HDL®

Buspro Wireless

An automation evolution
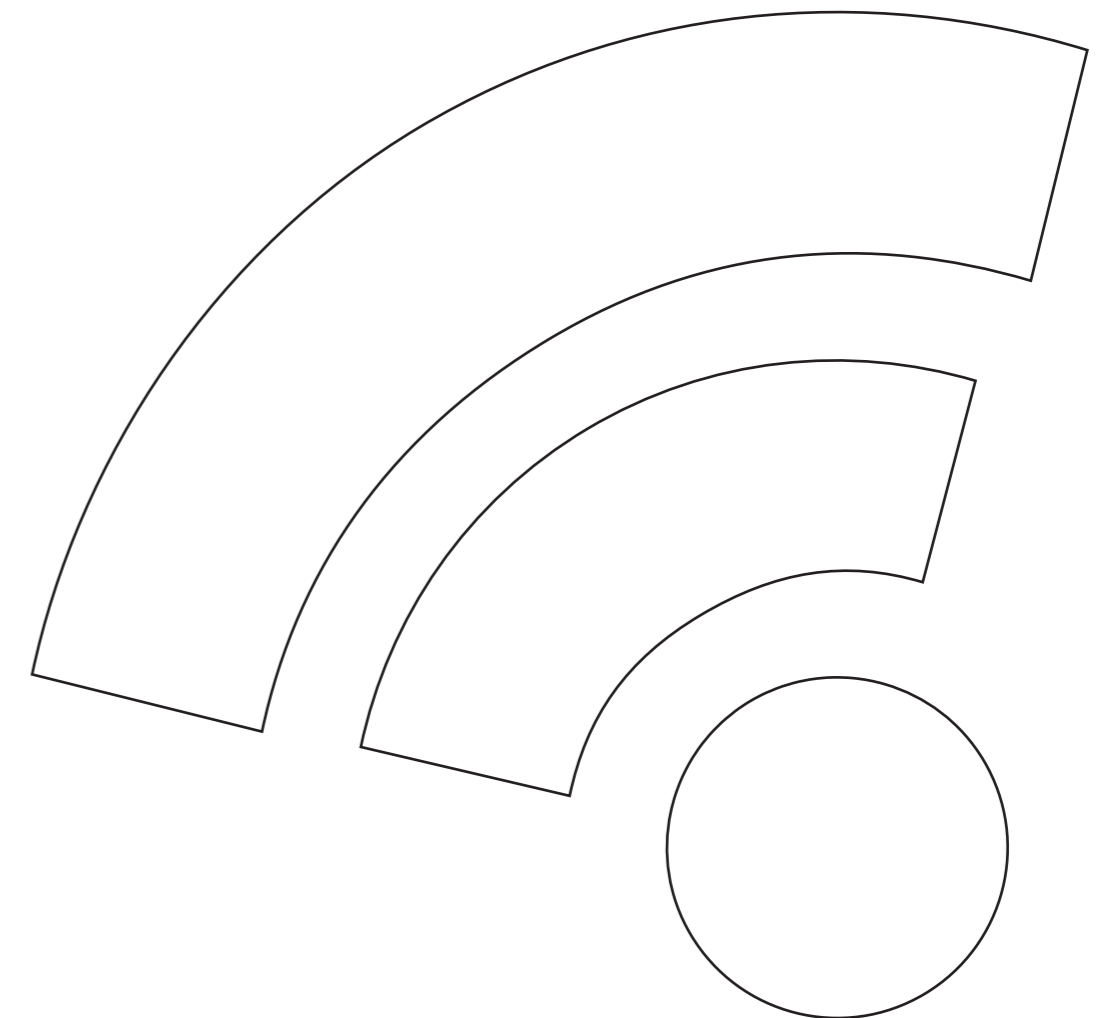
Buspro Wireless

2016/8 Edition

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Buspro Wireless

The Buspro wireless range has been created to make home automation simple, adaptable, and easy to manage.

Able to be installed quickly, and with the reliability and functionality of a wired system, Buspro wireless enables you to monitor your home, control your lighting, open your blinds, and manage your connected appliances from anywhere in the world.

Compatible with most 3rd party automation solutions, and Buspro wired automation solutions, Buspro wireless is an automation evolution.

The Buspro Wireless System

User Interfaces **Sensors** **Actuators** **System Components** **Apps**
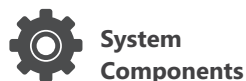
How It Works

Buspro wireless represents the evolution of the home automation system.

For the first time ever, total wireless control and monitoring is a possibility thanks to a revolutionary combination of proprietary HDL software and hardware.

Range

A wireless automation system is entirely dependent on the range of its wireless modules.

With the HDL Buspro wireless system each module has an industry leading communication distance of 30 meters.

This range ensures that commands to and from the modules are always clearly received.
- Wireless transmission power: +10dbm
- Wireless sensitivity: -90dbm

Power consumption

Our pioneering technology means that each module in the Buspro wireless network is incredibly energy efficient.

Modules in the Buspro wireless system fall into two groupings, those that take their power from the bus working voltage (15-24v), and those that take an outside AC power source (85-270v).

Easy to install

Installing a Buspro wireless system into your home doesn't require any rewiring or renovation.

As the system communicates wirelessly, simply connect the modules to a power supply, and configure your solution via a HDL iOS or Android app.

Mesh network

With the Buspro wireless system, each module in the network can repeat commands, so that even if a module is removed or damaged, the message will always get through.

Although most wireless solutions have a limit on how many modules can be included into a system, the mesh network used by Buspro wireless has an unlimited potential size.

Simple

Want to change your wireless panel for something a little different? No problem.

Just disconnect your current panel from its power interface, and pop your new panel in. It's that simple.
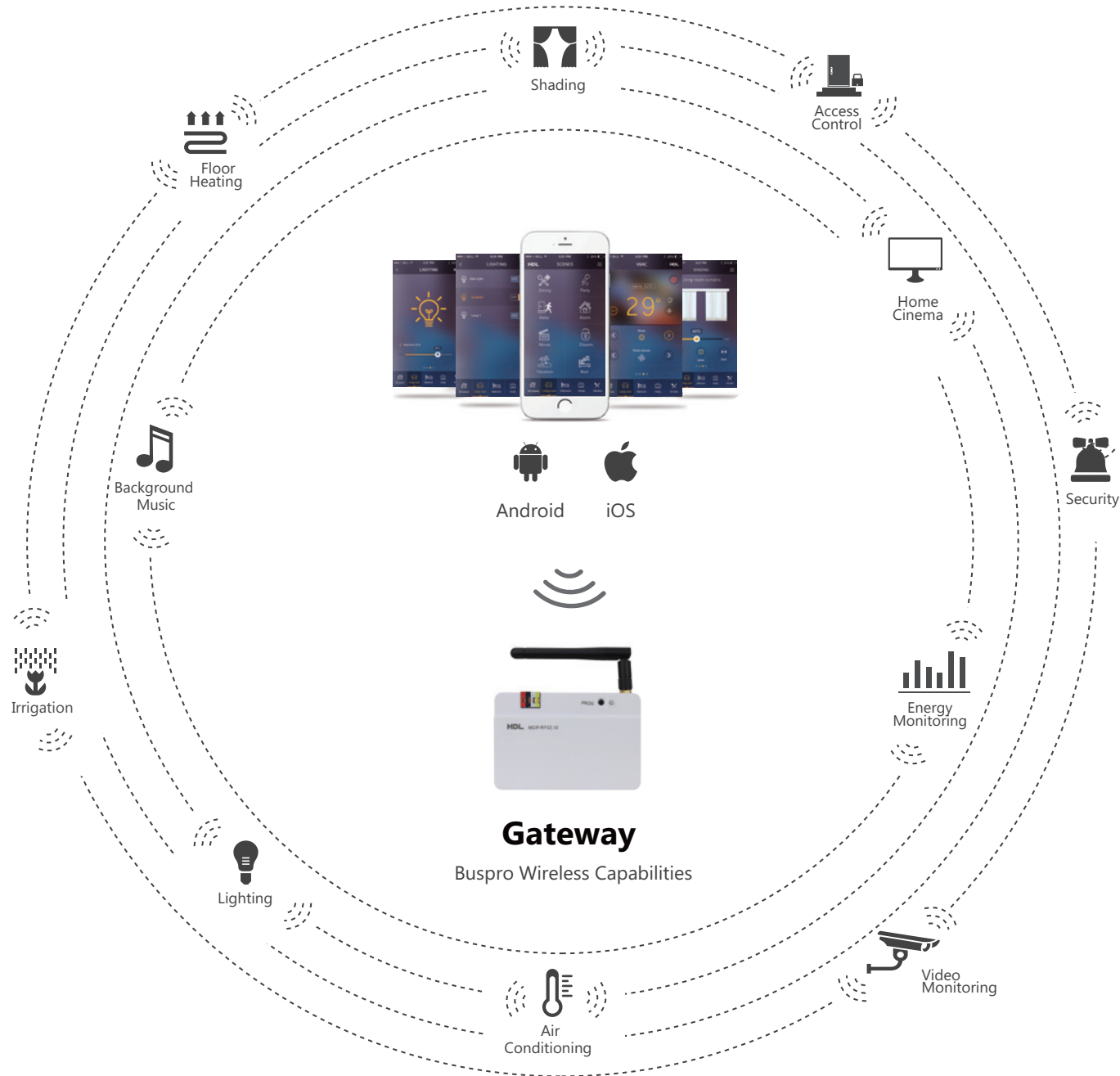
This compatibility is made possible through the extensive use of the Wago 236 terminal.

This terminal is used in all HDL solutions, so that every HDL system is as easy to service, and modify as possible.
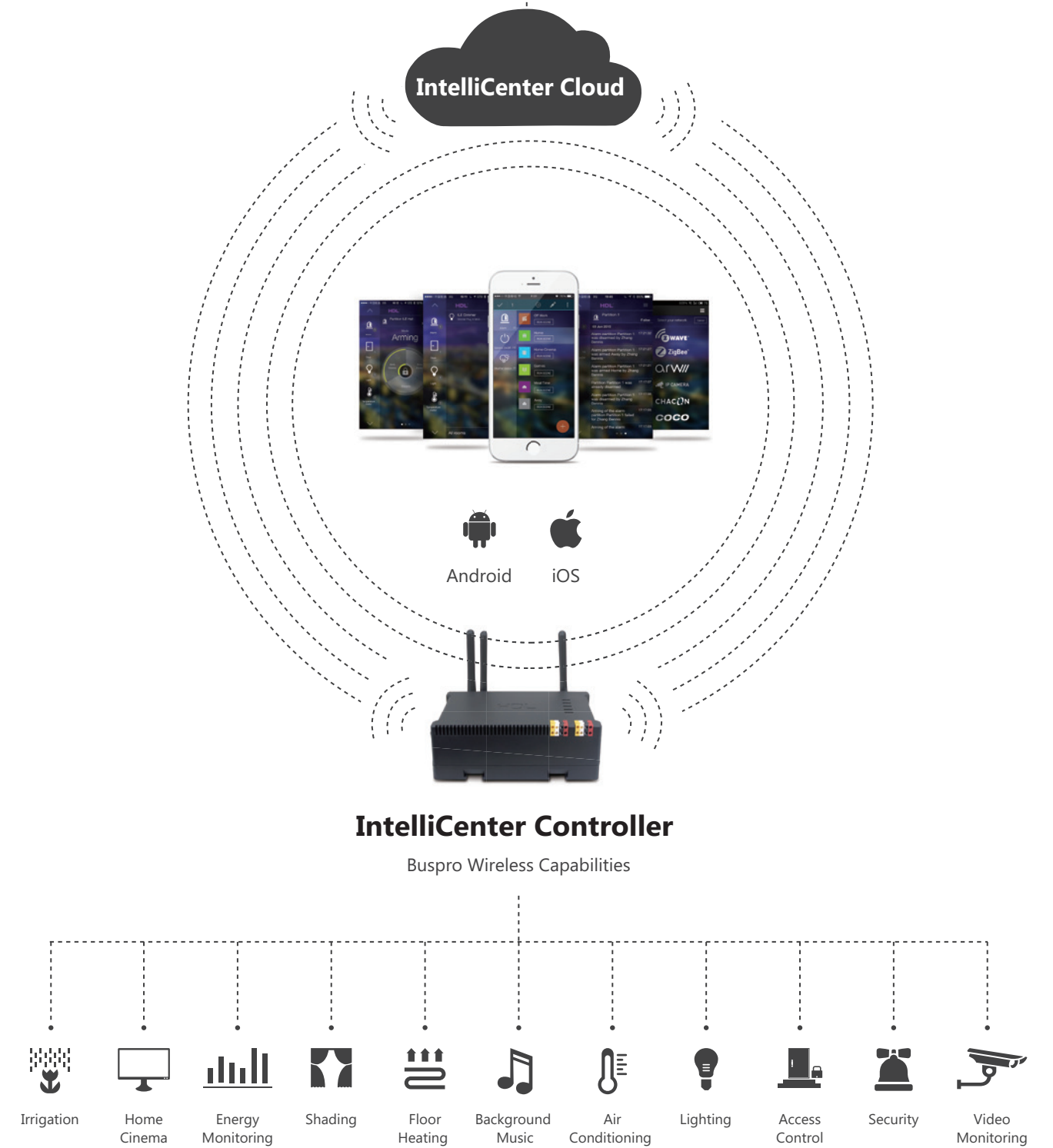
System Overview

Buspro wireless has been created so that anyone can take complete control over their home simply and effectively without any prior automation experience.

Shading

Access Control

Floor Heating

Home Cinema

Background Music

Security

Android   iOS

Irrigation

Energy Monitoring

Lighting

Gateway

Buspro Wireless Capabilities

Air Conditioning

Video Monitoring

Status Monitoring

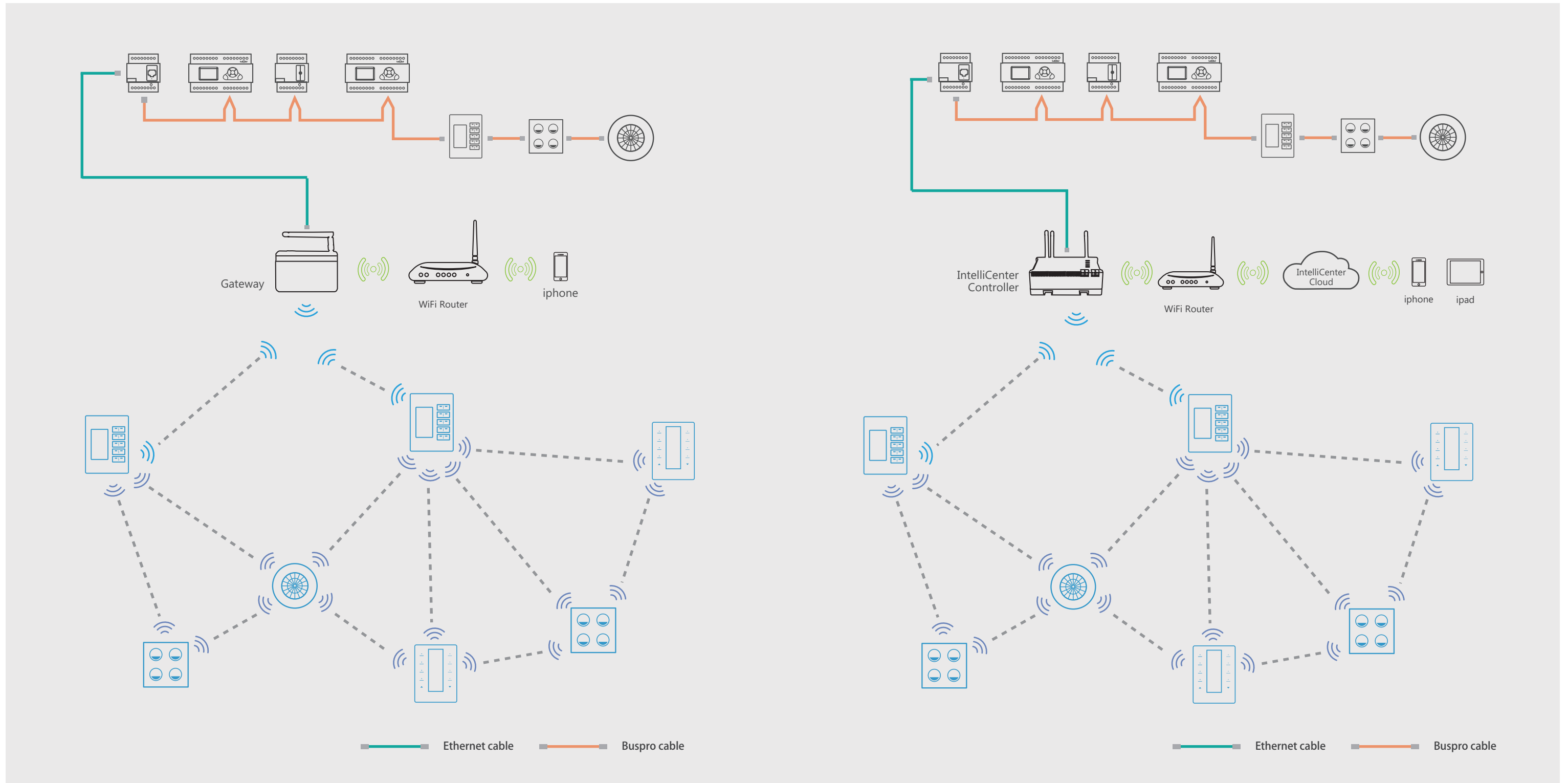System Reports

Data Management

Event Logging

Energy Metering

Remote Monitoring And Control

Multi-protocol Compatibility

IntelliCenter Cloud

Android   iOS

IntelliCenter Controller

Buspro Wireless Capabilities

Irrigation   Home Cinema   Energy Monitoring   Shading   Floor Heating   Background Music   Air Conditioning   Lighting   Access Control   Security   Video Monitoring

Combination Network Modes

– Using the Gateway

– Using the IntelliCenter Controller

Gateway

WiFi Router

iphone

IntelliCenter Controller

WiFi Router

IntelliCenter Cloud

iphone   ipad

━━━ Ethernet cable   ━━━ Buspro cable

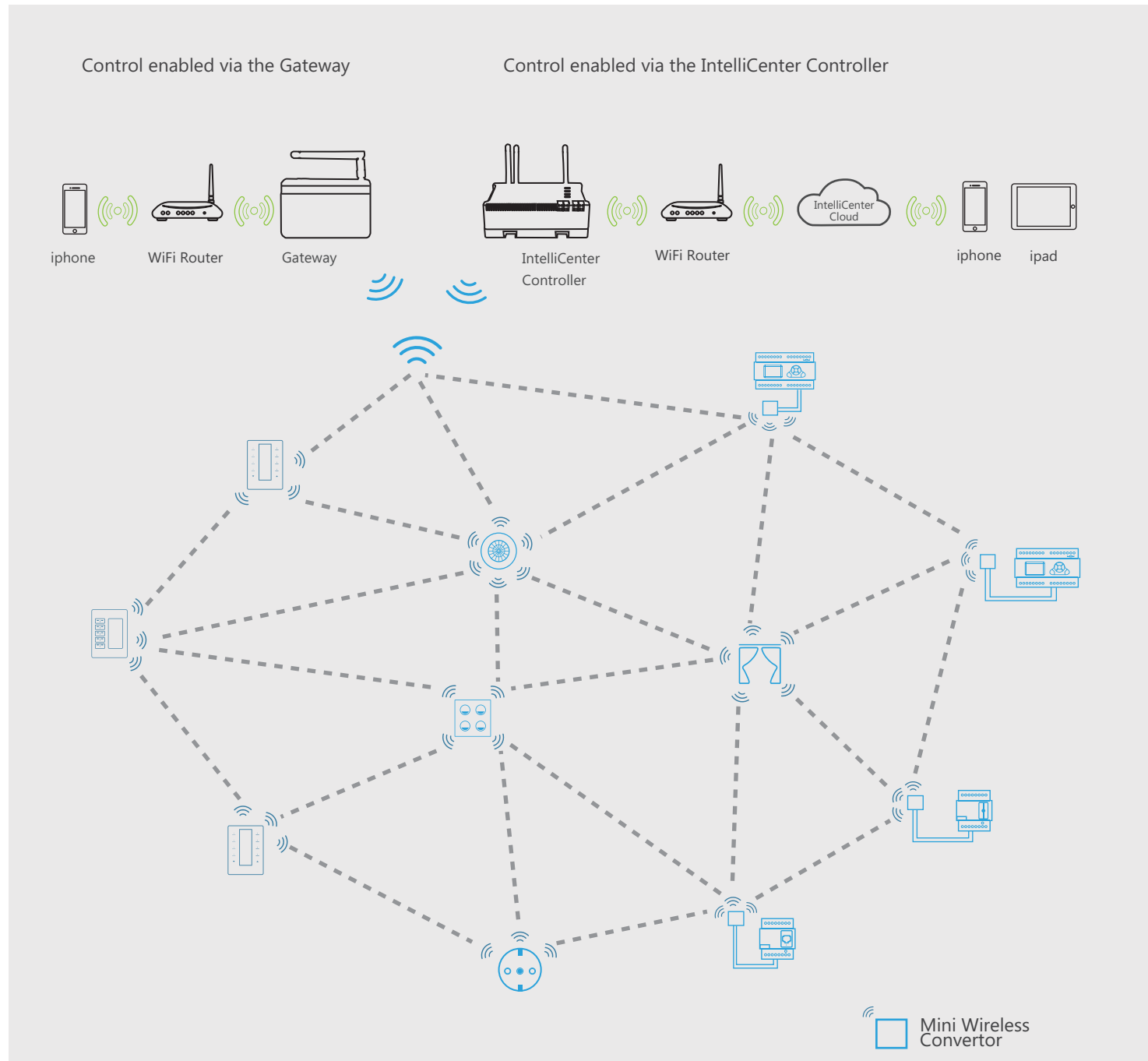━━━ Ethernet cable   ━━━ Buspro cable

Mesh Network Mode

– Ultra reliable

The mesh network mode is the default method in which modules in the Buspro wireless network communicate with each other.

In the mesh network every Buspro wireless module and device effectively 'talks' to every other module.

Using the Mini Wireless Convertor, wired modules can be fully intergrated into the mesh network.

Control enabled via the Gateway

iphone   WiFi Router   Gateway

Control enabled via the IntelliCenter Controller

IntelliCenter Controller   WiFi Router   IntelliCenter Cloud   iphone   ipad

Mini Wireless Convertor

Less Is More

Buspro wireless is a self-contained automation system which can be expanded or modified easily, while retaining the same functionality as a wired system.

With an installation time measured in hours rather than weeks, and the need for rewiring eliminated, the Buspro wireless system is your ideal automation solution.

Almost universal control is enabled through the wireless modules available from HDL, currently our range covers:

Touch panels   Gateways   Shading (curtains/blinds)

Switches   LED drivers   Plug sockets

Dimmers   Power interfaces   Sensors

Our wireless product range is constantly expanding, to take advantage of the very latest technological advancements.

Whatever your requirements are, HDL has the solution.

Why Buspro Wireless?

1 Flexible

Flexibility is an essential element of any HDL system, that's why we've worked hard to make sure all of our wireless solutions can be fully integrated into an existing wired HDL Buspro system.

This gives users the best of both worlds, allowing the systems to work in harmony with each other.

2 Adaptable

In an average household an installation can be hampered by WiFi interference, or load bearing walls.

Because the HDL systems can work together, a hybrid solution can be created that is able to overcome these issues.

3 Efficient

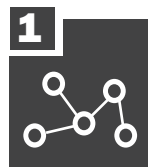At HDL we strive to create systems in which individual elements work in conjunction to maximize energy efficiency.

From light harvesting, to dynamic HVAC distribution, your electronic devices and appliances will work to save energy, while enhancing your comfort, convenience, and security.

4 Simple

From unpacking a module, to configuring the complete solution, every element of the Buspro wireless system has been designed to be simple and straight forward.

From a wall panel or an iOS/ Android device, controlling your home has never been so easy.
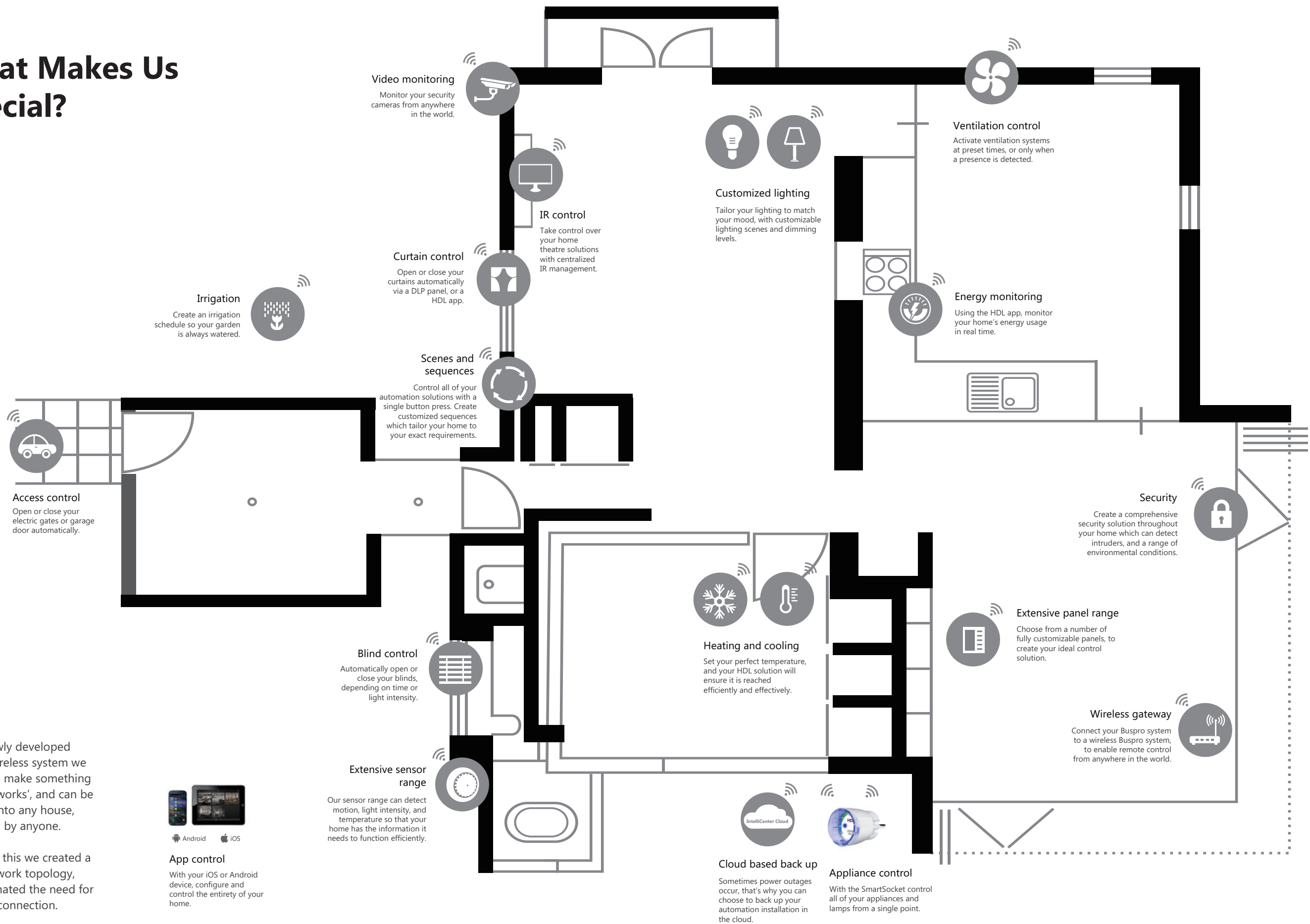
5 Reliable

Every element in the Buspro wireless network has been designed to be inherently reliable.

From industry leading data encryption, to module interoperability, a Buspro wireless network is guaranteed to work even when a module is damaged or removed.

What Makes Us Special?

Video monitoring
Monitor your security cameras from anywhere in the world.

IR control
Take control over your home theatre solutions with centralized IR management.

Curtain control
Open or close your curtains automatically via a DLP panel, or a HDL app.

Irrigation
Create an irrigation schedule so your garden is always watered.

Scenes and sequences
Control all of your automation solutions with a single button press. Create customized sequences which tailor your home to your exact requirements.

Customized lighting
Tailor your lighting to match your mood, with customizable lighting scenes and dimming levels.

Ventilation control
Activate ventilation systems at preset times, or only when a presence is detected.

Energy monitoring
Using the HDL app, monitor your home's energy usage in real time.

Access control
Open or close your electric gates or garage door automatically.

Security
Create a comprehensive security solution throughout your home which can detect intruders, and a range of environmental conditions.

Blind control
Automatically open or close your blinds, depending on time or light intensity.

Heating and cooling
Set your perfect temperature, and your HDL solution will ensure it is reached efficiently and effectively.

Extensive panel range
Choose from a number of fully customizable panels, to create your ideal control solution.

Wireless gateway
Connect your Buspro system to a wireless Buspro system, to enable remote control from anywhere in the world.

Extensive sensor range
Our sensor range can detect motion, light intensity, and temperature so that your home has the information it needs to function efficiently.

App control
With your iOS or Android device, configure and control the entirety of your home.

Android   iOS

Cloud based back up
Sometimes power outages occur, that's why you can choose to back up your automation installation in the cloud.

IntelliCenter Cloud

Appliance control
With the SmartSocket control all of your appliances and lamps from a single point.

In our newly developed Buspro wireless system we wanted to make something that 'just works', and can be installed into any house, anywhere, by anyone.

To enable this we created a mesh network topology, and eliminated the need for a neutral connection.

User Interfaces

Sensors

Actuators

System Components

Apps

The Buspro wireless range of switches, buttons, and panels empower you to effortlessly manage a building of any size.

Because our interfaces are wireless, you can install your control solution in whatever area works best for you.

From the bedside table, to above the kitchen sink, your ideal location is only limited by your imagination.

Shading
(Curtains/Blinds)

Thermostats

Lighting

Home
Cinema

Plug
Sockets

Home
Appliances

Energy
Consumption

Electronics

Interfaces

Every HDL control solution can manage multiple appliances, in multiple rooms, with ease.

This is achieved through the revolutionary multi tap process which enables a single button to control up to 99 appliances, devices, or lighting targets.

We know that there is no such thing as a 'standard home', that's why our control solutions can be completely customized.

From designs, materials, and LCD color, to fascia and button engraving, the features and appearance of any HDL interface is completely up to you.

With HDL full control over your home is only a touch away

DLP Range

HDL-MPL8-RF.18

HDL-MPL8-RF.16

- Able to control 4 wireless power interfaces simultaneously

- Built-in temperature sensor and IR receiver

- Specific pages for music control, AC control, and floor heating

- Additional customizable pages

- Adjustable display and button LED intensity

- Multiple key modes

- Two dedicated page switching buttons

- Eight programmable buttons

Customizable colors

- **Dimensions :**
  86×86×10.5mm (EU)
  86×116.5×10.5mm (US)

Bringing you the most advanced control solution possible, the DLP Panel offers users a superb blend of svelte design, and powerful performance.

Enabling every electrical device in a home to be managed from a single point, and with an ultra clear energy efficient screen, complete home control has never been simpler or easier.

iFlex Range

- Customizable paper label
- LED button indication
- Built-in temperature sensor

- Customizable fascia
- Multiple key modes
- Available in 1 to 8 button combinations

HDL-MP2B-RF.18   HDL-MP2B-RF.16   HDL-MP4B-RF.18   HDL-MP4B-RF.16

HDL-MP6B-RF.18   HDL-MP6B-RF.16   HDL-MP8B-RF.18   HDL-MP8B-RF.16

When you need your control interface to be as flexible as you are, then the iFlex range is the perfect solution to your automation control needs.

With an intuitive tactile interface, full home control is only a button press away.

To make the iFlex range even easier to use, buttons can have a customized label attached, enabling the system to be instantly modified.

- **Dimensions :**
  86×86×10.5mm(EU)
  86×116.5×10.5mm(US)

Customizable colors
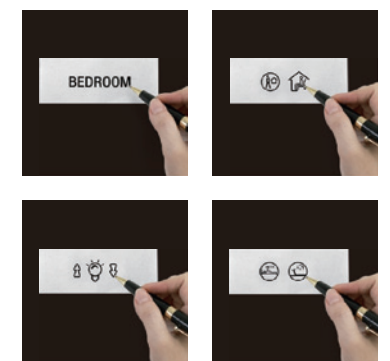
DIY customization

The iFlex range offers users the ability to swap their button names or icons, by simply removing a plastic sleeve and placing one of their own designs under it.
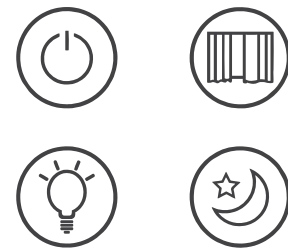
This enables rapid changes without the need for computers, engraving, or etching.

iTouch Range

HDL-MPT1-RF.18

For a tailored finish, both the fascia color and button icons can be customized to meet your exact requirements.

With an unbroken surface courtesy of its seamless glass finish, the iTouch range gives you the polished brilliance of tempered glass coupled with the precise control capabilities of capacitive pads.

Eminently practical, and available in 1-9 button combinations, the iTouch range brings intuitive control over a single room, or an entire building, to your fingertips.
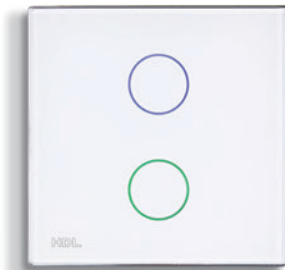
HDL-MPT2-RF.18   HDL-MPT3-RF.18
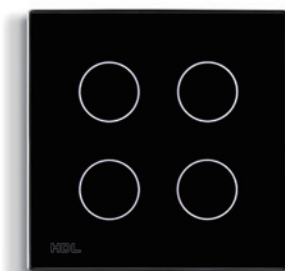
HDL-MPT4-RF.18   HDL-MPT9-RF.18

HDL-MPT2-RF.16   HDL-MPT4-RF.16   HDL-MPT6-RF.16

- Customizable LED indication levels
- Multiple press modes
- Built-in IR receiver
- Supports online upgrades
- Available in both EU and US standards

- **Dimensions :**
  86×86×10.5mm (EU)
  86×116.5×10.5mm (US)

Customizable colors

iSense Range

The iSense range effortlessly combines the understated elegance of the 1930's, with the height of modern automation technology.

With the reassuring press of a single button, every element of an automated building can be simply and effectively controlled.

- Multiple button modes
- Adjustable red/green/blue button indication
- Customizable buttons and fascia
- Available in bronze, brushed aluminum, and glass finishes

HDL-MP01R-RF.18

HDL-MP02R-RF.18

HDL-MP03R-RF.18

- **Dimensions :**
  86×86×10.5mm (EU)

Customizable colors

HDL-MP04R-RF.18

iSmart Panel

The iSmart Panel combines two traditional interfaces into a single uniquely functional module.

Using four standard buttons, and a centrally located dial with integrated OLED display, total building control has never been easier.

To adjust the temperature or dimming levels, the central rotary controller enables the desired level to be set precisely and effortlessly.

Ensuring that your desired temperature level is achieved, the modules integrated thermal sensor is able to both display the current temperature when the top right button is pressed, as well as sending temperature information to the underfloor heating controller.

Five customizable control modes can also be selected by pressing the bottom left button enabling the perfect atmosphere to be created instantly.

- Rotary dimming control
- Multi key control modes
- Inbuilt temperature sensor
- Adjustable OLED display and button LED intensity
- Designed to be installed into all standard European wall mounts

HDL-MPE04-RF.18

Power interface   iSmart Panel   Frame

- **Dimensions :**
  55.5×55.5×16.8mm

Power on/off   Current tempreture

Scene Control   Settings

Day   Night   Away   Shading   Floor Heating   Lighting
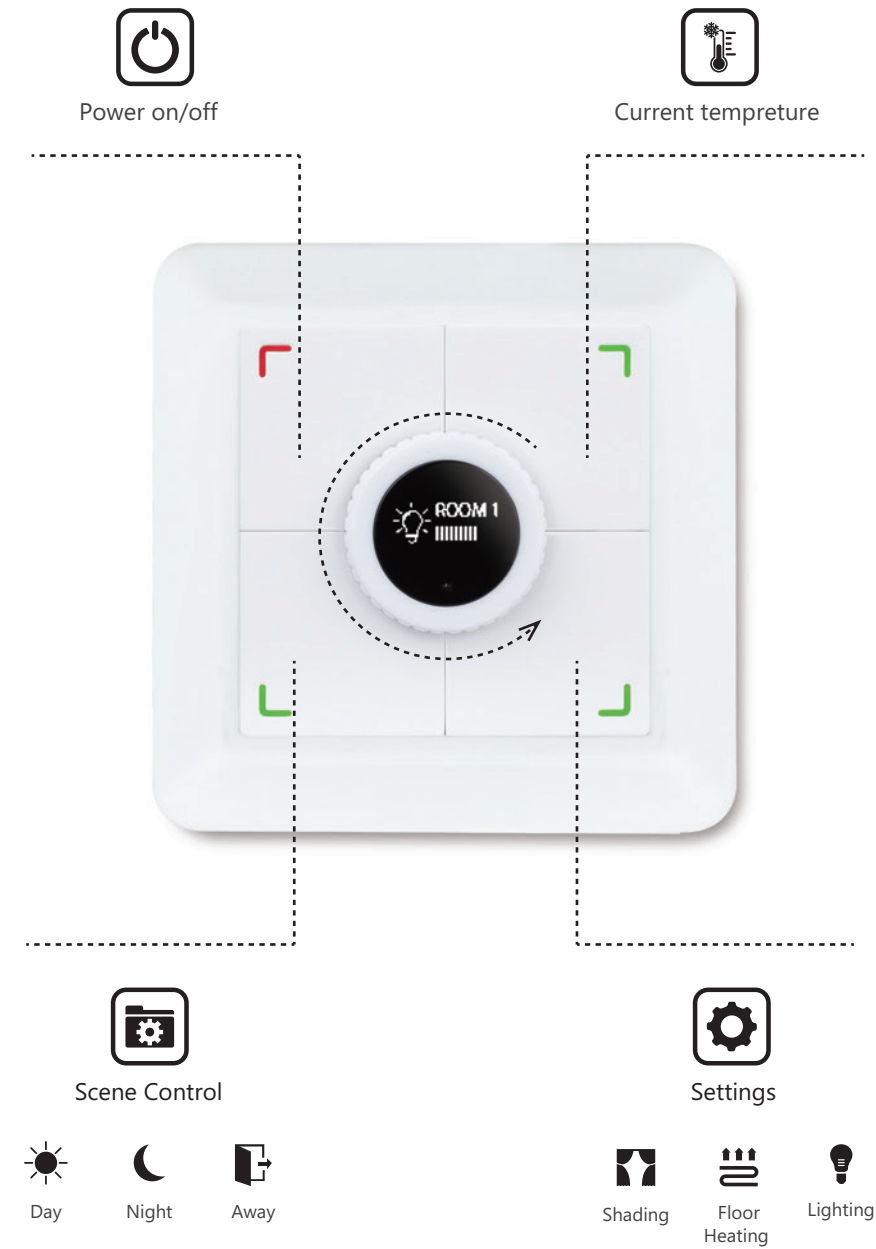
By simply pressing the two bottom buttons simultaneously, a user can effortlessly enable or disable underfloor heating control.

Customisable icons

Day   Night   Away   Lighting   Floor Heating

Temprature   Eco   Power   Home   Background Music
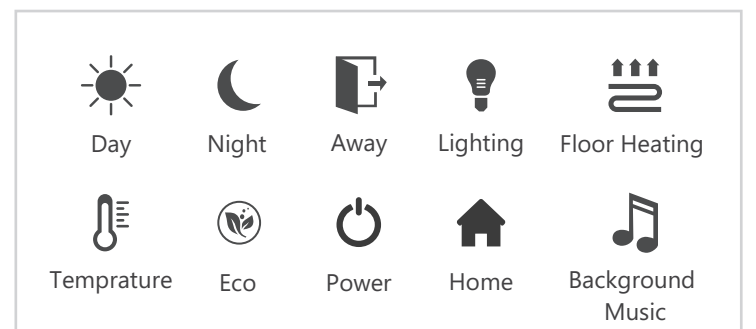
User Interfaces

Sensors

Actuators

System Components

Apps

Sensors form the eyes and ears of a home automation system, allowing devices to be triggered, or scenes and sequences to be activated.

The Buspro wireless sensor range brings you a unique combination of performance and power, enabling you to maximize your home's efficiency while providing comfort, convenience, and safety.

With the HDL wireless sensors you can monitor motion, humidity, air quality, and a whole lot more to bring true peace of mind.

TriSense Detector

BiSense Detector

Combining three sensors into one, the TriSense Detector houses an ultrasonic sensor, a passive infrared sensor, and a Lux sensor.

This unrivaled detection ability means that with a single TriSense unit blinds can automatically open, lighting be automatically activated or dimmed, and scenes and sequences automatically triggered.

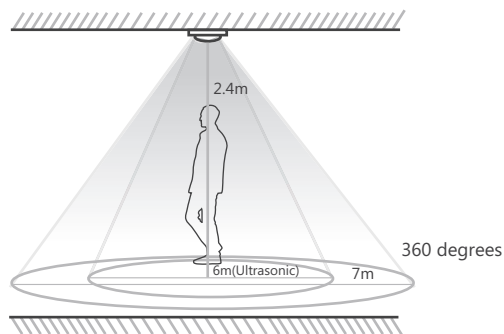Using dual logic states (OR&AND), the TriSense Detector can be integrated into your HDL security network, while still enabling a home to operate at peak efficiency.

- Single channel 5A relay output
- Adjustable infrared sensitivity
- Adjustable ultrasonic sensitivity
- Compatible with security solutions
- Ceiling mounted
- Capable of controlling: Scenes, sequences, curtains, universal switches, single channel lighting, broadcast scenes, broadcast channels, panels, security modules, and the z-audio module.

With both a Lux and an ultrasonic sensor, the compact BiSense detector is perfectly suited for unobtrusive presence and illumination detection.

Ideally suited for areas which require lighting activation or constant illumination, the module can not only activate the lighting when a room is occupied, but adjust the lighting level so that an optimum balance between energy efficiency and illumination is struck.

The BiSense detector is also fully compatible with HDL security solutions, making it a uniquely compact multirole module.

- Supports 1Ch 5A relay output
- Adjustable detection sensitivity
- Dual logic states
- 24 logic blocks each capable of outputting 20 commands
- Supports power off recovery
- Ceiling mounted

HDL-MSPU05-RF.1C

HDL-MSU03-RF.1C

2.4m

6m(Ultrasonic) 7m

360 degrees

Detection range

2.4m

6m

360 degrees

Detection range

- **Working voltage :** 85-265VAC
- **Current :** 4.2mA/220VAC
- **Relay output :** 5A
- **Dimensions :** φ95×38(mm)

- **Working voltage :** 85-265VAC
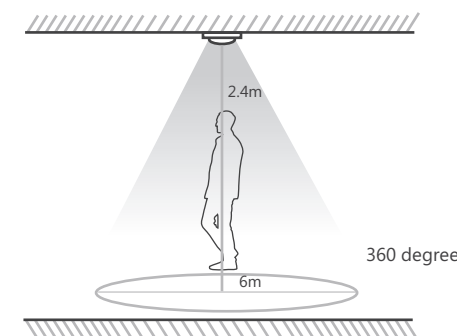- **Current :** 4.2mA/220VAC
- **Relay output :** 5A
- **Dimensions :** φ77.5×43(mm)

MobiSense

This omnidirectional mini sensor is fully portable and able to detect motion, light intensity, and temperature.

Ideal for solutions which require a truly flexible detection ability, the sensor can be placed in practically any location.

Once a location for the sensor is selected, the adjustable socket ensures an optimum field of detection.
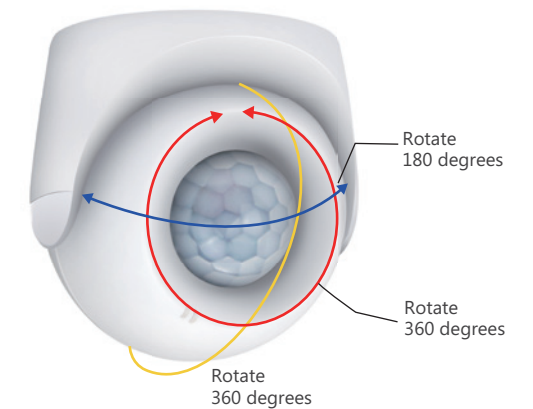
HDL-MSPU03-BRF.10

- Lux sensor
- PIR sensor
- Temperature sensor
- Fully mobile
- Dual logic states

- **Working voltage :** 3V 1600mAh
- **Working current :** 16mA
- **PIR detection range :** 6m
- **Dimensions :** 54×51.5×49.6(mm)

2.4m

360 degrees

6m

Detection range

Rotate 180 degrees

Rotate 360 degrees

Rotate 360 degrees

Applications
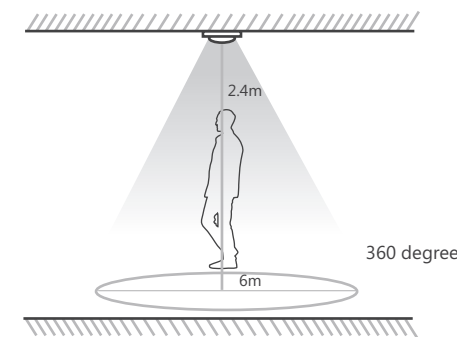
Four Channel Dry Contact

This quad channel wireless actuator enables you to turn a traditional 'dumb' switch, into a smart switch capable of controlling any Buspro wireless solution.

In addition to this the four channel dry contact can also receive the status of practically any module which utilizes a dry contact.

From magnetic sensors used for door and window security, to PIR presence detectors, any dry contact signal can now be integrated into a Buspro wireless system.

- 4 channel relay output
- 4 channel LED output
- Switch on + switch off protection delay
- Supports both mechanical and electronic switches
- Capable of dimming

- **Input voltage :** AC 85-265V, 50/60Hz
- **Power consumption :** 0.44W max.
- **Dimensions :** 44×36×17(mm)

HDL 4 Dry contact input
HDL-MPS04-RF.18
Input voltage: AC85-265V
Power consumption:0.44W max.
Made in China

HDL-MPS04-RF.18

Four Channel
Dry Contact
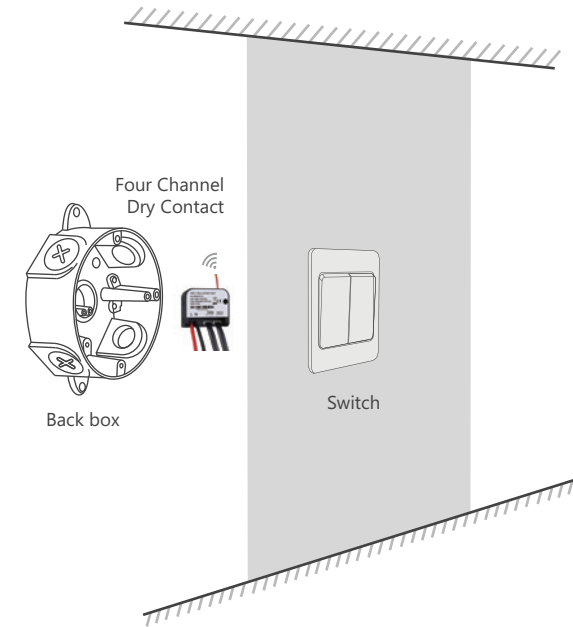
Back box

Switch

Due to its small size, the Four Channel Dry Contact can be placed inside of a switch back box.

This allows the switch to trigger the dry contact, and communicate directly with the wireless system

Back box

Four Channel
Dry Contact
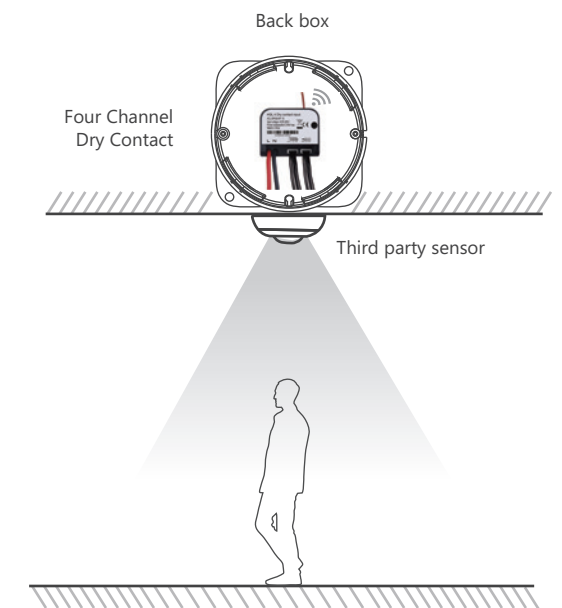
Third party sensor

Practically any third party sensor can be integrated into the wireless network through the use of the Four Channel Dry Contact.

This enables existing sensors to be updated, and reutilized for different purposes.

Four Channel
Dry Contact

Magnetic
sensor

Door

Four Channel
Dry Contact

Magnetic
sensor
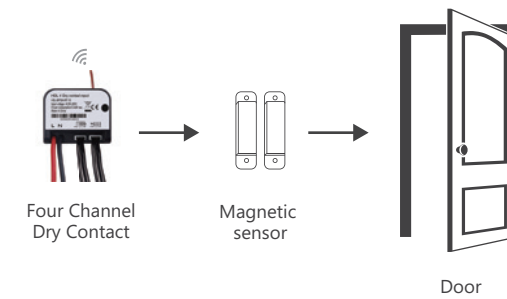
Window

Bring your window and door sensors into the Buspro wireless fold, by connecting them to the Four Channel Dry Contact.
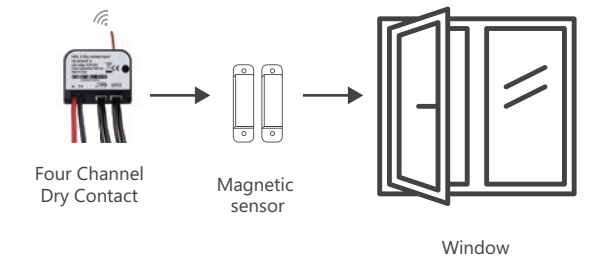
This enables you to check the status of your doors and windows from any where in the world via your iOS or Android device.

User
Interfaces

Sensors

Actuators

System
Components

Apps

Actuators form the backbone of any automation system. From being used in LED lighting and curtain control, to switches and dimmers, they are integral to the Buspro wireless network.

Every solution in the Buspro wireless actuator range has been tested to ensure that it not only meets international standards, but exceeds them.

With an expected service life greater than 20 years, and world leading industrial design, you can rest assured that your automation system will stand the test of time.

Single Channel Relay

■ 1 channel relay output

■ Switch on + switch off protection delay

■ Supports both mechanical and electronic switches

■ Capable of dimming

HDL 1CH Relay
HDL-MPR01-RF.18
Input voltage: AC85-265V
Output current: 16A
Power consumption: 0.41W max.
Made in China

■ **Input voltage :** AC 85-265V, 50/60Hz

■ **Output current :** 16A

■ **Power consumption :** 0.27W max.

■ **Dimensions :** 44×36×17(mm)

HDL-MPR01-RF.18

The Single Channel Relay is able to be used with loads of 16A/3600W.

If capacitive or inductive loads for LEDs and florescent lamps are used, the single channel relay can handle up to 500W.

Coupled with the module's relay ability, it also functions as a four channel dry contact switch.

This allows the Single Channel Relay to receive four 240V inputs, making the conversion of traditional switches to smart switches possible.

Dual Channel Relay

Containing two 8A relays capable of supporting 1800W each, or 250W each if used with capacitive or inductive loads, the Dual Channel Relay is suitable for everything from LEDs or florescent lamps, to gate and curtain motors.

Making the Dual Channel Relay truly multifunctional, it can also act as a four channel dry contact switch.

This makes the conversion of traditional switches to smart switches possible, through the module's four non-isolated 240V inputs.

HDL 2CH Relay
HDL-MPR02-RF.18
Input voltage: AC85-265V
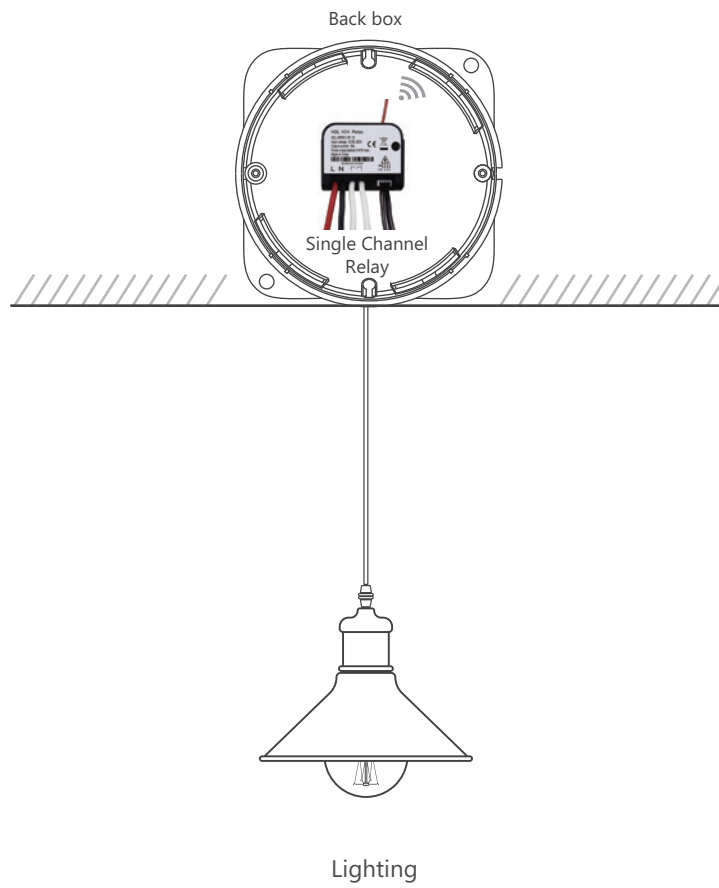Output current: 8A
Power consumption: 0.45W max.
Made in China

■ 2 channel relay output

■ Switch on + switch off protection delay

■ Supports both mechanical and electronic switches

■ Capable of dimming

■ **Input voltage :** AC 85-265V, 50/60Hz

■ **Output current :** 8A

■ **Power consumption :** 0.45W max.

■ **Dimensions :** 44×36×17(mm)

HDL-MPR02-RF.18

Applications

Back box

Single Channel
Relay

Lighting

Installed in the ceiling, a wireless
relay is the perfect solution for
wirelessly switching your lighting
on and off.

If a wireless relay is installed into
a standard switch back box, it will
be able to control appliances and
devices through communicating
with either the SmartSocket or the
IR Controller.

Dual Channel
Relay

Back box

Lighting

Living Room

Home
cinema

Background
music

Shading
control

HVAC

Kitchen

Electric
kettle

Home
appliances

Energy
monitoring

Ventilation
control

Through communicating with either the Buspro
wireless SmartSocket or IR Controller, over 90%
of a home's appliances can be directly
controlled.

A Buspro wireless relay also enables direct
control over any Buspro wireless solution, this
means that with the flick of a standard light
switch curtains can open, lamps be turned off,
and your music turned on.

Applications

Single Channel Dimmer

Capable of dimming both inductive and capacitive loads, the Single Channel Dimmer can dim standard loads of 350W, and LED loads of 60W.

Due to the instantaneous manner in which loads are controlled, the life expectancy of incandescent bulbs can be increased, and LED flickering can be practically eliminated.

As well as dimming, the single channel dimmer is also able to convert traditional 'dumb' switches, into smart switches allowing any device in the Buspro wireless network to be controlled.

- Single channel MOSFET dimming
- Supports both electronic switches and mechanical switches
- Capable of controlling scenes, sequences, universal switches, and the Z-audio module

HDL-MPD01-RF.18

- **Input voltage :** AC 85-265V, 50/60Hz
- **Output current :** 1.5A
- **Power consumption :** 0.58W max.
- **Dimensions :** 44×36×20.2(mm)

Back box
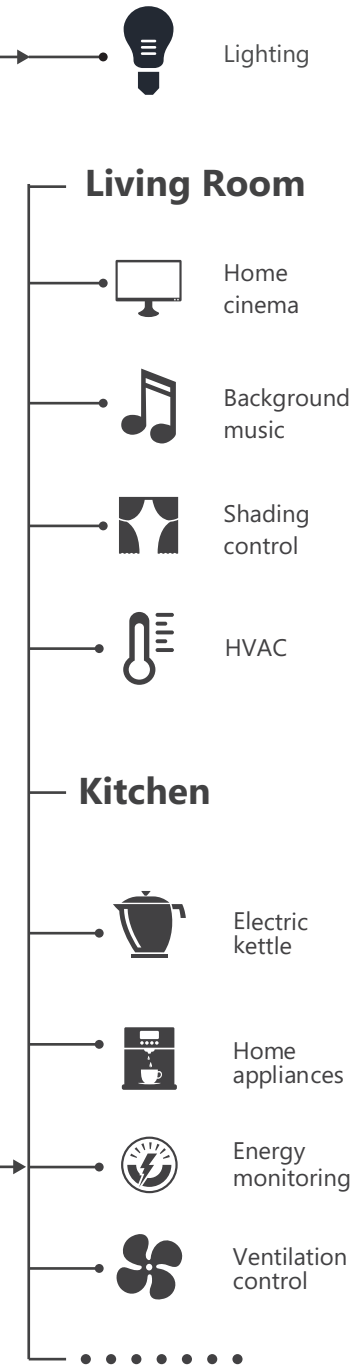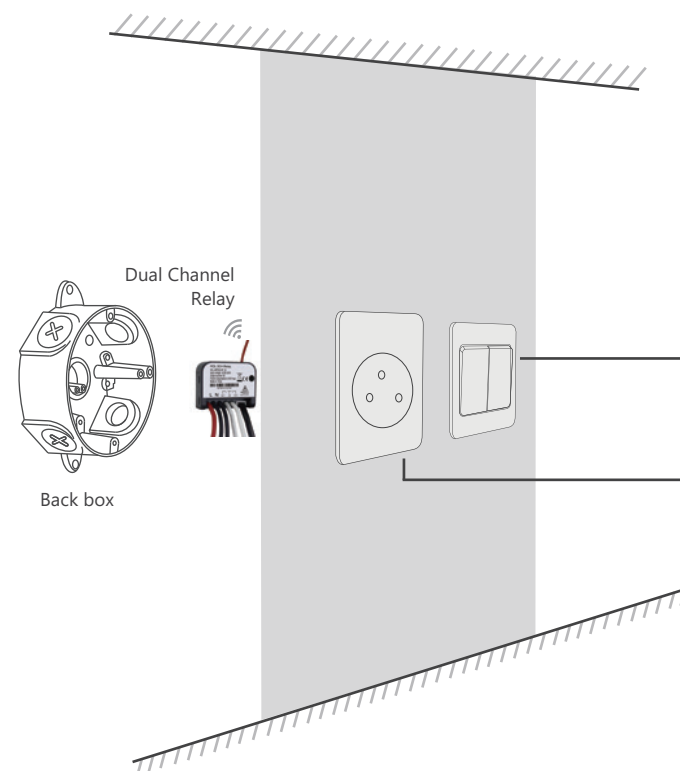
Single Channel Dimmer

Lighting
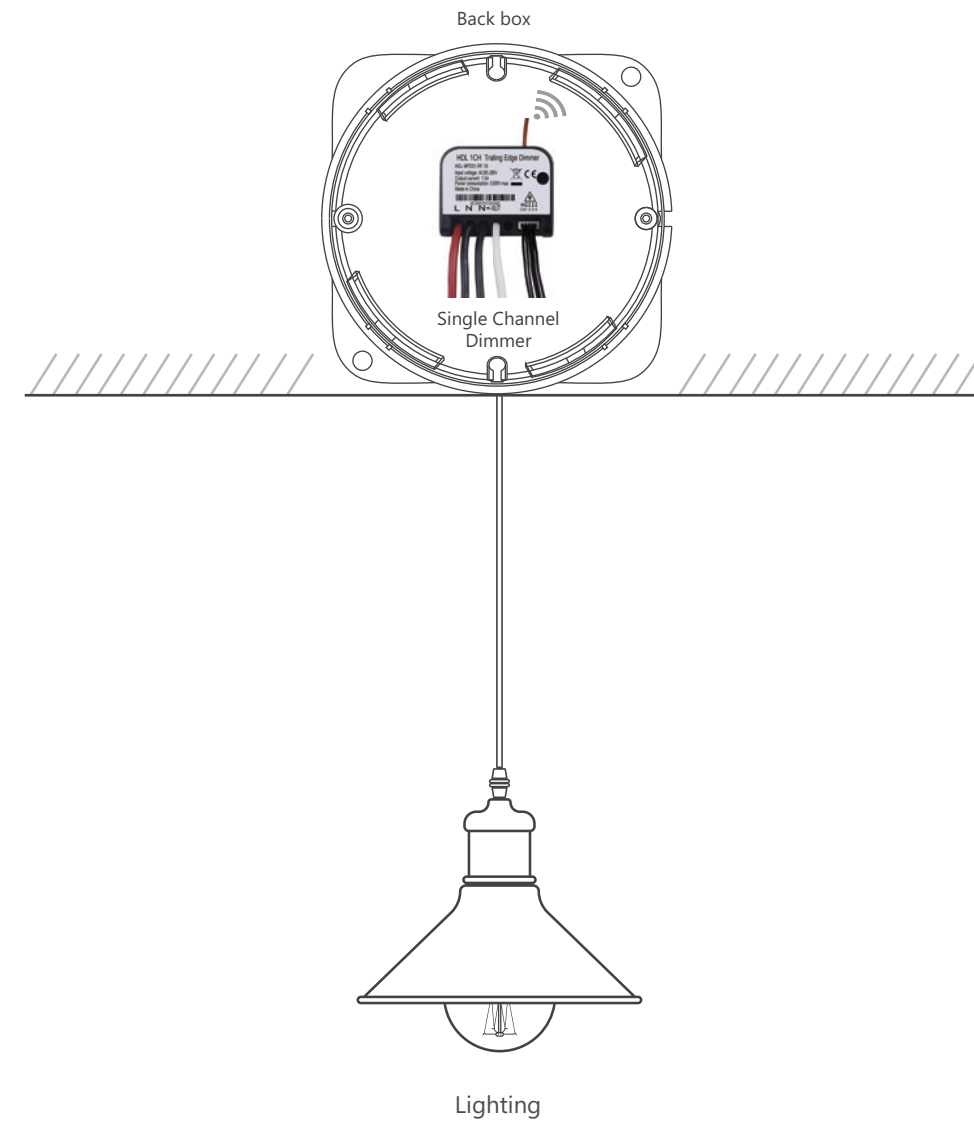
Able to be placed in practically any location due to its compact size, the Single Channel Dimmer is able to wirelessly control the luminosity of lights directly.

This allows customized illumination levels to be created, and a user to control their lighting from any HDL keypad, panel, or compatible wireless app.

Single Channel Dimmer

Back box

switch

Lighting

Applications

Four Channel Dimmer

Designed to specifically control LED lights, the four channel dimmer can not only dim, but control the color of RGB LEDs.

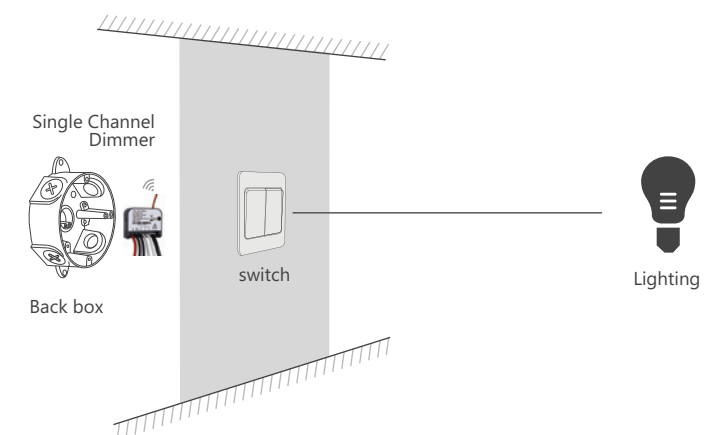Each of the modules four lighting channels support up to 4A, and are capable of pulse wave modulation.

This makes customized flash sequences, and dimming levels effortless to control.

For maximum flexibility, the Four Channel Dimmer can be used with 4 independent lamps, 2 independent CCT lamps, or a single red, green, blue, white color strip.

- Customizable dimming curves
- Capable of controlling scenes, sequences, universal switches, and the Z-audio module.
- Supports two way dimming
- Supports both mechanical and electronic switches

- **Input voltage :** AC 85-265V, 50/60Hz
- **Power consumption :** 0.44W max.
- **0-10VDC output for each channel :** 0-30mA
- **Dimensions :** 44×36×17(mm)

HDL-MPDA04-RF.18

Back box

Four Channel Dimmer

0~10V ballast

LED lamp
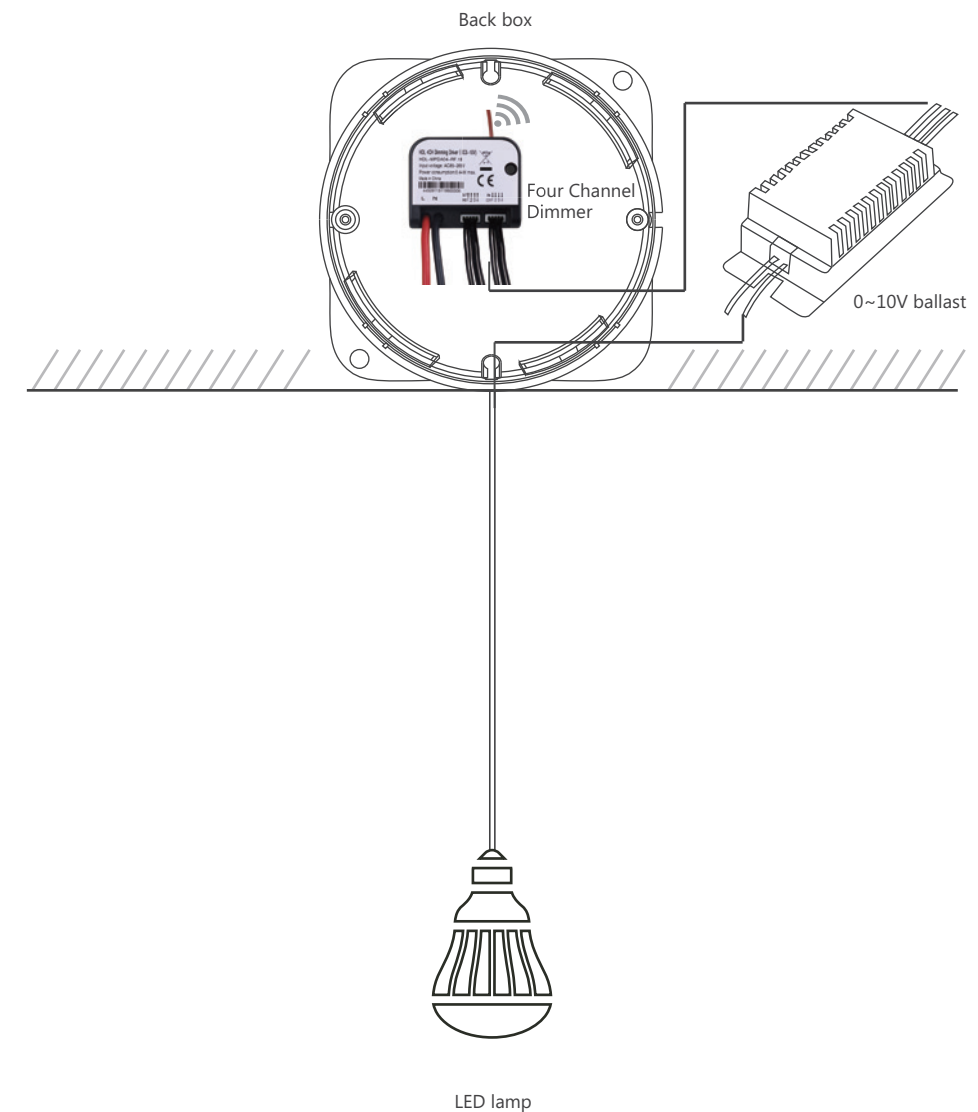
With the Four Channel Dimmer you are provided with the ability to wirelessly dim any type of LED lighting instantly.

Via the Four Channel Dimmer controlling the LED ballast, customized dimming levels can be created, and a user can control their lighting from any HDL keypad, panel, or compatible wireless app.

Single Channel Curtain Actuator

With the Single Channel Curtain Actuator, precise command and control over curtains and blinds has never been easier.

Able to be installed into any back box due to its compact nature, the Single Channel Curtain Actuator can enable any traditional switch to wirelessly control any Buspro wireless shading solution.

The module can also function as a dimmer, and a scene or sequence controller, so that multiple actuators within the same back box are unnecessary.

- Supports both mechanical and electronic switches
- Supports dimming
- Supports curtain 'inching' control

- **Input voltage :** AC 85-265V, 50/60Hz
- **Output current :** 5A
- **Power consumption :** 0.45Wmax.
- **Dimensions :** 44×36×17(mm)

HDL-MPC01-RF.18

Curtain Motor

With the ability to be operated remotely, as a timed event, or to be triggered by a sensor, shading control brings a new level of comfort and convenience to even the most luxurious of homes.

Operating at a whisper quiet 40db, the Curtain Motor ensures that even the lightest sleeper, or most sensitive ear is undisturbed.

With SmartPull technology you can take advantage of both manual opening/closing, and assisted manual opening/closing.

- Supports online upgrading.
- Supports easy programming.
- Manual & automatic control
- Customizable drag distances
- Overheat protection

HDL-MWM70-RF.12   HDL-MWM70S.12

Master   Slave

- **Rated voltage :** AC220V   50Hz
- **Voltage range :** AC220V±20%   50HZ
- **Slave interface :** 6P internet port
- **Rated power :** 70W
- **Rated torque :** 1.0Nm
- **Rated speed :** 112rpm
- **Dimensions :** 284×70×50(mm)

Blind Controller

Roller blinds are ubiquitous the world over for their practicality and usefulness.

The HDL Blind Controller enables every building, be it a home, office, or school to control their blinds automatically or remotely.

Sensor information can also be used to open or close blinds, or specific times can be set at which the blinds will open or close.

To provide you the ultimate in blind control, the motor can output a massive 10 newton meters of torque, and be precisely opened and closed thanks to percentage control.

HDL-MVSM45-RF.12

Ultra-quiet operation

Customized shading percentages

High torque & large load

Manual & automatic operation

- Overheat protection
- Percentage control
- Able to be operated manually
- Supports online upgrading

- **Rated voltage :** AC220V   50Hz
- **Working voltage :** AC190~235V
- **Working current :** 0.6A
- **Rated power :** 140W
- **Rated torque :** 10Nm
- **Rated speed :** 17r/min
- **Dimensions :** Φ45×755(mm)

SmartSocket Relay

SmartSocket Dimmer

With the HDL SmartSocket Relay, automation has never been so simple.

By plugging the SmartSocket Relay into a standard socket, any device which is then plugged into the SmartSocket Relay can be instantly automated.

This means that you will never have to bend down to turn on a table lamp, or reach behind your TV to turn your media center on or off.

If multiple SmartSocket Relays are used, you can control every appliance in your home through a single panel, or your iOS or Android device.

Energy saving is integral to automation solutions, that's why the SmartSocket has an inbuilt LED halo which at a glance lets you know the connected appliances power draw.

- 1CH 13A relay output.
- Capable of detecting relay status, current, power, and voltage
- 3KW power output
- Overcurrent and overheat protection

Dim any of your table lamps, bedside lamps, floor lamps or desk lamps with ease from your mobile device or HDL wall panel.

Able to manage the luminosity of both inductive and capacitive lighting technologies, the Smart-Socket Dimmer is perfectly suited for dimming both LED bulbs, and incandescent bulbs.

To let you know the dimming status of your automated lamp, the SmartSocket Dimmer has a multifunctional LED halo which indicates both the dimming level and the strength of the wireless mesh signal.

Whatever SmartSocket you choose, both can be controlled remotely, or automatically via sensor integration.

This lets you walk into your kitchen and have the coffee machine turn on, or have your lamps automatically adjusted to take into account the external lighting conditions.

- Single channel MOSFET dimming
- Supports both inductive and capacitive loads
- Customizable dimming levels

- **Input voltage :** 110-230VAC±10%, 50/60Hz
- **Power consumption :** 0.81W max.
- **Output :** 3kW/13A (Resistive load) 2.5kW/10A (Capacitive load)
- **Communication :** Wireless MESH
- **Dimensions :** 43.5×48.5×72.5(mm)

MR/PLUG-RF.1P

- **Input voltage :** 110-230VAC±10%, 50/60Hz
- **Power consumption :** 0.81W max.
- **Output :** 3kW/13A (Resistive load) 2.5kW/10A (Capacitive load)
- **Communication :** Wireless MESH
- **Dimensions :** 43.5×48.5×72.5(mm)

MD/PLUG-RF.1P

User
Interfaces

Sensors

Actuators

**System
Components**

Apps

From powering panels and switches, to completing the mesh network, HDL wireless system components are essential to every HDL wireless installation.

They allow your installed solutions to function correctly, and enable you to control and configure your home's devices.

Every HDL component has been rigorously tested to ensure that it meets the very highest standards.

However large or small your home is, you can rest assured that your HDL system will always be there for you.

Power Interfaces

The HDL wireless live & neutral power interface range use both a live, and a neutral connection to power all HDL Buspro wireless panels.

To protect your system, this power interface features short circuit protection, provided by a replaceable 2A, aR type fuse.

- **Product name :** Wireless Power Interface (LN)
- **Working voltage :** AC85-270V 50/60Hz
- **Output current :** 100mA/5VDC
- **Fuse :** 2A, aR type
- **Dimensions :**
  84×84×39(mm)-EU
  84×114×39(mm)-US

Channels:

Back box   Wireless power interface   Panel plate

HDL-MPWPID00LN.18 (EU)

HDL-MPWPID00LN.16 (US)

- Live & Neutral connection
- Available in both EU and US standards

Power Interfaces
With 1ch+3ch Dimmer Live Only

The HDL wireless power interface & dimmer range can provide power to all HDL Buspro wireless panels.

The single channel power interface and dimmer is capable of MOSFET dimming and switching, whereas the triple channel interface and dimmer uses both MOSFET and TRIAC dimming and switching methods.

Single Channel

HDL-MPWPID01L.18(EU)   HDL-MPWPID01L.16(US)

Triple Channel

HDL-MPWPID03L.18(EU)   HDL-MPWPID03L.16(US)

■ Short circuit protection
■ Overheat protection
■ Available in both EU and US standards

■ **Product names :**
  Wireless 1ch dimmer interface
  Wireless 3ch dimmer interface
■ **Working voltage :**
  AC85-270V   50/60Hz
■ **Output current :**
  01L: 1CH≤1.5A
  03L: 1st channel ≤ 1.2A
  2nd and 3rd channel total current≤2A
■ **Fuses :**
  01L:4A, aR type
  03L:6A, aR type
■ **Dimensions :**
  84×84×39(mm)-EU
  84×116×39(mm)-US

Power Interfaces
With 1ch+3ch Dimmer

The HDL live & neutral dimming power interface range use both a live, and a neutral connection to power all of the HDL Buspro wireless panels.

The single channel power interface and dimmer is capable of MOSFET dimming and switching, whereas the triple channel interface and dimmer uses both MOSFET and TRIAC dimming and switching methods.

Single channel

HDL-MPWPID01LN.18 (EU)   HDL-MPWPID01LN.16 (US)

■ Live & Neutral connection
■ Short circuit protection
■ Overheat protection
■ Available in both EU and US standards

Triple channel

HDL-MPWPID03LN.18 (EU))   HDL-MPWPID03LN.16(US)

■ **Product names :**
  Wireless 1ch dimmer interface (LN)
  Wireless 3ch dimmer interface (LN)
■ **Working voltage :**
  AC85-270V
  50/60Hz
■ **Output :**
  1channel/3 channels
■ **Output current :**
  MPWPID03LN.18: 1st channel≤1.2A ,
  2nd and 3rd channel total current≤2A
  MPWPID01LN.18: ≤1.5A
■ **Fuses :**
  01LN: 4A, aR type
  03LN: 6A, aR type
■ **Dimensions :**
  84×84×39(mm)-EU
  84×114×39(mm)-US

Power Interfaces
With 1ch Relay

The HDL range of power interfaces with relay functionality are able to fully power a HDL panel, while providing the ability to function as a 1 channel relay.

With both a live and a neutral connection, both of the power interfaces are perfectly suited for use with all HDL Buspro wireless panels.

- Live & Neutral connection
- Power protection
- Available in both EU and US standards

HDL-MPWPIR01.18 (EU)   HDL-MPWPIR01.16 (US)

- **Product name :**
  Wireless 1ch relay interface (LN)
- **Working voltage :**
  AC85-270V 50/60Hz
- **Output channel :**
  1CH relay
- **Output current :**
  16A 250VAC
- **Fuse :**
  2A，aR type
- **Dimensions :**
  84×84×39(mm)-EU
  84×114×39(mm)-US

Power Interfaces
With 1ch Relay
And Temperature Sensor

The HDL range of power interfaces with relay functionality and temperature sensor input are able to fully power a HDL panel, while providing the ability to function as a 1 channel relay.

With both a live and a neutral connection, both of the power interfaces are perfectly suited for use with all HDL Buspro wireless panels.

- Live & Neutral connection
- Temperature detection
- Power protection
- Available in both EU and US standards

HDL-MPWPIR01T.18 (EU)   HDL-MPWPIR01T.16 (US)

- **Product name :**
  Wireless 1ch relay interface
  Temperature (LN)
- **Working voltage :**
  AC85-270V 50/60Hz
- **Output channel :**
  1CH relay
- **Output current :**
  16A 250VAC
- **Fuse :**
  2A，aR type
- **Dimensions :**
  84×84×39(mm)-EU
  84×114×39(mm)-US

Gateway

The Gateway lies at the heart of the Buspro wireless system, and acts in essence as a transmission bridge.

With revolutionary HDL proprietary technology, all wireless devices can be connected to a central point.

This in turn allows the system to be controlled by an iOS or Android device, or connected to an existing wired automation network.

The Gateway module is ideally suited for upgrading an existing wired HDL system, and for those making their first foray into the world of automation.

With the Gateway module you can take control over your environment through real time energy monitoring, customizable scenes and sequences, and anytime anywhere remote management.

- Can function as a transmission bridge
- Wireless data is encrypted to ensure system security
- Selectable channel frequencies
- RF parameter shielding

HDL-MCIP-RF02.10

- **Working power :** 12~30VDC
- **Communication :** RJ45,HDL Buspro,RF
- **Working mode :** Mesh mode, bridge mode
- **BUS Terminal :** Wago 252,0.75-0.85mm diameter single core
- **Dimensions :** 107×99.5×27(mm)
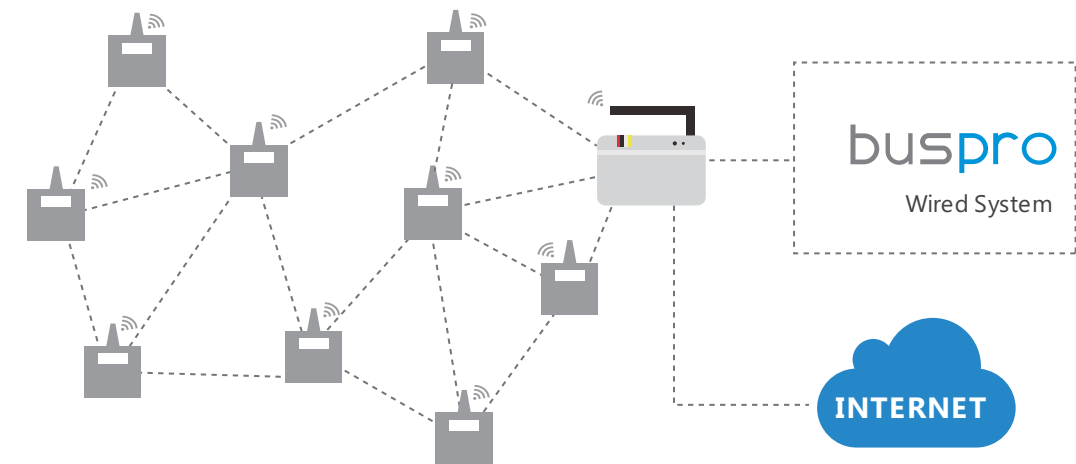
■ **Dual working modes**

- Employing two working modes, the Gateway can function in both mesh working mode and bridge network mode.

- In the mesh network mode all devices active in the network are able to communicate with each other, and a wired system can be integrated into the system via the RJ45 and HDL Buspro ports.
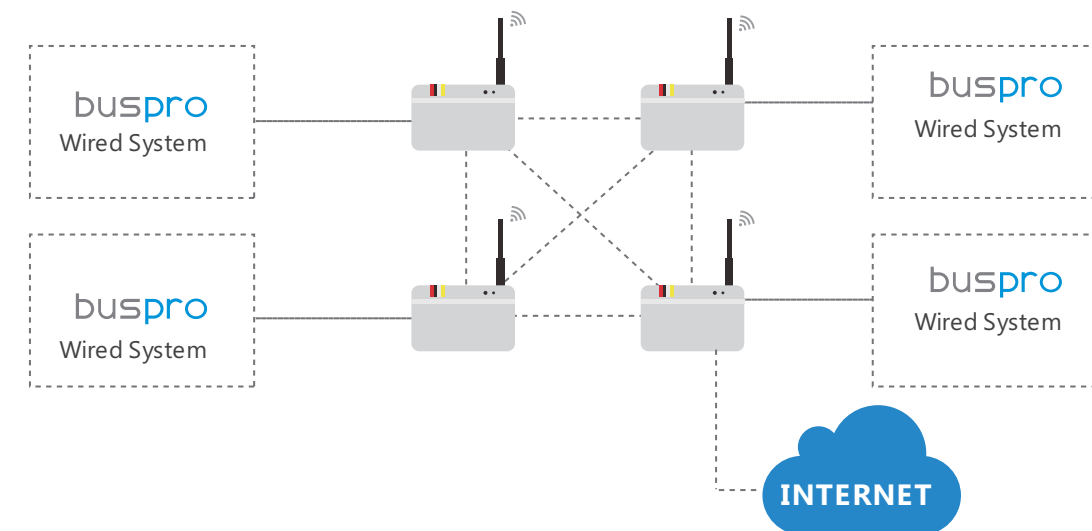
- When in the bridge working mode, the Gateway acts as a transmission bridge.

  This enables multiple gateways and their associated devices to wirelessly communicate with each other.

■ **Mesh working mode**

buspro
Wired System

INTERNET

■ **Bridge working mode**

buspro
Wired System

buspro
Wired System

buspro
Wired System

buspro
Wired System

INTERNET

Mini Convertor

Already have a wired Buspro solution installed in your home, but looking to upgrade to a Buspro wireless system? No problem.

Designed to bridge the gap between wired and wireless Buspro installations, the Mini Converter enables fast and efficient upgrades to be completed almost instantly.

With automatic address setting, all you need to do is connect the converter to your selected wired module, and configure your solution using your Android or iOS device.

HDL-MBUS/GW-RF.40

■ **Working voltage :** AC85-240VAC   50Hz
■ **Output voltage :** 24V DC   100mA
■ **Dimensions :** 48.2×43.6×21.3(mm)
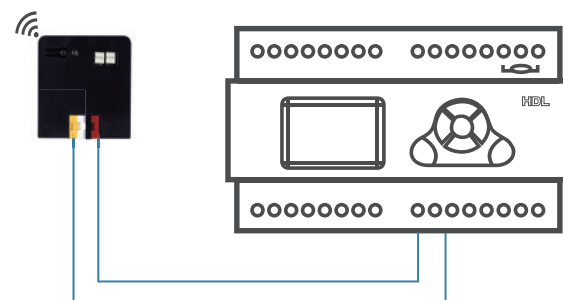
IntelliCenter Controller

When a home has multiple automation devices from different manufactures, finding a unifying control solution can be difficult.

That's why HDL has created the IntelliCenter Controller.

Designed to provide control over practically any automation solution, the IntelliCenter Controller enables you to manage your household appliances effortlessly, monitor energy usage, enhance security, and take control of your home from anywhere in the world.

HDLSERVER-10

Android   iOS

How It Works

The IntelliCenter Controller is able to speak to thousands of home automation devices, because it can translate and understand 34 different protocols, which are used in 99% of all automation solutions.

With the IntelliCenter Controller you can rest assured that whatever existing automation system you have, a unified control solution is not only possible, but breathtakingly simple to accomplish.

To set up the IntelliCenter, simply plug in the IntelliCenter Controller, and use the Android/iOS app to discover your existing automation products. Once this is done connect the IntelliCenter Controller to the internet, and a virtual bridge is created linking you to your home.

Wired or wireless? Why not both?

Wireless automation technology presents possibilities which are simply impossible for a traditional wired system to achieve.

Simply installed, and with unsurpassed flexibility, wireless systems are fast becoming the norm for residential installations.

This doesn't mean that your previously installed wired system is obsolete though.

Often just as functional as their wireless equivalents, wired solutions have a proven track record, and often do a single job very well.

Added to this is the fact that a wired system can be troublesome and costly to remove.

To enable your existing wired solutions to effectively be upgraded, the HDL IntelliCenter Controller has the ability to accept a wired connection, a wireless connection, or a combination of wired and wireless connections, making it a truly inclusive automation control system.

Easy rule creator

Having a fully integrated and unified automation system means nothing if it cannot be configured to meet your needs.

Using the HDL easy online rule creator, your system can be tailored to your exact requirements without the need for complex programming or coding.
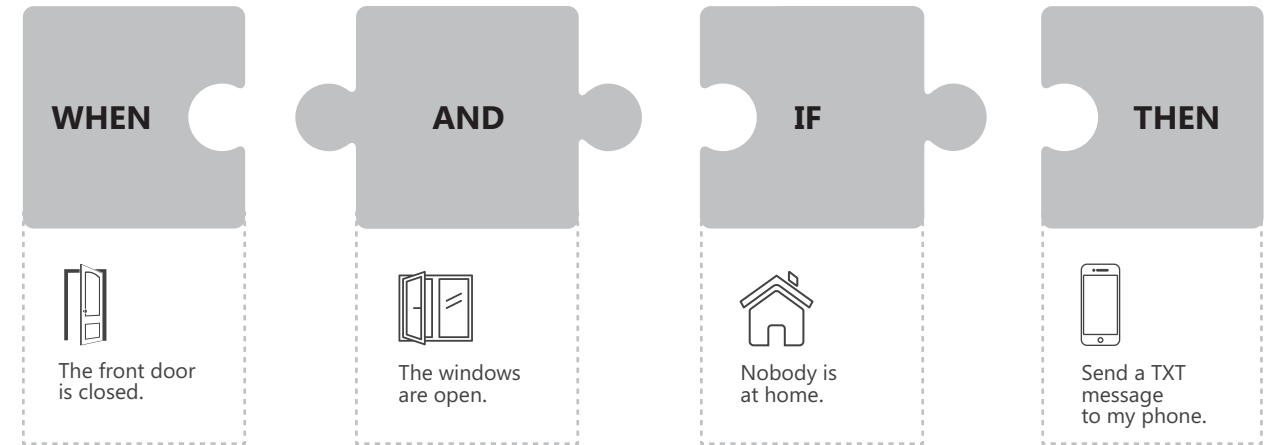
Simply log into your system, and then select the modules you wish to control.

With the modules selected, choose the applicable 'When', 'And', 'If' and 'Then' conditions.

Simple rule creation

With a set of 'When', 'And', 'If', and 'Then' rules your tailored control system can be created simply and intuitively.

WHEN	AND	IF	THEN
The front door is closed.	The windows are open.	Nobody is at home.	Send a TXT message to my phone.

Using the rule creator you can also make;

- Scenes which unify different automation solutions, allowing them to be triggered simultaneously.
- Scheduled events so that you never forget to water the garden, turn off your lights, or close the curtains.
- Groups so that your system collaborates sensor data, eliminating false alarms.

IR Emitter

Designed to control all IR devices and appliances, the IR Emitter brings you a centralized IR management solution for televisions, air conditioners, DVD players, home cinemas, and other IR controlled devices.

With a comprehensive list of in-built IR codes, the emitter is capable of controlling most devices from major manufactures instantly.

If your device is not included in the IR library, the IR Emitter can be updated via the HDL IR learner.

- Control IR devices from a HDL wall panel or your mobile device
- Enables full control over all IR devices
- Supports online upgrades
- Build a custom IR library

- **Working voltage :** 5V (by USB)
- **Working current :** 16mA
- **Dimensions :** 119.7×37.2(mm)

MIR01R-RF.10

Remote controller

IR Emitter

IR controlled devices

DLP panel
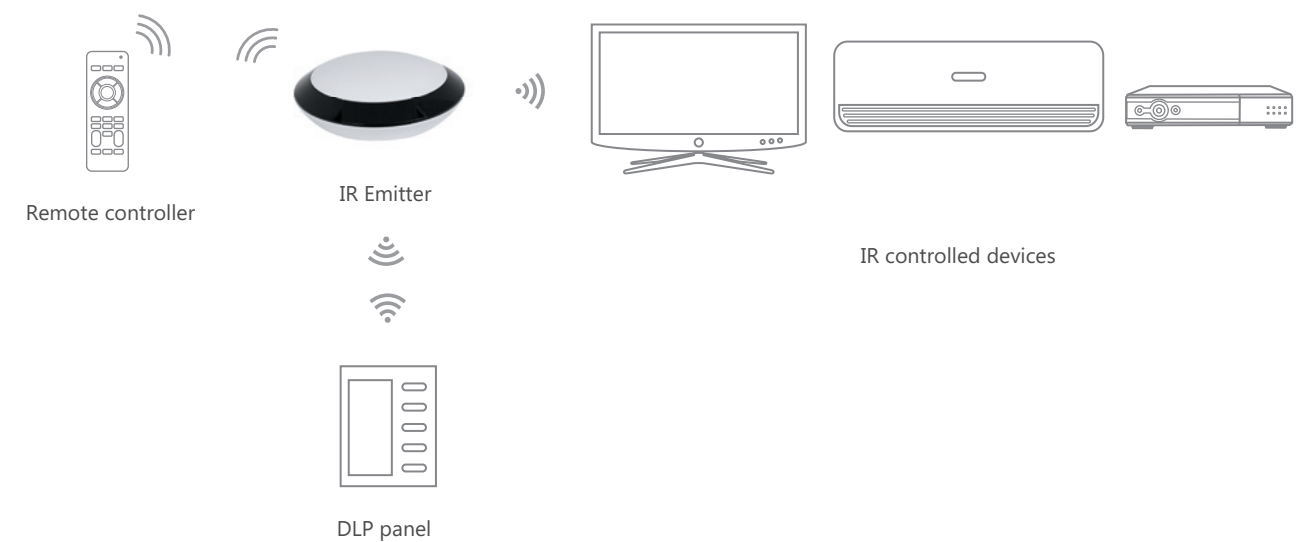
User
Interfaces

Sensors

Actuators

System
Components

Apps

A HDL app brings you more than the
ability to effortlessly configure your
automation system, it brings you
unparalleled control, convenience,
and security.

Adjust your homes temperature, dim
your lights, turn off your TV, and
monitor your CCTV cameras from
anywhere in the world via an in house
HDL app, or a 3rd party control app.

Available on both iOS and Android
platforms, a HDL app brings new
meaning to the words mobile control.

71 **72**

HDL On App

The HDL On App makes installing, configuring, and managing your HDL Buspro wireless solutions a breeze.

Simply run the app on your iOS or Android device, and your wireless solutions will appear automatically.

Once your solutions have been detected you can add, delete, or change your wireless devices, and create new rooms or device groups effortlessly.

The app also provides you with full control so you can adjust your lighting levels, open & close your curtains, set your home's temperature, and monitor your security solutions from anywhere in the world.
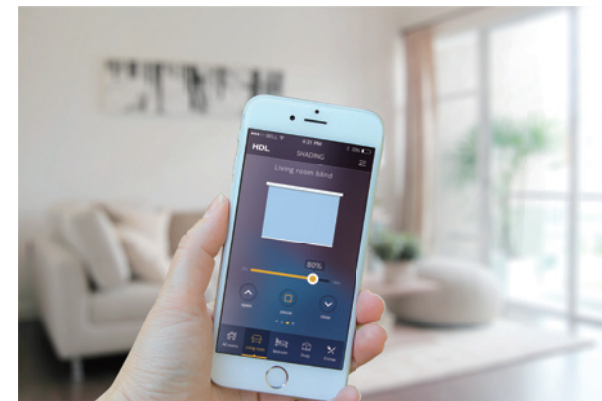
Android   iOS
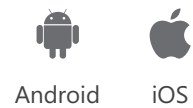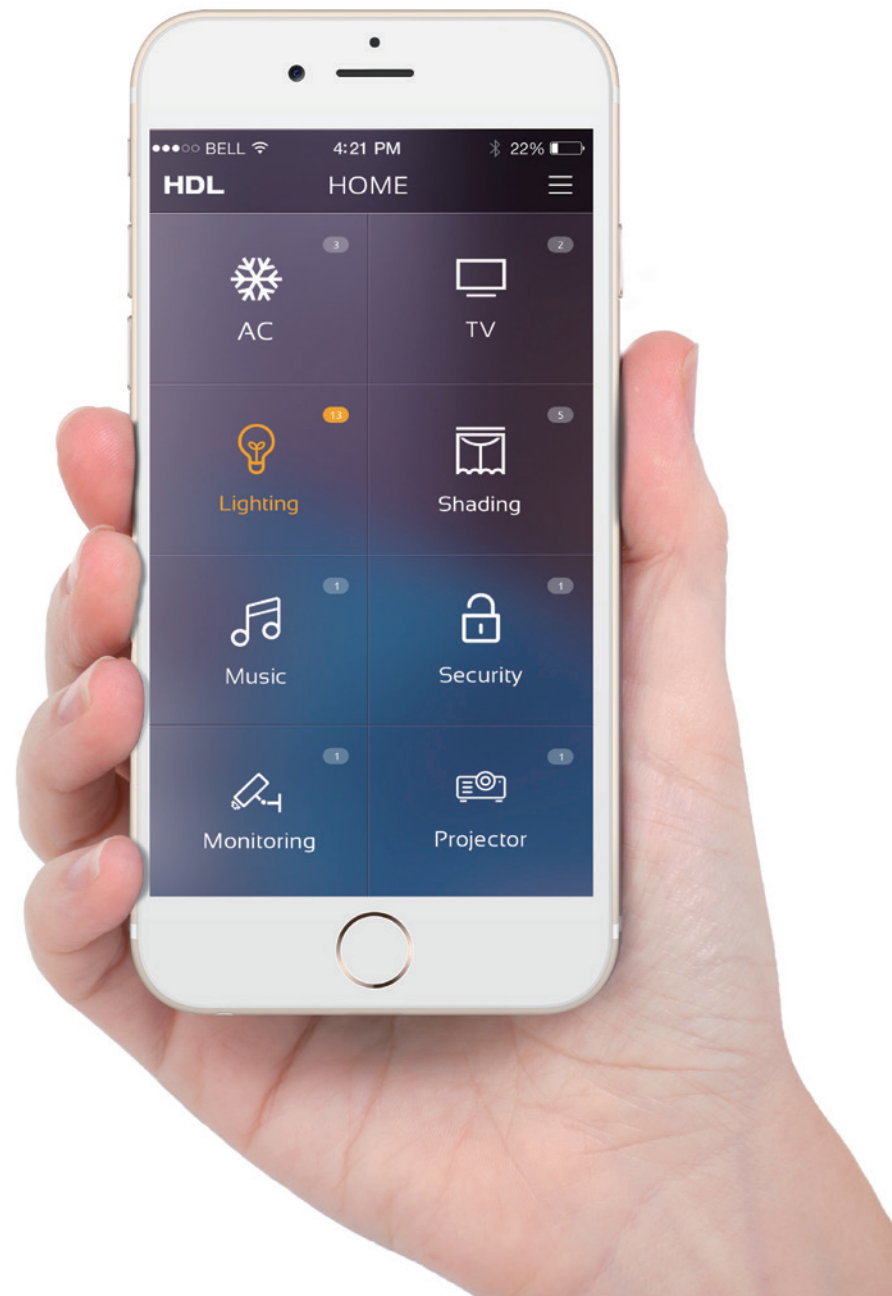
■ Customizable background photos
■ Create scenes and sequences in minutes
■ Simple, clear, and easy to use interface

■ Online cloud backup
■ Share your control settings with other iOS and Android devices

Scenes

Lighting

Shading

HVAC

73 **74**

IntelliCenter App

Designed to work in conjunction with the HDL IntelliCenter, the IntelliCenter App makes controlling your home's lighting, temperature, background audio, and connected devices and appliances effortless.

From the IntelliCenter App you can also monitor the status of your home's security, be notified via txt messages of changes in your home's status, arm or disarm your alarm, check the status of your doors and windows, and view a live feed from your security cameras.

To ensure that your home is as energy efficient as possible, you can also monitor in real time the energy consumption of your connected devices.

This allows you to see exactly how much electricity is being used in your whole home, or by each individual connected device instantly.

Android   iOS

This data can then be used to provide you with reports and statistics of your home's energy consumption so you can analyze where savings could be made, and project your future energy usage.

Available on both Android and iOS platforms, the IntelliCenter App has been specifically created to be the perfect partner for your HDL IntelliCenter system.