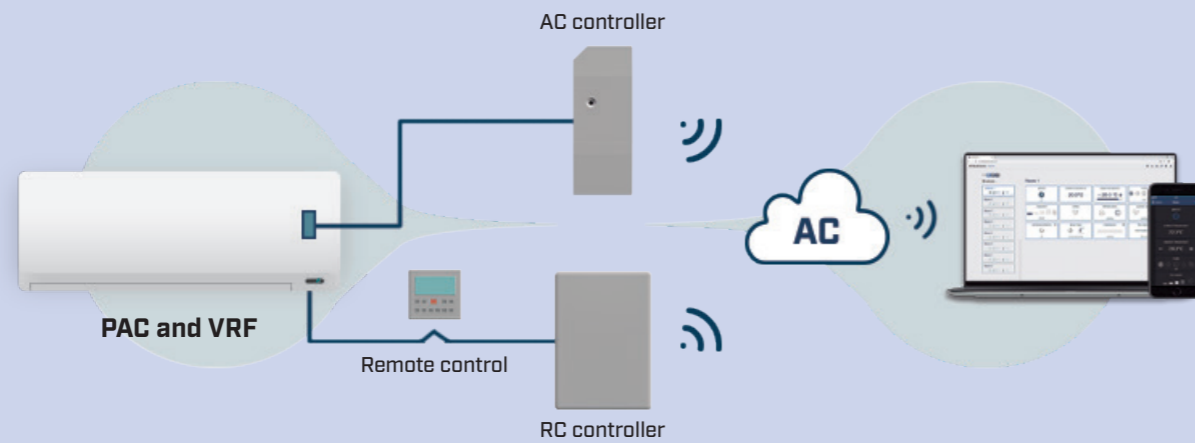| Remote control	ON/OFF	Tº Set point	Mode	Ambient Tº	Fan & vane control
Smart	Email & push notifications	Timer & scenes	Multi-language		Error codes & descriptions
	Voice over	Anti-frost & overheat	Operating hours		Auto updates
Professional	Maintenance & filter cleaningl	Binary input	Schedule calendar	Tº limitation	Multiple sites

AC Cloud Control main strengths

Multiple brands and multiple sites
Organize any brand and model in three different levels.

Energy saving and maintenance functionalities
Special functionalities to help our customers increase energy efficiency.

Secondary users
Manage who can monitor and control each unit.

Professional API for 3rd party integration
Connect your system to Intesis cloud solutions and offer bidirectional HVAC control to your customers.

Email and push notifications
Be aware of everything that happens in your climate system.

OEM projects
Reduce the time to market and maintenance costs, our R&D resources are at your disposal.

Smart interfaces for air conditioning and heat pumps

AC Cloud Control devices are developed to interface with AC units and provide cloud connectivity using the local Wi-Fi network. They are b/g/n compatible and use 2.4GHz frequency, ensuring a strong data connection within the installation. Communication issues are avoided thanks to IoT-optimized communication protocols. They are firewall friendly since only outbound ports are used, ensuring an easy and secure configuration.

AC controller

PAC and VRF

Remote control

RC controller

Specific features for brand specific devices

■ Devices manufactured along with the major AC manufacturers use the proprietary communication protocol of each manufacturer.

■ Offers advanced parameters like error signals, error codes, power consumption*.

■ The AC controller is directly connected to the internal electronic card, and specifically designed for RAC and domestic lines.

■ The RC controller is connected to the HVAC remote control bus, and specifically designed for PAC and VRF.

Specific features for universal controller

■ Offers compatibility for thousands of AC models.

■ Only requires an indoor unit that has an IR receiver working with a standard wireless infrared remote controller.

■ Equipped with an IR receiver.

■ Allows using the universal and the manufacturer's controller at the same time.

■ The Universal controller is specifically designed for PAC, RAC and VRF.

PAC, RAC and VRF

IR

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*Depending on the AC brand.

DAIKIN	ORDER CODE	POINT VERSION
AC Domestic units to Wi-Fi (ASCII)	INWFIDAI001I000	1 I.U.
VRV and Sky systems to Wi-Fi (ASCII)	INWFIDAI001R000	1 I.U.
FUJITSU		
RAC and VRF systems to Wi-Fi (ASCII)	INWFIFGL001I000	1 I.U.
	INWFIFGL001R000	1 I.U.
LG		
VRF systems to Wi-Fi (ASCII)	INWFILGE001R000	1 I.U.
MITSUBISHI HEAVY INDUSTRIES		
FD and VRF systems to Wi-Fi (ASCII)	INWFIMHI001I000	1 I.U.
Domestic units to Wi-Fi (ASCII)	INWFIMHI001R000	1 I.U.
Panasonic		
Etherea AC units to Wi-Fi (ASCII)	INWFIPAN001I000	1 I.U.
ECOi and PACi systems to Wi-Fi (ASCII)	INWFIPAN001R000	1 I.U.
TOSHIBA		
VRF and Digital systems to Wi-Fi (ASCII)	INWFITOS001R000	1 I.U.
UNIVERSAL		
Universal IR air conditioner to Wi-Fi (ASCII)	INWFIUNI001I000	1 I.U. with Binary Inputs

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Never before has it been so easy to check AC compatibilities

AC Compatibility Tool

The new AC compatibility tool provides a fast and reliable way to check the compatibility of air conditioning units with Intesis interfaces.

Forget the time-consuming task of searching an AC unit's reference into the endless compatibility document. Thanks to the search engine of the new web-based tool, get the answer you are looking for with a click of the mouse.

In addition, the maintenance of the compatibilities is much easier now and therefore we ensure a tool always up to date.

Search Engine
Type the first letters of your AC reference and get suggestions to make the search even easier.

Compatible AC units
More than 2500 models already in our database. New units included every day!

Compatible interfaces
Get an overview of all the compatible one-to-one Intesis interfaces with the AC unit searched.

Updated information
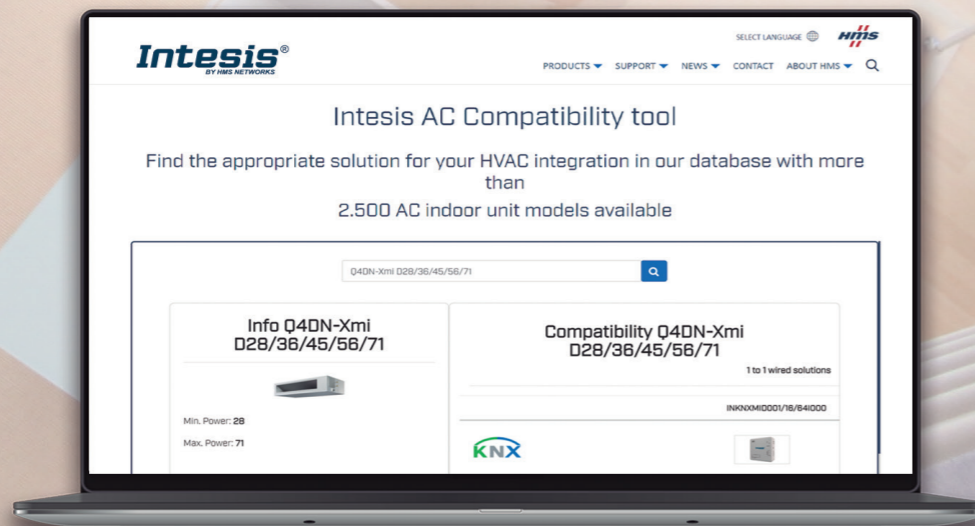We can ensure updated information thanks to the ease of maintenance of the tool.

The support behind
Can't you find your AC unit in the database? Send us a request and we will indicate the best solution for your AC.

Intesis®
BY HMS NETWORKS

SELECT LANGUAGE | HMS

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Intesis AC Compatibility tool

Find the appropriate solution for your HVAC integration in our database with more than

2.500 AC indoor unit models available

Q4DN-Xmi D28/36/45/56/71 🔍

Info Q4DN-Xmi
D28/36/45/56/71

Compatibility Q4DN-Xmi
D28/36/45/56/71

1 to 1 wired solutions

Min. Power: 28
Max. Power: 71

INKNXMID001/16/84I000

KNX

Intesis helps you to reduce your carbon footprint

Intesis is committed to reduce the CO2 emission of air conditioning units by offering the best integration product portfolio.

For more than 10 years, we have provided gateways to control more than 700,000 air conditioning units around the world. The estimated energy consumption from this units is more than 1.3 billion KWh/year. But thanks to our gateways, 411 million kWh are saved, that means 121 million Kg CO2 savings.

This figure is equivalent to the total CO2 that 527 million PCs generate during an hour, or the same than almost 5 million trees absorb in one year.

CO2 saved by...
4,851,582 trees
in one year

CO2 generated by...
18,951 European people
in a year

CO2 generated by...
527,345,920 PC working
during one hour

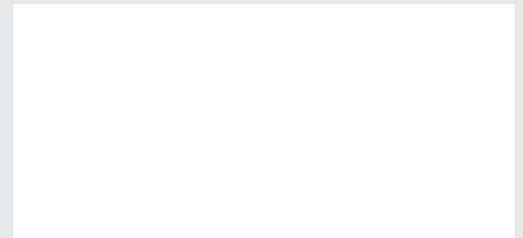CO2 generated by...
275,658 flights
from London to New York

Work with HMS.
The number one choice for Industrial Information & Communication Technology.

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Find your nearest contact here:

www.hms-networks.com/contact

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