

# ABOUT ASTRUM 2021

**ASTRUM**  
TECHNOLOGY



Begin 2012 in Istanbul

HQ - R&D in Istanbul

Hong-Kong Trading Office



Expert team on Smarthome,  
BMS and IoT



Lean methodology is on every  
aspect of our company

## MEMBERSHIPS & CERTIFICATES



CEDIA<sup>™</sup>  
MEMBER

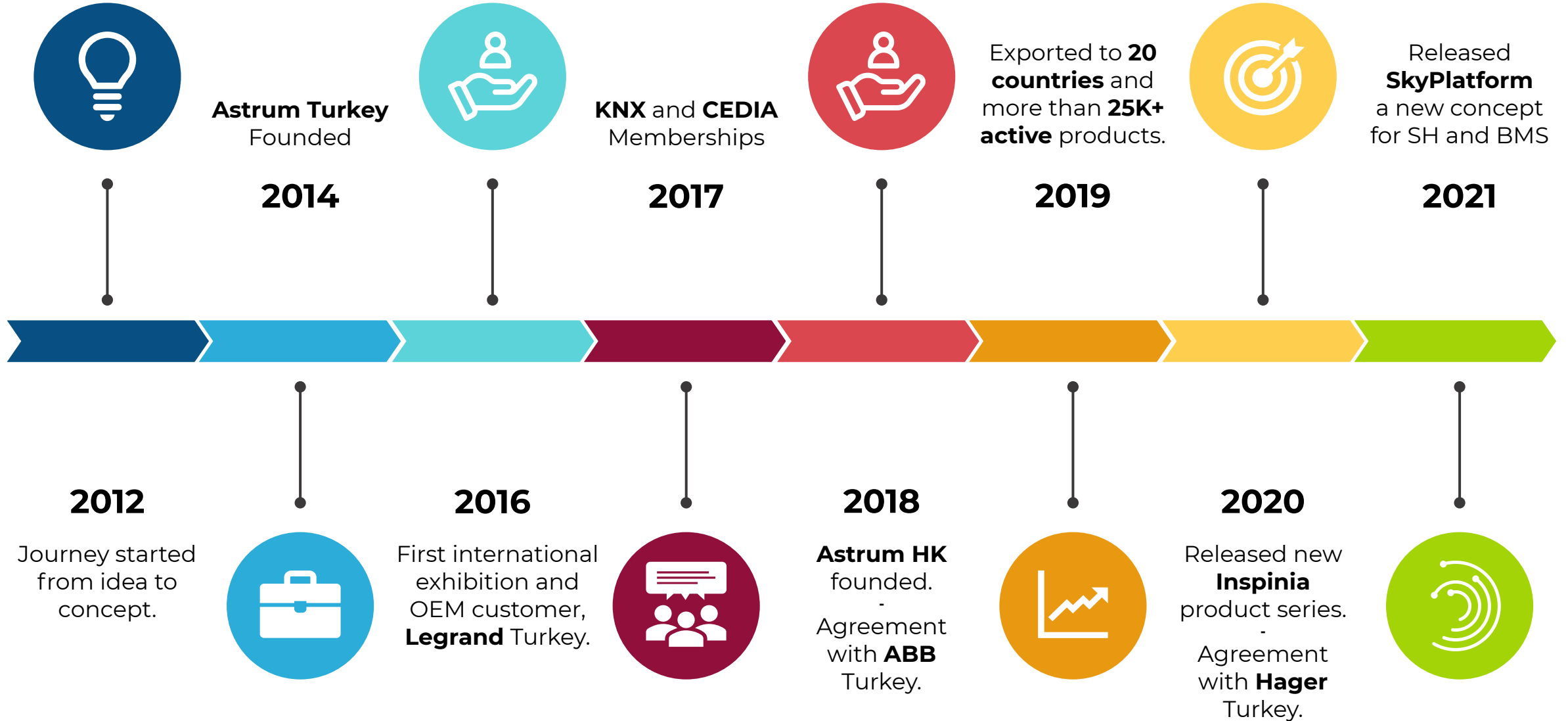


## INTELLECTUAL PROPERTY RIGHTS



All hardware and software developments  
are %100 done by our expert team and all  
intellectual property rights belongs to us.

# HISTORY



# BRANDS



Our web-based cloud platform where Skything framework based products can be configured and monitored.

**[www.skyplatform.io](http://www.skyplatform.io)**



Inspinia series of products are based on the Skythings framework and specially designed for smart home, smart building and hospitality automation.



- Main Company -



Framework designed to run with low system requirements for embedded systems which allows a flexible programming structure and a large library that is constantly developing.

## Synergy

New brand on smart air conditioning and energy management. A series of products based on the Skythings framework and programmable with Skyplatform.



 **hager**

**ABB**

**JUNG**

 **legrand®**



# ASTRUM TECHNOLOGY

## INTERNATIONAL EXHIBITIONS

FRANKFURT LIGHT + BUILDING	2016 - 2018
MCE MILANO	2018
AMSTERDAM ISE	2019
DUBAI MIDDLE EAST ELECTRICITY	2019



# WHERE WE REACH

Over 50,000 active products in hundreds of projects. Dozens of domestic and international elite projects have been completed successfully.

- Residences
- Hotels
- Offices
- Commercial Buildings
- Shopping malls
- Hospitals
- Public buildings

40+ COUNTRIES

100K+ ACTIVE PRODUCTS

250+ ACCOUNTS

**ASTRUM**  
TECHNOLOGY

GREECE  
AZERBAIJAN  
LITHUANIA  
LEBANON  
ISRAEL  
CYPRUS  
IRAQ  
MOROCCO  
ROMANIA  
CZECHIA  
RUSSIA  
IRAN  
ITALIA  
QATAR  
UAE  
SAUDI ARABIA  
JORDAN  
ESTONIA  
EGYPT  
GERMANY  
TAIWAN  
GANA  
TUNISIA  
FRANCE  
KAZAKHSTAN  
OZBEKISTAN  
UNITED KINGDOM  
SINGAPOUR  
INDIA  
PAKISTAN  
AFGHANISTAN  
AUSTRALIA

PRODUCTS & SOLUTIONS

2021

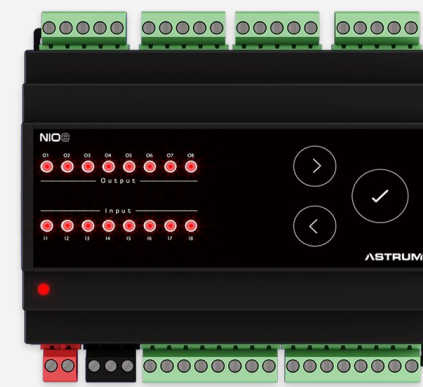
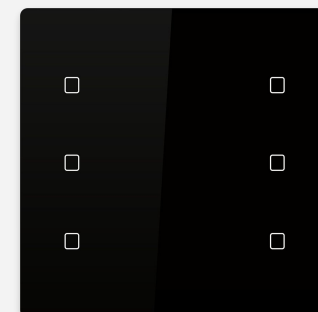
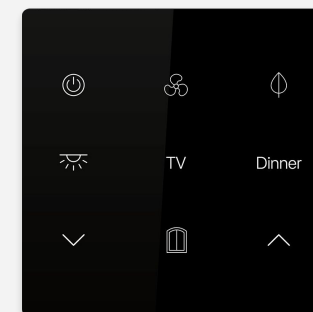
**ASTRUM**  
TECHNOLOGY



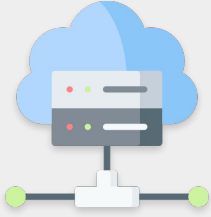
# SKYPLATFORM



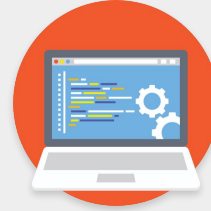
BASED ON FRAMEWORK



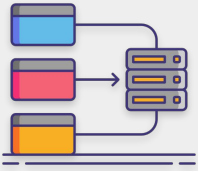
# SKYPLATFORM ADVANTAGES



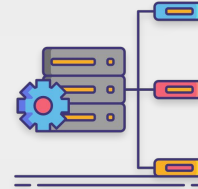
Online configuration and programming devices via cloud



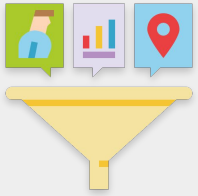
Always up-to-date software with flow-based programming



Live monitoring of products and connected devices via cloud



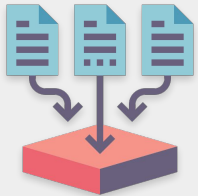
Multiple device configuration and programming via cloud



Data collection from devices with filtering and importance criteria



Analysis of collected data and detailed reports



Import/export configuration files and parameters



Easy integration possibility with Rest API



The logo for Sky Things, featuring a stylized circular graphic with concentric arcs and dots, followed by the text "SKY THINGS" in a bold, sans-serif font.



Skythings framework is the core software of our smarthome, building management and energy management products. Applications built on this framework, allows integrators wide range of capabilities and solutions in projects. Skythings configuration and programming based on cloud and uses native drivers to access to many protocols simultaneously. Skythings framework is configured by Skyplatform which is a flow-based configuration platform.

## Framework Features

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- Multiprotocol operations
- Logic functions
- Math functions
- Data logging
- Protocol gateway
- Centralized management
- Online icon library
- Up to 5000 data points
- Scene creation
- Astronomical time
- Scheduled operations
- Flow-based easy programming
- Editable UI interface
- Online/Offline configuration
- Cloud programming
- Live monitoring
- Built-in web server/interface

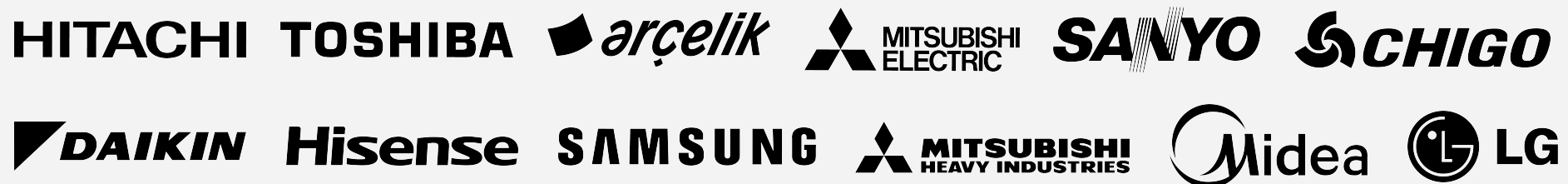
## Supported Protocols

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## Supported HVAC VRF Brands

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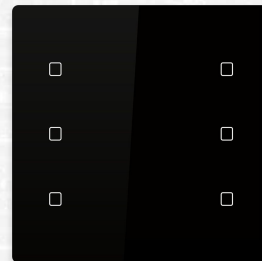
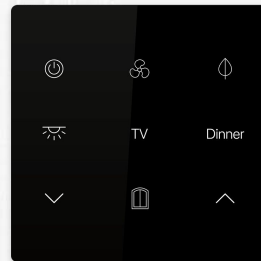
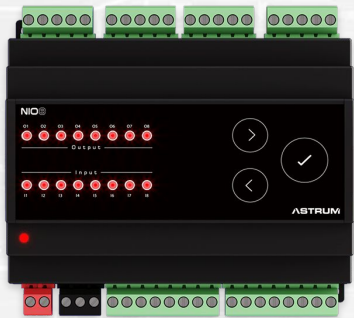


# PRODUCT RANGE

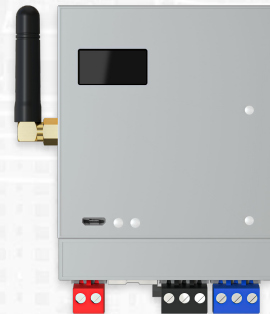
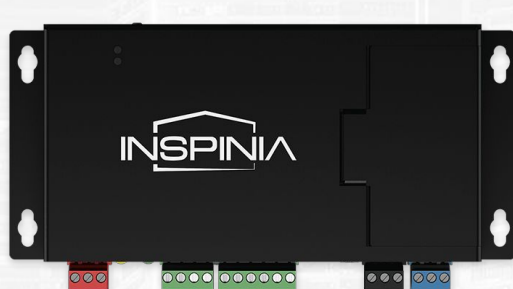
**ASTRUM**  
TECHNOLOGY



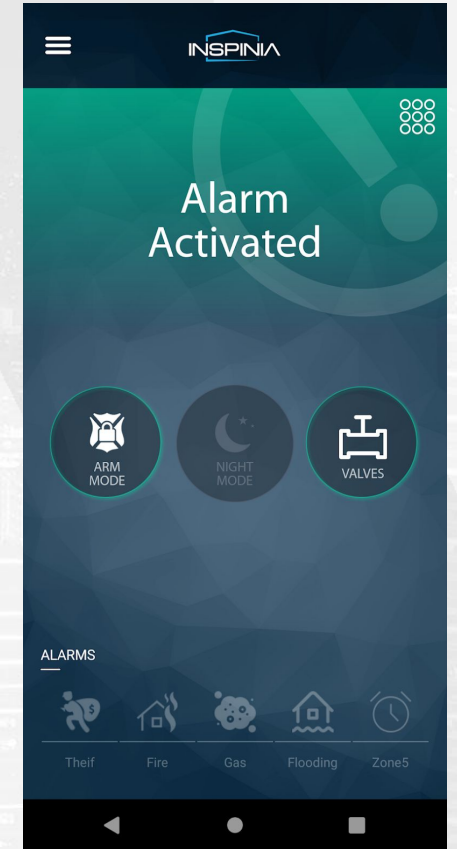
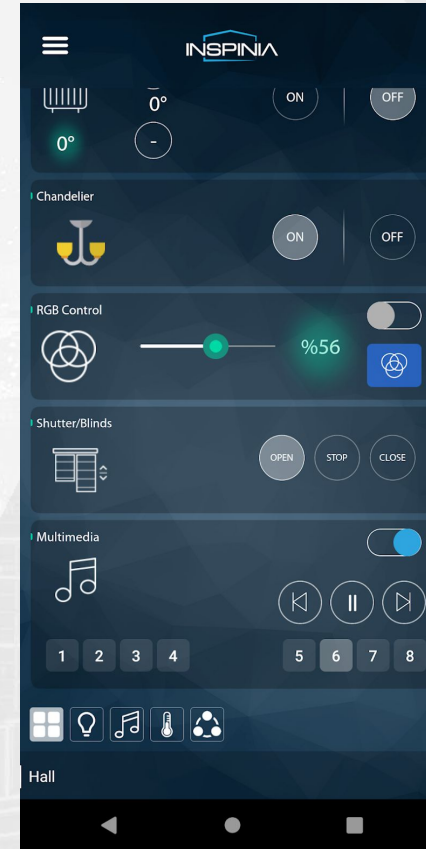
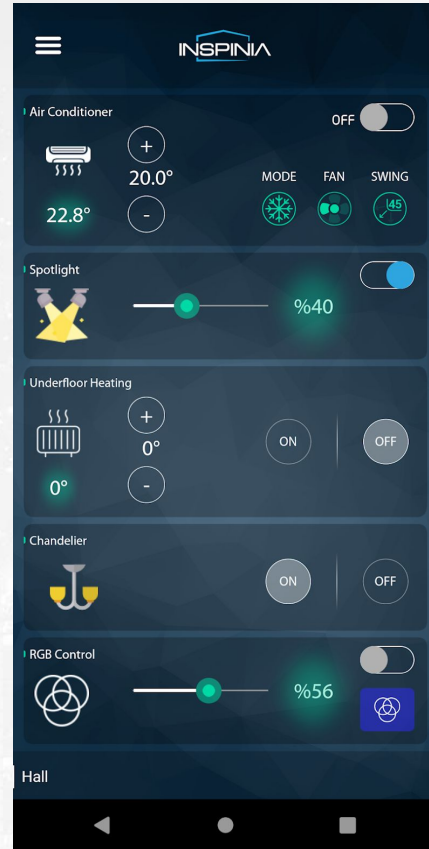
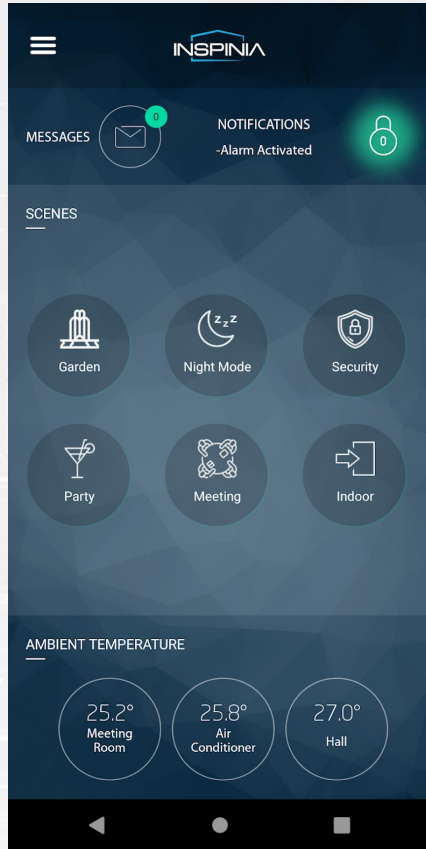
SMART TOUCH PANELS  
4/8/10 INCH



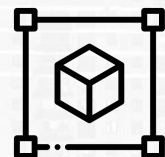
KEYPADS AND ACTUATORS



CONTROLLERS AND SERVERS  
PROTOCOL GATEWAYS



Android & iOS



Many control objects



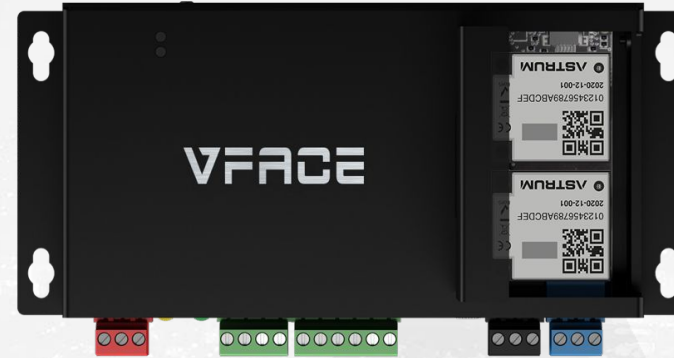
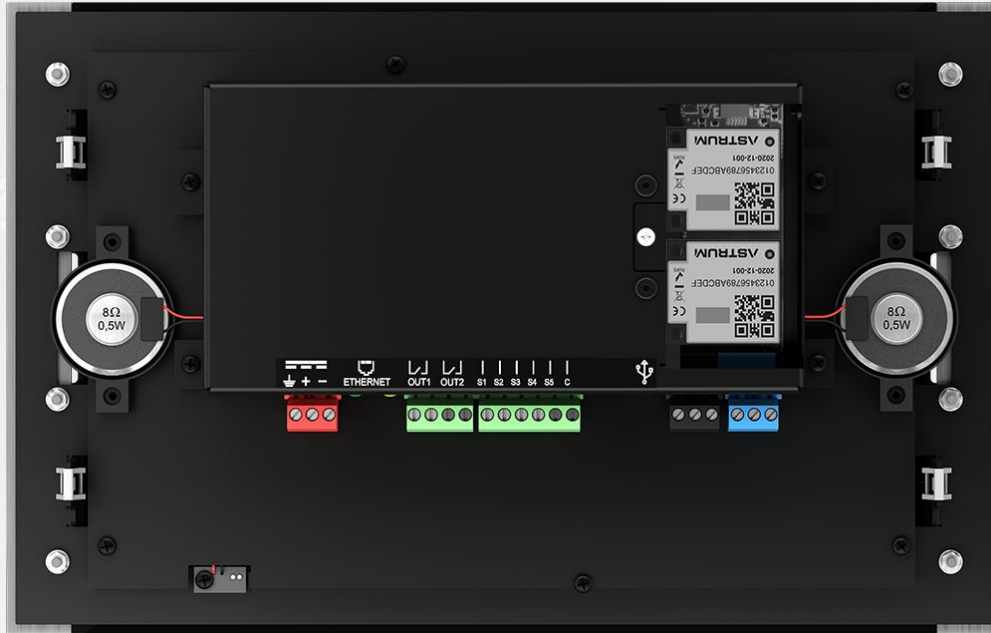
Free Cloud Service



Mobile-on-call

# CONNECTIVITY APPROACH

**ASTRUM**  
TECHNOLOGY



All products are compatible with our future-proof add-on concept. Various kind of add-on modules allows to extend the connectivity options of products such as; KNX, RS485, HVAC systems, Lighting Systems and other wired and wireless protocols natively.

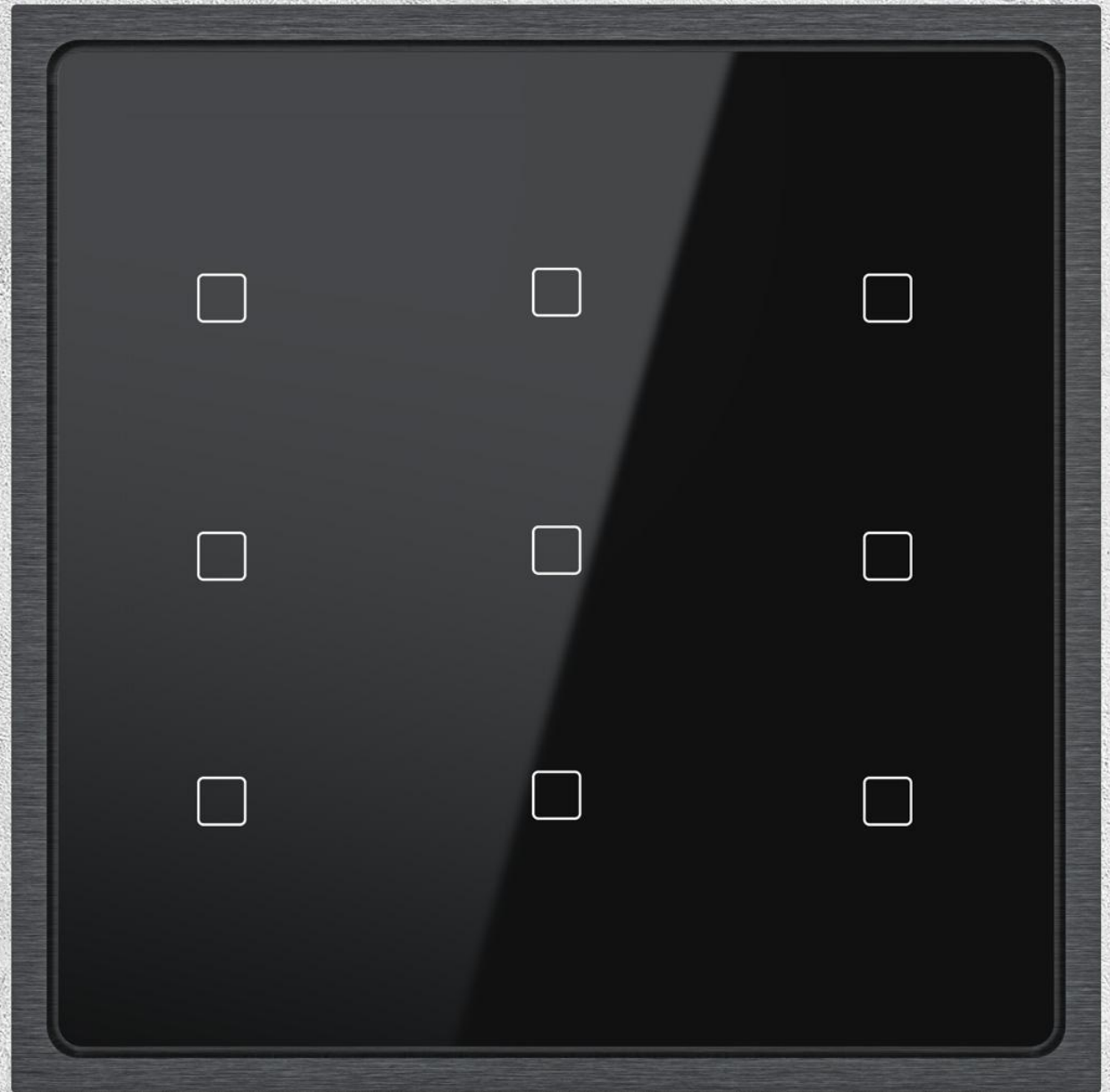
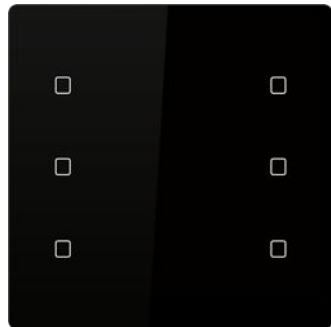
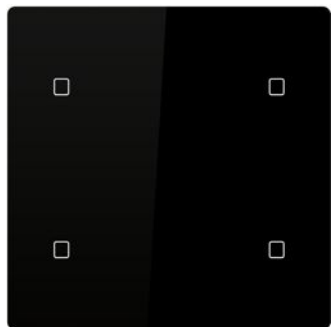
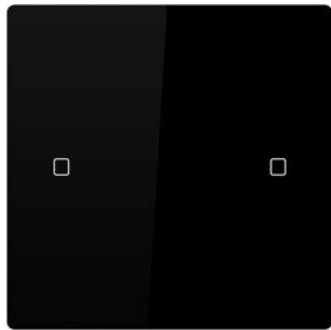
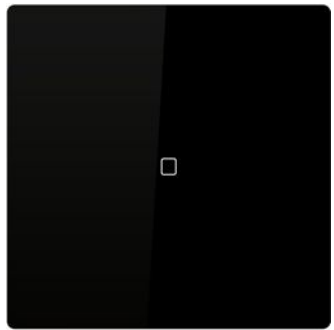


## KEYPADS & ACTUATORS



# STANDARD

## 9 TOUCH POINT





## ALL-IN ONE SOLUTION

CUSTOMIZABLE KEYPAD

LASER MARKING ARTWORK

THERMOSTAT FUNCTION

ROOM CONTROLLER



DND

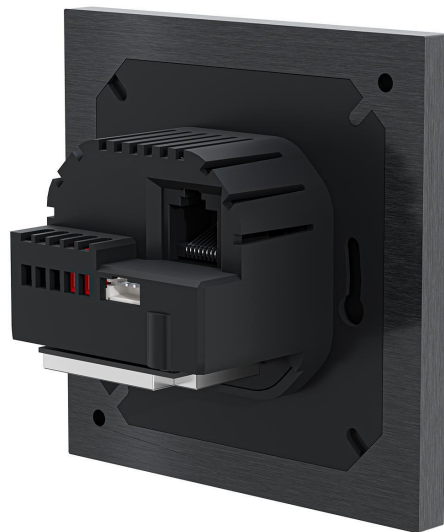


JALOUSIE

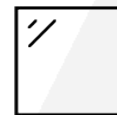


DIMMER





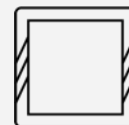
Linux Based OS  
w/ SkyThings Framework



1.5" Oled LCD  
128x64px



1x I, 1x O



Metal Frame Options  
Black / Silver / Gold



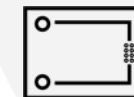
Box Standards  
- German Box  
- 2M Italian Box



Temperature &  
Humidity Sensor



Ethernet (POE)



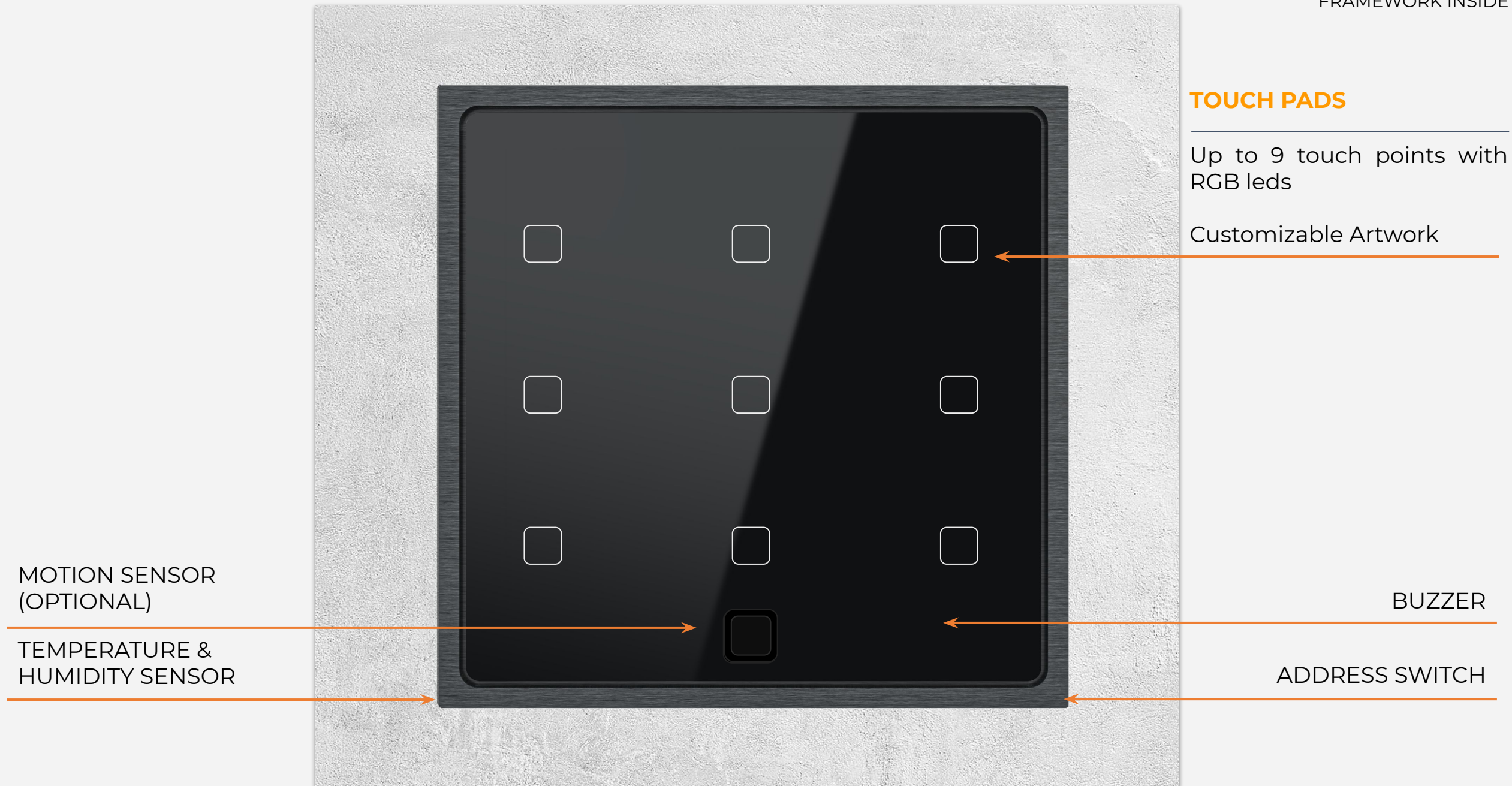
1 x Add-On Port



Motion Sensor



# INSPINIA KEYPAD





# INSPINIA KEYPAD THERMOSTAT

**LCD and TOUCH PAD**

Upto 7 touch points with RGB leds and a 1.5" LCD

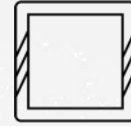
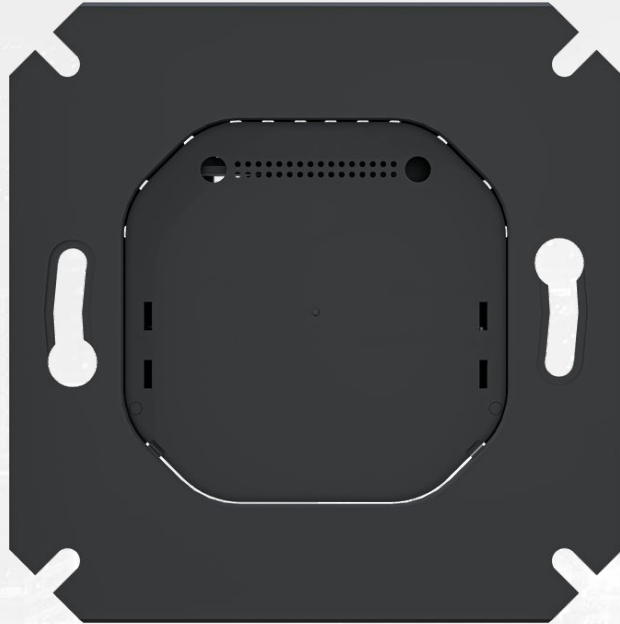
MOTION SENSOR  
(OPTIONAL)

TEMPERATURE &  
HUMIDITY SENSOR

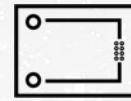
BUZZER

ADDRESS SWITCH





Compatible with  
4" Touch Panel & Keypads



1 x Add-On Port



Compatible Box Standards  
- German Box  
- 2M Italian Box



Ethernet (POE / PPOE)



Zigbee (Optional)



Bluetooth (Optional)



1x I, 1x O

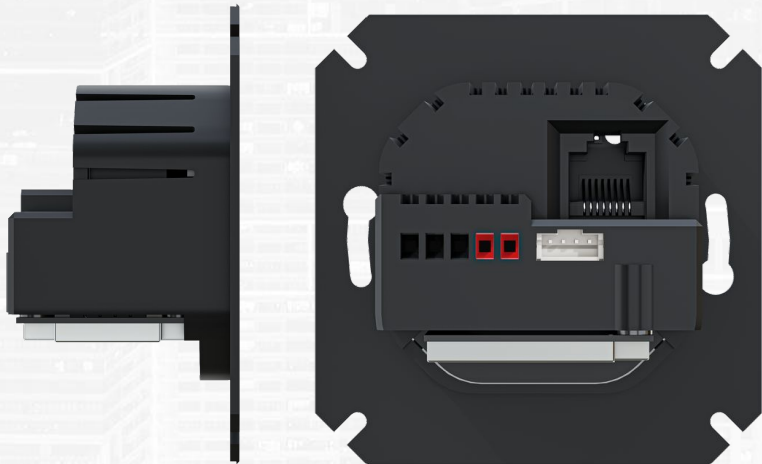
## 2 DIFFERENT BCU OPTIONS:

BCU-S24

- 24VDC IN + PASSIVE POE

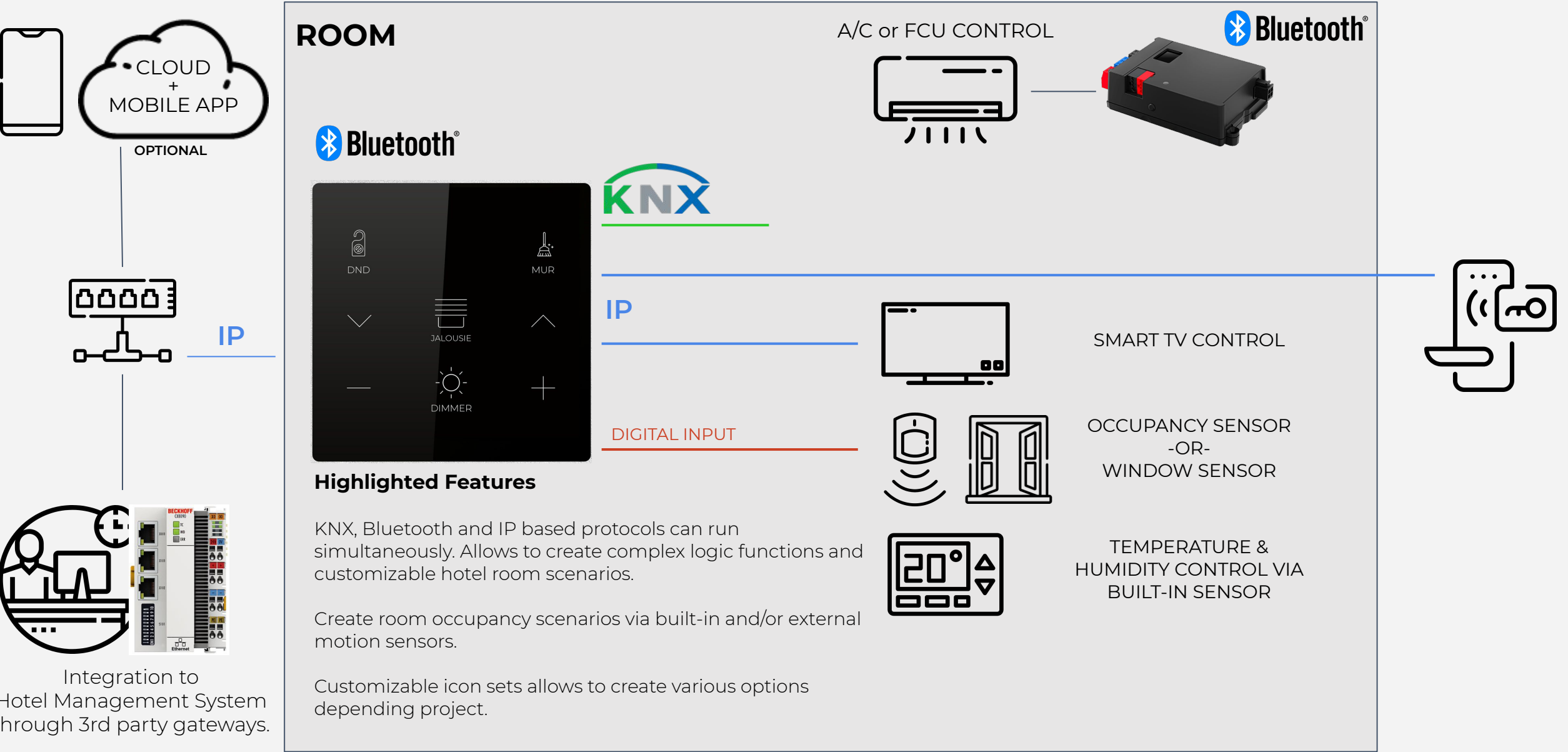
BCU-POE

- ACTIVE POE

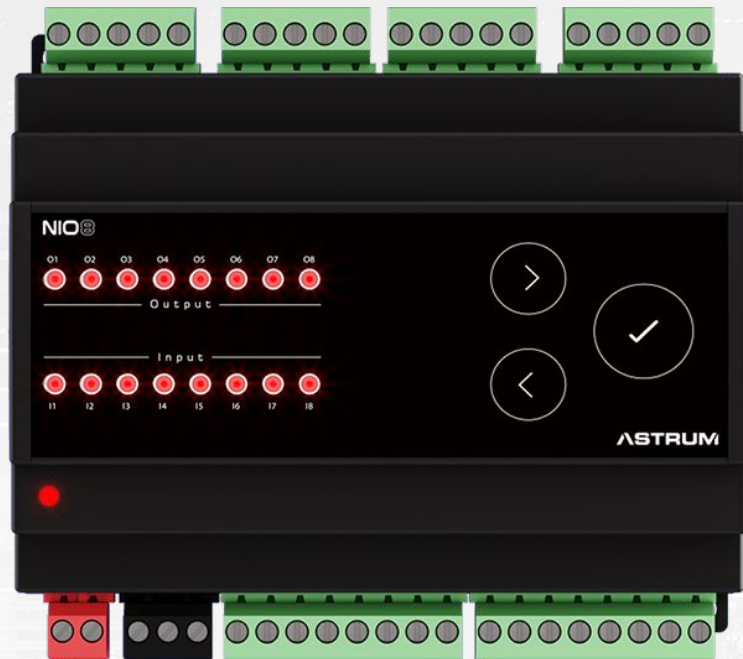


# HOSPITALITY SOLUTION w/ IT-S9F

This example presents how Inspinia Keypad controls various products in a hotel room.







RS485  
Communication



8 x Digital Input



8 x 10A Relay

Cost-effective solution to control lights, shutters, valves etc.  
Suitable for residential, hospitality and hvac control solutions.

Compatible with INSPINIA Touch panels and keypads.

TOUCH PANELS &  
ROOM CONTROLLERS

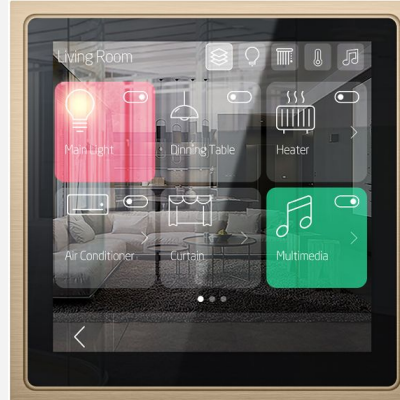
# SMART TOUCH PANELS



Silver

Black

Gold



## HIGHLIGHTED FEATURES

- ANDROID / LINUX BASED OS
- 4 / 8 / 10 INCH OPTIONS
- CLOUD MOBILE APP & VOIP INTERCOM
- CONFIGURABLE UI, DASHBOARD WIDGETS
- LIGHT, SHUTTER, AIR CONDITIONING, MULTIMEDIA, CAMERAS AND 10+ VARIOUS CONTROL OBJECTS
- FLEXIBLE PROGRAMMING, 10000+ ONLINE ICON LIBRARY
- SUITABLE FOR SMART HOME AND SMART HOSPITALITY
- METAL FRAME & BAR OPTIONS
- SUITABLE FOR RETROFIT APPLICATIONS (ON-WALL)
- CONNECTIVITY OPTIONS VIA ADD-ON MODULES

BASED ON FRAMEWORK  SKY THINGS



## 4SQ | FLUSH MOUNT



 **7 mm**  
THICKNESS

## 4RT | ON-WALL



 **11 mm**  
THICKNESS





# INSPINIA 4RT ON-WALL TOUCH PANEL



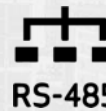
Linux Based OS  
w/ SkyThings Framework



4" Capacitive Panel  
IPS, 400 Nit LCD



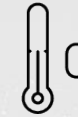
Wi-Fi



RS-485  
Communication



Ambient Light  
(Side RGB Leds)



Temperature  
Sensor



Humidity Sensor



Bluetooth



Haptic Feedback



1W Speaker



4x Microphone



# RETROFIT APPLICATION EXAMPLE

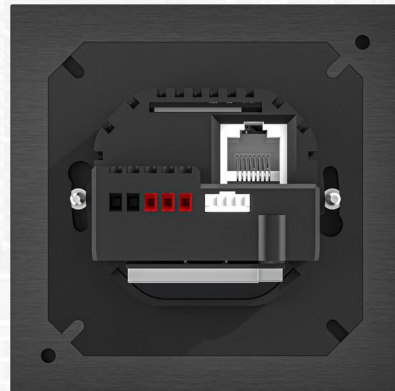
This example presents retrofit solution of Inspinia 4W. Device can connect different RF protocols, as well can control IP based products and act as gateway. Allows cloud mobile app control through Wi-Fi.



92mm



INS4SQ



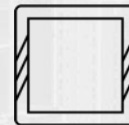
Linux Based OS  
w/ SkyThings Framework



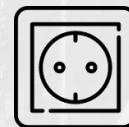
4" Capacitive Panel  
IPS, 400 Nit LCD



2 x I/O



Metal Frame Options  
Black / Silver / Gold



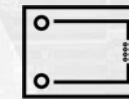
Compatible Box Standards  
- German Box  
- 2M Italian Box



Ethernet (POE/PPOE)  
(BCU Option)



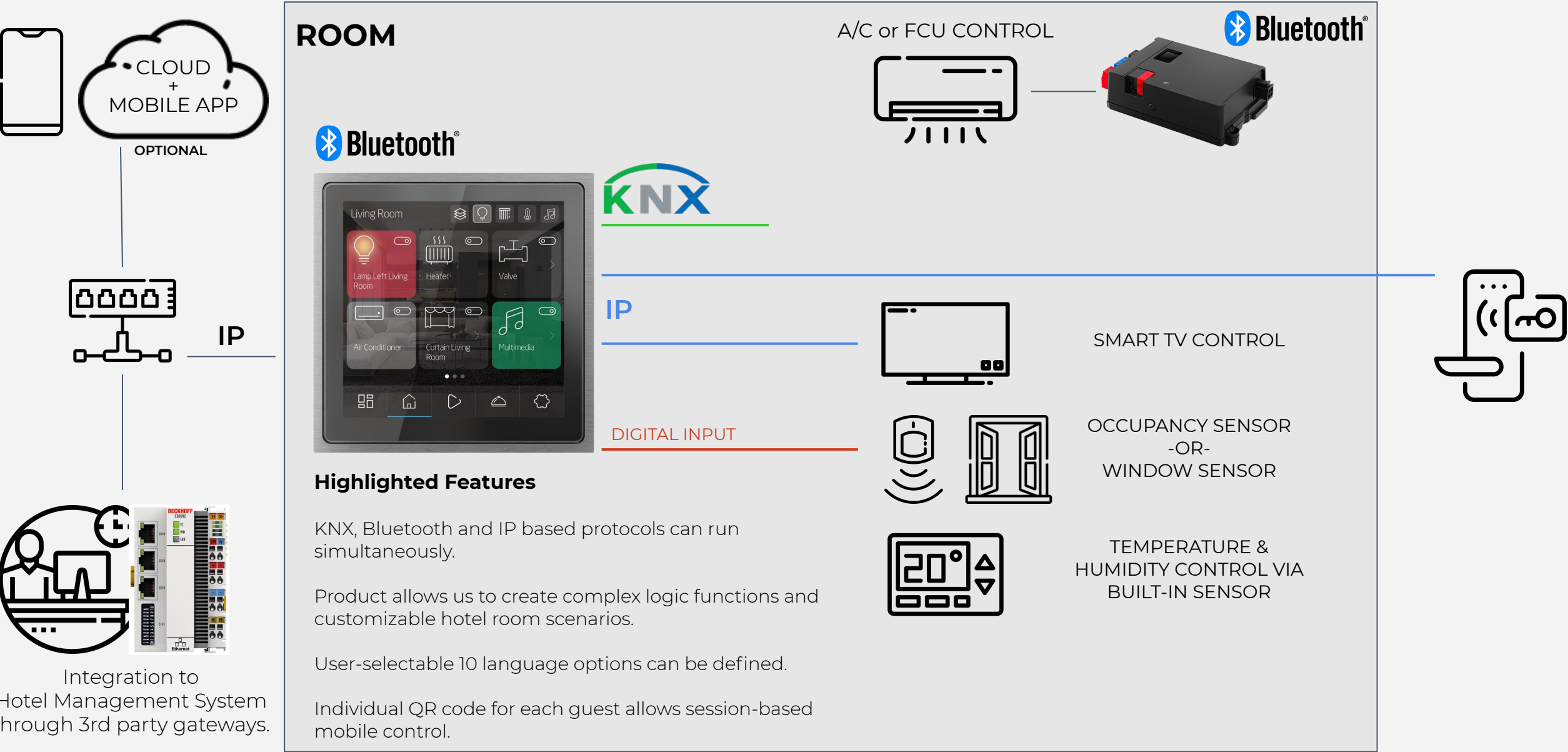
Temperature &  
Humidity Sensor



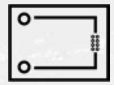
1 x Add-On Port

# HOSPITALITY SOLUTION w/ INS4SQ

This example presents how Inspinia 4F controls various products in a hotel room.







2 x EXTENSION  
ADD-ON PORTS



2 x 2W SPEAKERS



ANDROID 6.0



POE GIGABIT  
ETHERNET



2.4 GHZ  
ANTENNA



MICROPHONE



TEMP  
SENSOR



HUMIDITY  
SENSOR



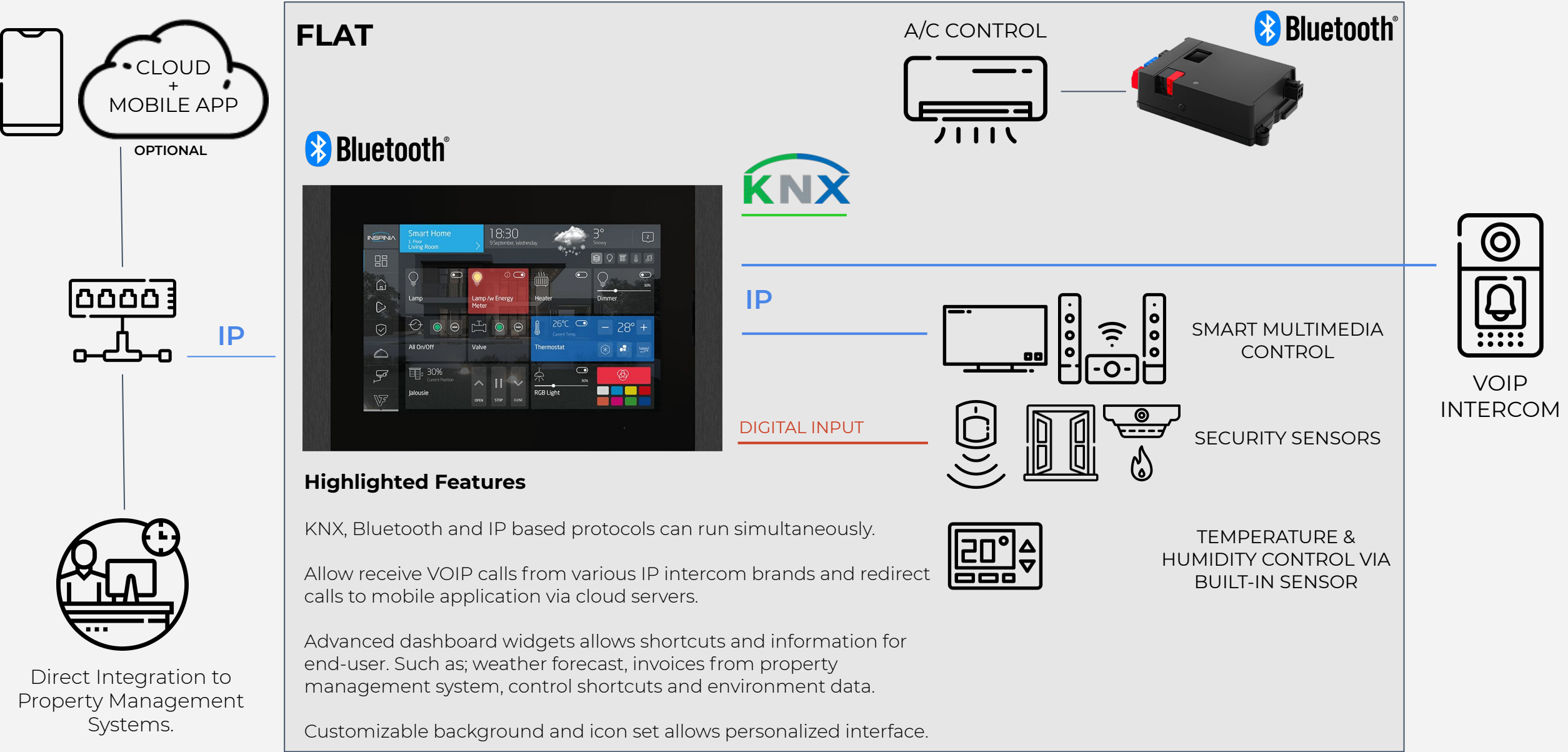
QUAD CORE CPU  
+ 1 GB RAM  
+ 8 GB MMC



5 POINT  
MULTI TOUCH

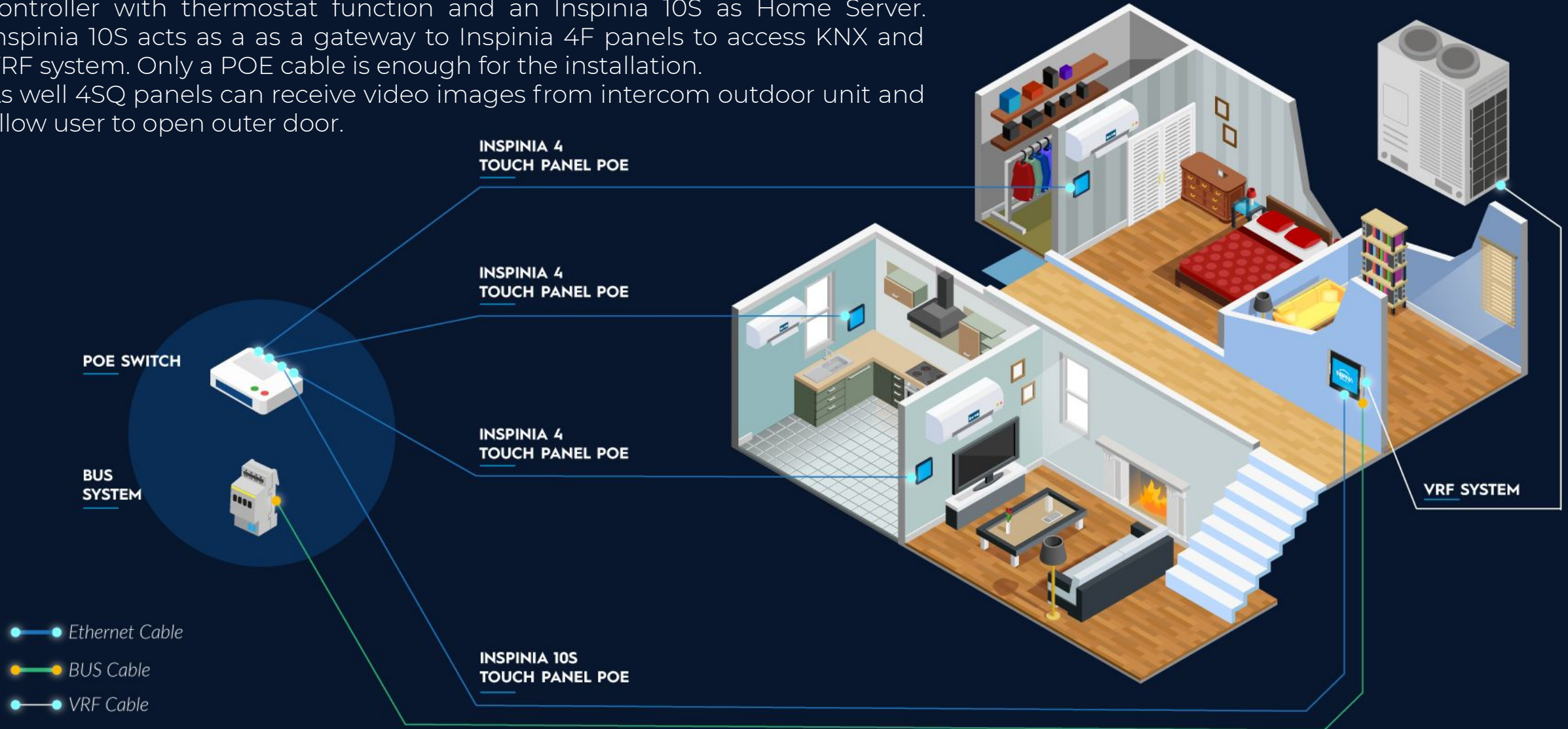
# RESIDENCE SOLUTION - INS8SQ / INS10SQ

This example presents how Inspinia 8F controls various products in an apartment.



# SMARTHOME WITH HVAC EXAMPLE

This example presents Inspinia 4SQ or Keypad for each room as a room controller with thermostat function and an Inspinia 10S as Home Server. Inspinia 10S acts as a gateway to Inspinia 4F panels to access KNX and VRF system. Only a POE cable is enough for the installation. As well 4SQ panels can receive video images from intercom outdoor unit and allow user to open outer door.



## SERVERS & INTERFACES





## HIGHLIGHTED FEATURES

- ANDROID / LINUX BASED OS
- CLOUD MOBILE APP & VOIP INTERCOM
- LIGHT, SHUTTER, AIR CONDITIONING, MULTIMEDIA AND VARIOUS CONTROLS
- FLEXIBLE PROGRAMMING
- EMBEDDED WEB INTERFACE FOR LOCAL CONTROL
- CONNECTIVITY OPTIONS VIA ADD-ON MODULES
- SUITABLE FOR SMART HOME, SMART HOSPITALITY AND BUILDING MANAGEMENT
- SUPPORT VARIOUS WIRED AND WIRELESS PROTOCOLS





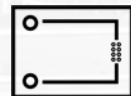
OR



1 INCH OLED LCD



PPOE  
ETHERNET



2 x ADD-ON PORT  
PORT 1 / PORT 2

## HIGHLIGHTED FEATURES

- CLOUD MOBILE APP
- EMBEDDED WEB INTERFACE
- FLEXIBLE PROGRAMMING
- CONNECTIVITY OPTIONS VIA ADD-ON MODULES
- SUITABLE FOR SMART HOME, SMART HOSPITALITY AND ENERGY MANAGEMENT
- SUITABLE FOR M2M APPLICATIONS
- ALLOWS GSM CONNECTION
- SUPPORTS VARIOUS PROTOCOL WIRED AND WIRELESS UP TO 1000 POINTS

AC OR VRF INDOOR UNIT



5 different brands are supported at the moment and we constantly work on to support different brands.

External temperature sensor input allows to get real data from the filed.

 **Bluetooth®**



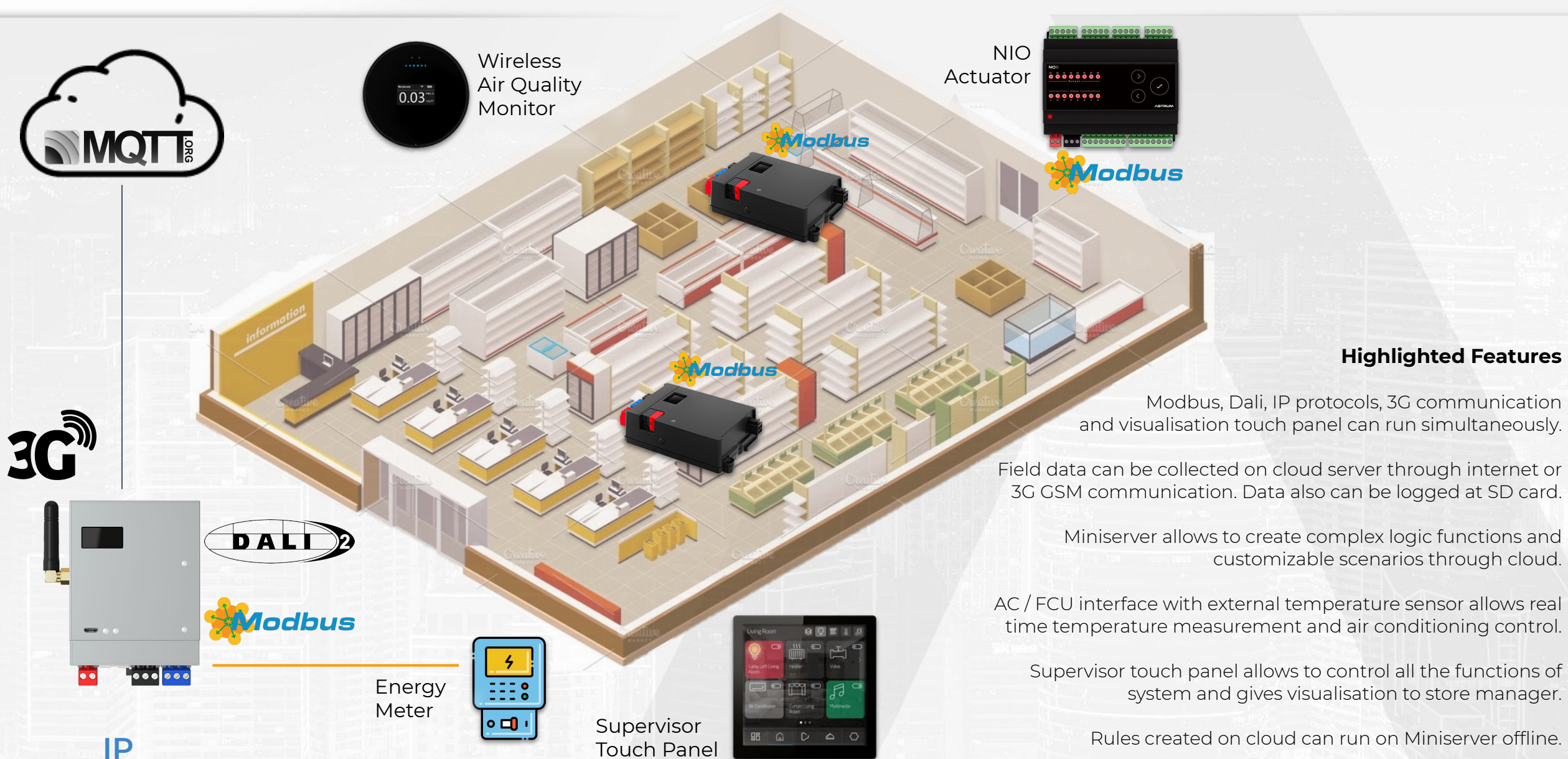
Bluetooth 5.0  
Technology  
as Default



Product also have  
KNX connectivity  
as an option.



# ENERGY MANAGEMENT APPLICATION EXAMPLE





THANK YOU

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**ASTRUM**  
TECHNOLOGY

[www.astrum.eu](http://www.astrum.eu) | [sales@astrum.eu](mailto:sales@astrum.eu)