

HDL®

HDL®



2019/7 Edition

BUILDING AND HOME AUTOMATION CONTROL SYSTEM buspro

HDL[®]

**Building and Home Automation
Control System**

HDL social media and more...

We, the team at HDL, are pleased to invite you to join us in the social media community. As an HDL customer, you are very important to us, and we look forward to assisting you however and whenever we can. We invite you to explore our solutions, learn more about us online, and connect with others who can inspire and help you. Follow us on Facebook, Twitter, YouTube and LinkedIn!

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HDL Automation



HDL Automation



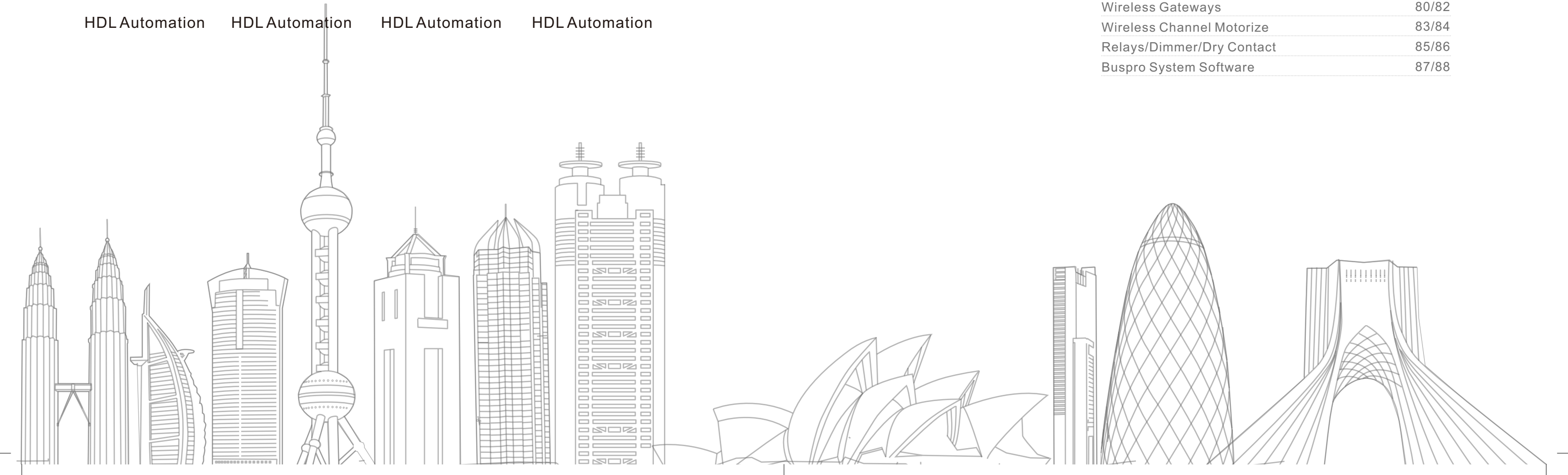
HDL Automation



HDL Automation

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Company Profile

Headquartered in Guangzhou, China, HDL is a manufacturer of comprehensive automation systems and provider of integrated solutions for homes,commercial buildings and hotels.Its business has been presented over 100 countries and regions. Tens of thousands of projects have adopted HDL products and solutions, such as Dubai International Airport, the office building of the Australian Institute of Architects 41X, Macao Morpheus Hotel, Beijing MOMA multi-dwelling apartment buildings, etc.

Our Automation Systems

Currently our product portfolio consists of three comprehensive automation systems, namely, Buspro,Buspro Wireless and KNX. These are distributed systems that can connect with most electrical devices and appliances in a building, LED lamps, for example, and allow users to control them on a wall panel, mobile app or a PC. With the help of sensors and logic settings, task can also run automatically without user interference.

Buspro is a wired system runs HDL's proprietary protocol while Buspro Wireless is a wireless one as you can see from its name. In addition, HDL is also manufacturer member of KNX International and board member of KNX China, hence we also provide KNX system products.



Advantages of HDL



Complete product range



Reliable Quality



Full management of product life span



Longstanding and trustworthy brand

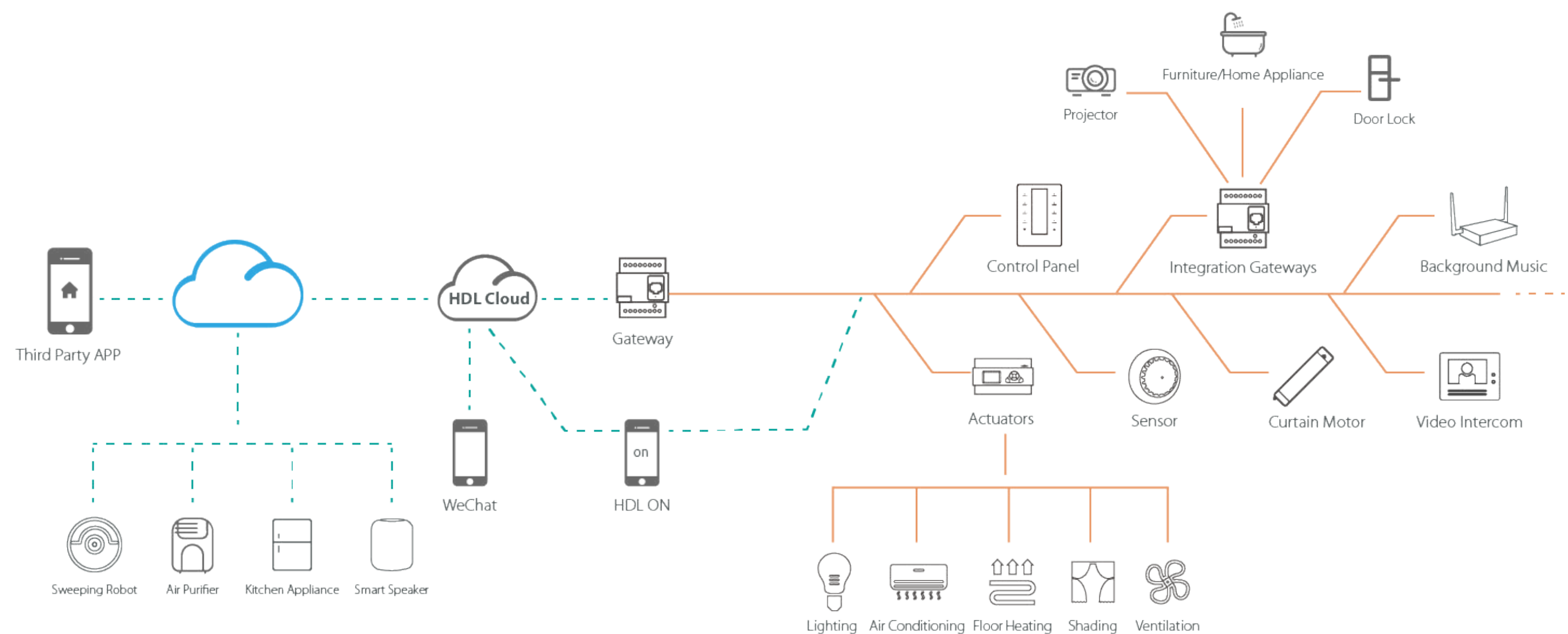


True Integration and Compatibility



Better Respond to Customer Requirements

Schematic Diagram of Buspro





HDL® buspro

Buspro is a distributed communication bus protocol based on the RS-485 standard, which enables control of all building appliances, and integration with third party software and hardware. It allows technologies to merge and can be expanded in a simplistic manner.

1 Channel Tubular Blind Controller

MVSM45B.12



Parameters

- Power Supply: DC16~30V
- Rated voltage: AC220V 50Hz
- Static direct-current power: 0.7W
- Dynamic direct-current power: 1.2W
- Working voltage range: AC190~235V
- Working current: 0.6A
- Rated power: 140W
- Rated torque: 10N.m
- Rated speed: 17r/min
- Terminal: HDL Buspro
- dB: 42dB
- Insulation class: H
- IP class: IP44
- Dimension: $\Phi 45 \times 75.5$ (cm)

Functions

- Can control to open, close, stop and percentage control
- Communication: HDL Buspro
- AC motor is power source, provide enough power, it can make the torque of tubular motor big enough
- Overheat protection
- Supports online upgrading
- Supports easy programming

MVSM45B.12



The MVSM45B.12 is a tubular blind controller, which has been designed to automate all common roller blinds. The unit can output 10 Nm of torque giving an effortlessly smooth action, and operates at a barely audible 42dB.



High torque

Using a single phase AC motor the unit can effortlessly control blinds via its 10 Nm of torque. To provide a user with the ultimate in blind control, the unit has percentage control; stop, up and down control.

Reliable

To increase reliability and service life, the MVSM45B.12 utilizes overheat protection. This safeguards not only the unit itself, but the system it is integrated into.



1 Channel Motorized Curtain

MWM70B.22



HDL-MWM70B.22 is the new motorized curtain, it supports open, stop, close and percentage control. And It has manual mode and over heat protection.

Parameters

- Power Supply: AC220V 50HZ
- Rated power: 75W
- Rated torque: 1.2Nm
- Rated speed: 112rpm
- Line speed: 20cm/s
- Insulation class: I.CI.F
- IP class: IP20
- Bus working voltage: DC12-30V
- Bus power consumption: 40mA/DC 24V
- Communication interface: HDL-Buspro
- Interface: RJ11(6P6C)network port

Functions

- Whisper quiet operation at only 40db
- Overload and overheat protection
- Automatic calibration when powered on
- Pulse coding for position control
- Supports forward, reverse, stop, and percentage control
- Able to be manually opened and closed

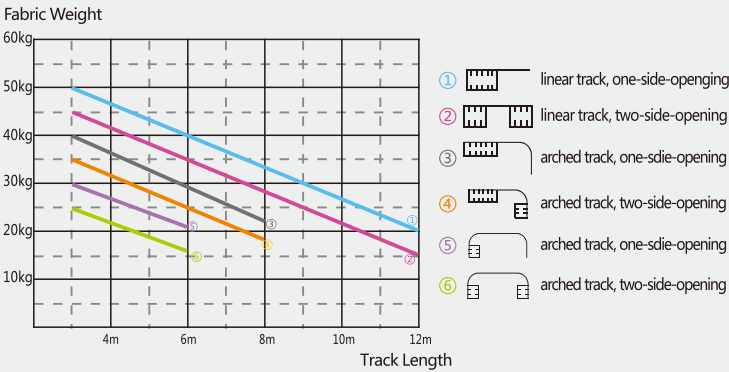
MWM70B.22



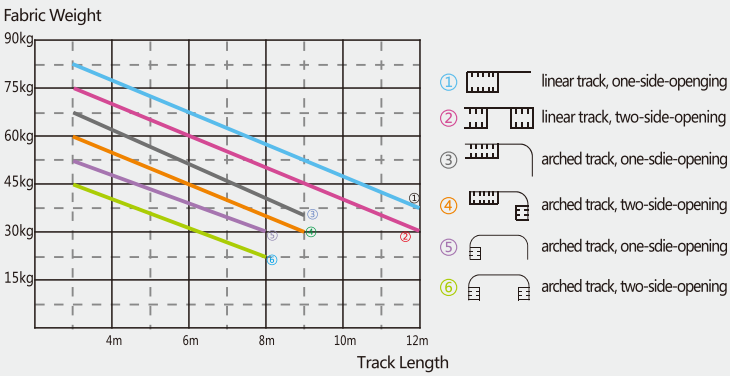
Created to open and close curtains effortlessly, the HDL-MWM70B.22 Motorized Curtain enables curtains to be completely integrated into a Buspro automation system. This lets you control your curtains with the press of a single button, or take full advantage of the Buspro system through:

- Precise percentage control
- Scheduled opening and closing
- Scene and sequence integration
- Intelligent opening and closing based on sensor data
- Remote opening and closing via iOS and Android devices

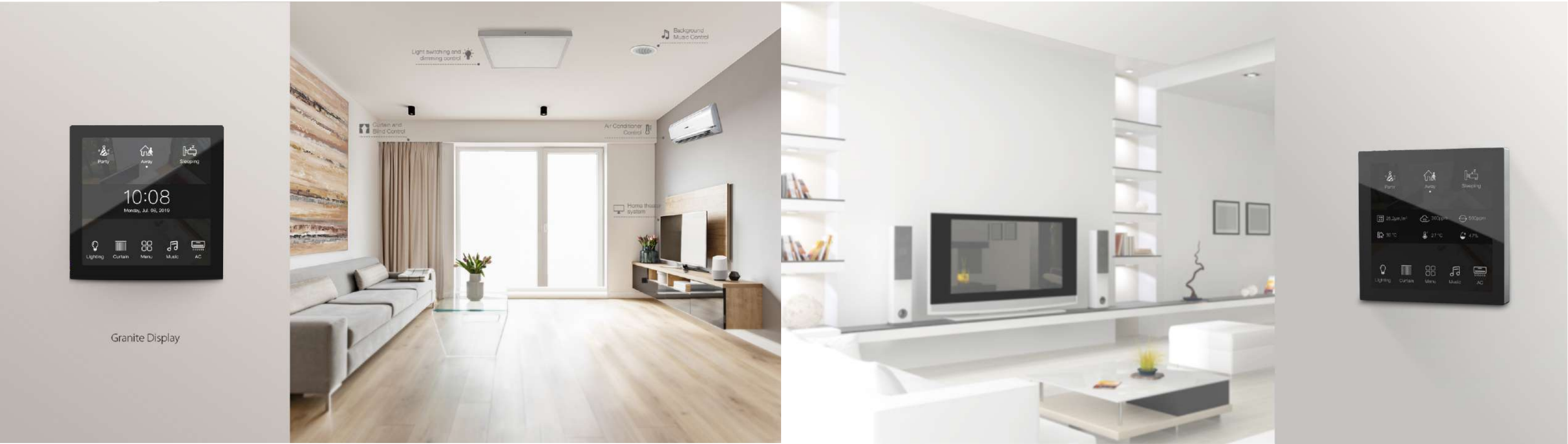
Load curves(one-motor type)



Load curves(two-motor type)



Granite Display
MPTL4C.48



■ Redefine the way you control connected devices on a wall panel.

Granite Display is a multifunctional touch-control panel with 4-inch high-resolution display. You can quickly access the most frequently used functionality or scenes by the short-cut buttons on the home screen. And you may change the short-cut settings as you wish. As you explore more on the user interface, you may find it different but comfortable controlling your home devices on Granite Display.

■ Features and specifications



4-inch 720 x 720P HD touch display



Built-in proximity sensor
temperature and humidity sensor



Adjustable screen backlight brightness

Colors:



Arctic Silver



Space Gray

S10 / 10 Inch Touch Screen
MTS10B.2WI

MTS10B.2WI



Add credits to interior decoration
in a perceptible way.

S10 is a touch panel equipped with a 10.1-inch 800 x 1280P HD display and a dedicated user interface. With the excellent industrial design and UI, a panel of such size will just make your building more beautiful apart from its tech features.

Features and specifications

- 10.1-inch 800X1280P display
- Built-in proximity sensor temperature sensor
- Built-in real-time clock (RTC)
- proximity sensor to automatically wake up the display
- DC 25V Power supply: DC 9 ~ 25V
- RS485 Communication: IP, RS485 (Not Buspro)

S57 Touch Panel
MTS57.1WI

MTS57.1WI

Quick and full control experience

With an 18:9 aspect ratio display embedded in the crystal white panel, S57 stands out among its rivals. The slim body makes it different. You can have quick and full control experience on S57.

Features and specifications

5.7-inch 1280 x 640P display with 18:9 aspect ratio

HDL ON iRidium Default: HDL ON,Optional: iRidium Mobile apps

Built-in proximity sensor, brightness sensor

Built-in microphone and speaker

Communication: Bluetooth, Wi-Fi, RJ45

DC 24V POE Power supply: DC 24V or POE

Prism Pro / Multi-function Touch Panel

MPTFL11.46

Prism Lite / Touch Panel US

MPTF02.46 / MPTF04.46 / MPTF06.46

MPTFL11.46



■ One panel for one room

Prism Pro is a touch panel that consists of an elegant metal frame and covered entirely by one piece of glass on the front. With the display showing the control targets and statuses, you can intuitively control lighting, shading, HVAC, music and more functions.

■ Features and specifications

- CNC-cut aluminum frame
- 2.5D glass cover
- 2.4-inch display for intuitive control
- RGB status indicators
- Customizable button icons
- Built-in temperature sensor, proximity sensor
- Power supply: DC 24V
- Colors: Pearl White, Night Black
- Dimensions: 86 x 116.5 mm (US)



MPTF02.46



■ Your choice of ultimate simplicity

Designed to be premium and simple, Prism Lite can easily merge into your interior deco with its minimal appearance. It would be a perfect choice if you only need to control a few functions.

■ Features and specifications

- CNC-cut aluminum frame
- 2.5D glass cover
- RGB status indicators
- Customizable button icons
- Built-in temperature sensor, proximity sensor
- Power supply: DC 24V
- Colors: Pearl White, Night Black
- Dimensions: 86 x 86 mm (EU), 86 x 116.5 mm (US)



MPTF04.46

MPTF06.46



Prism Lite / Touch Panel EU

MPTF02.48 / MPTF04.48 / MPTF06.48

Granite / Metal Push Button Panel EU / US

MP4C.48 / MP6C.46

MPTF02.48



Your choice of ultimate simplicity

Designed to be premium and simple, Prism Lite can easily merge into your interior deco with its minimal appearance. It would be a perfect choice if you only need to control a few functions.

MPTF04.48



Features and specifications

- CNC-cut aluminum frame
- 2.5D glass cover
- RGB status indicators
- Customizable button icons
- Built-in temperature sensor, proximity sensor
- Power supply: DC 24V
- Colors: Pearl White, Night Black
- Dimensions: 86 x 86 mm (EU), 86 x 116.5 mm (US)

MPTF06.48



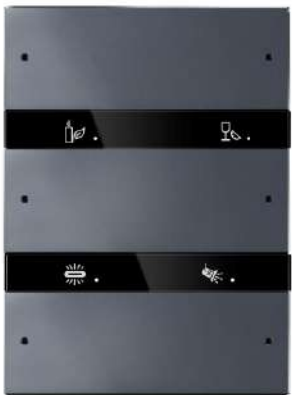
MP4C. 48



Premium and minimal

Granite is a push-button panel with premium metal finish. The RGB indicators, icons and the firm button feedback all together make your control comfortable and intuitive.

MP4C. 46



Features and specifications

- Premium metal finish
- Natural and comfortable push feedback
- Endures at least 100,000 times of pushes
- Power supply: DC 24V
- Color: Arctic silver, space gray, rose gold
- Dimensions: 86 x 86 mm (EU), 86 x 116.5 mm (US)

Tile Series OLED Panel

Tile



Control everything you need with buttons

The basic unit of Tile is a keypad or socket panel in EU standard. You can use just one unit if it meets your requirement, or combine multiple units to serve more functionalities in a specific area.



Tile

Features and specifications

- Supports various types of control targets
- Flexible combinations for required functionalities
- RGB icon backlight
- Customizable button icons
- Users are allowed to set the colors of icon backlight
- Available in two materials and four colors



Premium quality with two materials.

Tile series comes with two versions of different materials: metal and plastic. Each one is able to give you a sense of premium quality, either with the refined sandblasting finishes on the metal one or the skin-like touch feeling on the plastic one.



Plastic:



Metal:



Horizontal:



2-gang



3-gang



4-gang

Vertical(Metal Version Only):



2-gang



3-gang



4-gang

Tile Series OLED Panel

MPL6B / TILE.48

Tile Series Button Panel

MP1B / TILE.48 / MP2B / TILE.48 / MP4B / TILE.48

MPL6B/TILE.48



Overview

Tile OLED Panel (See Figure 1) is divided into an OLED display and four pushbuttons, enabling controls of air conditioning, fan coil unit, floor heating and ventilation system. Parameters can be set by HDL Buspro Setup Tool or manually set on the panel. The brightness level can be set. The icons and text on the panel support laser labelling.



Features and specifications

- Built-in temperature sensor and humidity sensor.
- Different pages for air conditioning, floor heating and ventilation system.
- Customizable icons and text
- Adjustable OLED backlight brightness
- Online upgrade via HDL Buspro Setup Tool.

Overview

Tile series contains 1/2/4-button panels, both plastic and metal versions. Icons and text of each button supports laser labelling. With built-in RGB backlight for each pushbutton, the color and brightness level can be set by HDL Buspro Setup Tool or manually set on the panel. The panels support controls of lights, curtains, scenes, music, etc.

MP1B/TILE.48



MP2B/TILE.48



MP4B/TILE.48



Touch DLP Panel
MPTL14.46-A



MPTL14.46-A



Parameters

- Working power: 12~30VDC
- DC Current: 45mA/24VDC
- Bus Terminal 0.75-0.85mm Diameter Single Core
- Housing Material: Glass , ABS, PC
- Installation: GI Wall-Box
- Dimensions: 86x116.5x10.5(mm)

Functions

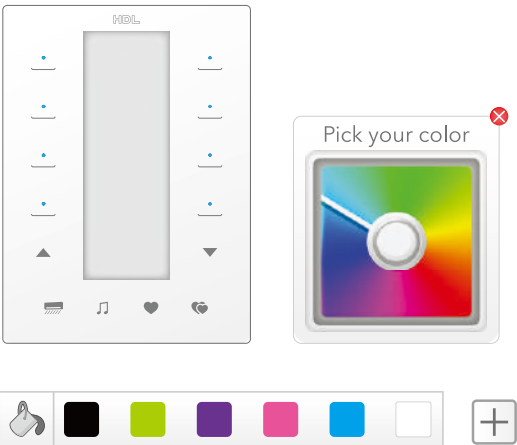
- Users can change icon for page 1,2,3 and download to device by "HDL KNX Assistant Software"
- Brightness of the LCD and LED can be set via ETS software.
- It support many kind of data point and functions, include Switch control, Dimming control, Shutter control, Flexible control, Scene control, Sequence control, Percentage control, Threshold control, Combination control, String(14bytes) control, HVAC, Audio, Floor heating, IR for AC, Button Lock, Button Trigger, Temperature Display, Time Display, Remote Trigger.
- Keep pressing the first and last button together for 2 seconds, the LED Indicators will flashing and enter programming mode.
- Button sound can be set.
- For security touch button can be lock via KNX/ EIB.



What's your favorite color?

- Your Company's Logo In The Switches
Give an excellent branding for your company using customized front plates with the logo of your company or the corporate colors.
- Choose The Color That Defines Your Home's Personality

We provide the possibility to print out layout colors, picture or image texture on the front plate that suit your lifestyle or with your interior designer's project. colors.



Enviro Panel
MPTLC43.46-A



■ Creating the perfect blend of form and functionality

Enviro Panel is an elegant multi-function touch LCD panel with smooth outlines and a luxurious display, creating the perfect blend of form and functionality. It can take complete control over your home by managing HVAC, lighting, and security in a minimalist user friendly package.

The customized versions have been widely used in the latest HDL hotel project, Morpheus Macau. Designed by the late legendary architect, “Queen of the Curve” Zaha Hadid, Morpheus is the new flagship hotel for the City of Dreams Macau.

HDL Enviro panels were installed into each of the 772 guest rooms, and all the public areas to improve guest experience and hotel staff work efficiency.



■ Parameters

- Working voltage: DC12~30V (From MPLPI.46 -A)
- Power consumption: 85mA /DC24V
- Terminal: 0.75-0.85mm Diameter Single Core
- Housing Material: Glass, PC, ABS
- Installation: GI Wall Box
- Dimensions: 86x116.5x10.5(mm)

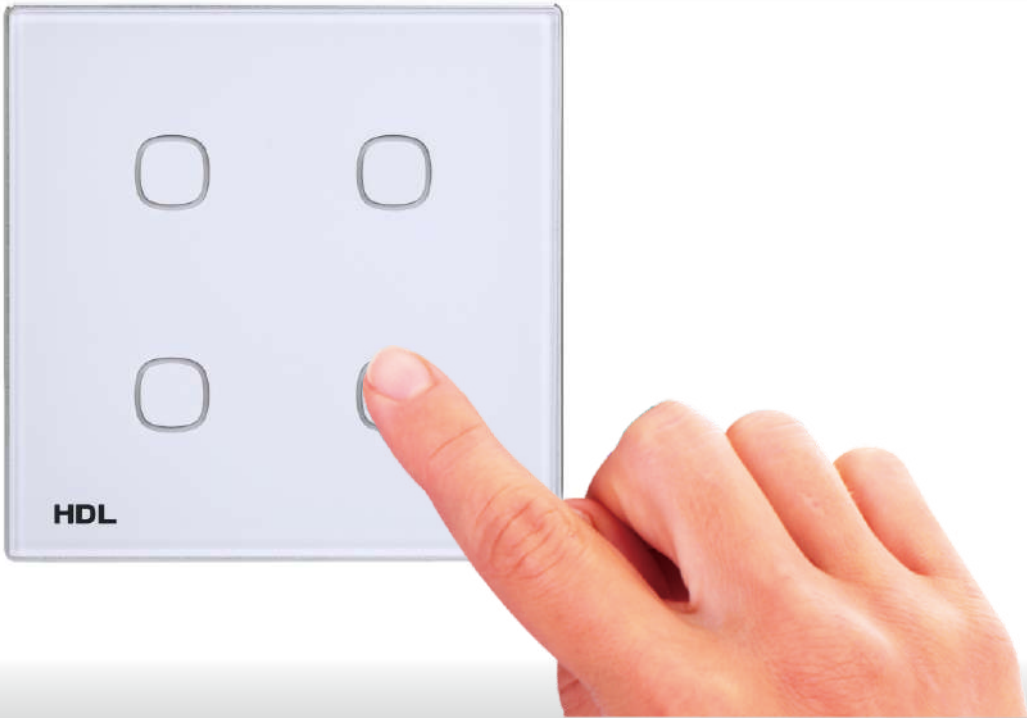


■ Functions

- Built-in temperature sensor
- Adjustable LCD backlight
- LCD Wake up function
- According to the set time, the screen will switch to the defined interface automatically, then the screen will dim and enter the power saving mode.
- 60 control buttons in total can be set. The quantity and layout of the control buttons can be defined by user.
- AC control: supports 9 air conditioners
- Floor heating control: Supports 9 floor heating modules. Mode: Normal, Day, Night, Away, Timing. (According to the set time, the panel can switch automatically between the Day mode and Night mode.)
- Music play: supports 9 music players
Music source: SD, Audio-IN, BT, S/PDIF, RADIO
Play list: supports 10 lists, list 1...list 10
- Timer function
- Security setting: supports 6 security modules, each security module can set different security mode, such as holiday, away, day, night, etc
- Time function: Displays date, time and temperature etc.
- Key mode: Invalid, Single on-off, Single on, Single off, combination on, combination off etc.
- Key control mode: Scene, Sequence, Timer switch, Universal switch, Single channel on-off, Broadcast scene, Broadcast channel, Curtain, GPRS control, Panel control, Security module, Music play, General control etc.
- Panel control: Enable infrared receiving, Turn on/off AC, cooling & heating for AC, Auto temperature setting, Fan Speed regulating, AC Mode setting, AC Temperature regulating, backlight adjusting, AC Lock, Backlight and status indicator light setting, floor heating temperature and mode setting etc.
- Supports online upgrading

Touch Buttons Switch

MPT4. 48-A



MPT4. 48-A



The back-light button lights up when it is touched

Each touch button has two-colour custom status which can be infinitely adjusted via the RGB value. The Touch Panel technology adjusts automatically to the changing environmental conditions such as humidity and temperature. Also other parameters such as the back-light's brightness and saturation are adjustable.

The color, icons and pattern of the plate can be customised



Touch Buttons Switch

MPT2.48-A / MPT2.46-A / MPT4.46-A / MPT6.46-A

MPT2.48-A



MPT2.46-A



Parameters

- Power supply: DC12-30V
- BUS power consumption: 20mA/DC24V
- Installation: Wall mounting
- Dimensions: EU:86×86×10.5(mm)
US:86×116×10.5 (mm)

MPT4.46-A



Functions

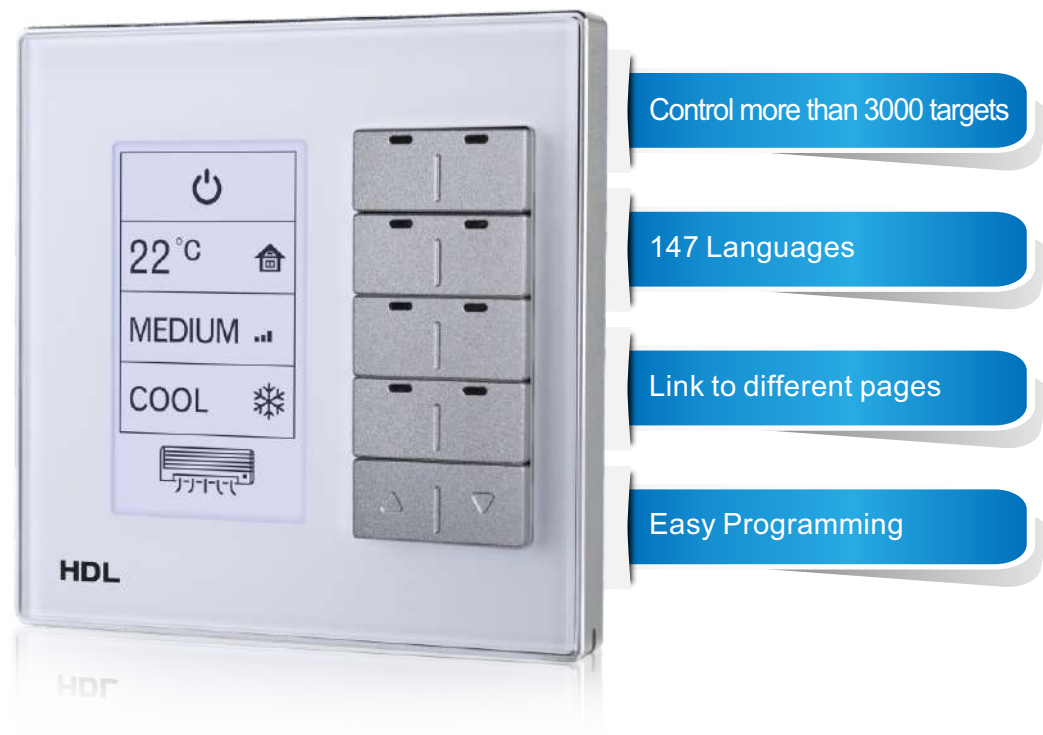
- Working with MPLPI.46-A / MPLPI.48-A panel power interface
- 2/4/6 touch control buttons
- Multi modes for button: Single on/ off, single on, single off, combination on, combination off, combination on/off, double click/ single on/ off, double click/combination on/off, momentary, short press/long press, short press/long momentary etc.
- Multi control types for button: Scene, sequence, timer, universal switch, single channel control, curtain, GPRS, panel, broadcast scene, broadcast channel, security module, music
- Adjustable RGB backlight
- Support easy programming
- Support HDL Buspro online upgrading

MPT6.46-A



DLP Switch
MPL8.48-A

MPL8.48-A



New generation DLP

New design features such as metal buttons with four left/right keys (in total eight individual buttons) which you can merge together and configure their LEDs. The frame and plate are selectable with different materials and colours to fit in with your lifestyle.

With just one DLP you can control your whole house. Up to 32 buttons distributed through four pages, you can control up to 99 targets with each button, and in total more than 3000 targets like lighting, curtain, blinds, HVAC, heating system, background music, etc.

The new firmware supports 147 different languages, has a user-friendly interface, and provides easy programming functions as well. The DLP panel allows connections with dimmers, relays, curtains, etc. directly without software. All the buttons have the ability to record the state of the rest of buttons and create with them new scenes in the DLP panel. This special function makes creating and changing scenes easy for the end users.



IR Remote Control

Built-in IR receiver (You need to replace a plate with an IR receiving hole to enable the IR remote control function)

DLP Switch / LCD Touch Thermostat with Metal Frame
MPL8.46-A / MPTAC01.48-A

MPL8.46-A



Parameters

- Power supply: DC12-30V
- BUS power consumption: 30mA/DC24V
- Installation: Wall mounting
- Dimensions: EU:86×86×10.5(mm) US:86×116×10.5 (mm)

Functions

- Works with MPLPI.46-A / MPLPI.48-A panel power interface
- 8 control buttons, 2 page buttons, button combine function
- Multi Modes for button: Single on/ off, single on, single off, combination on, combination off, combination on/off, double click/ single on/ off, double click/combination on/off, momentary, clock timer, short press/long press, short press/long momentary, "hyperlink" etc
- Multi control types for button: Scene, sequence, timer, universal switch, single channel control, curtain, GPRS, panel, broadcast scene, broadcast channel, security, music
- IR remote control, adjustable LCD back light
- Floor heating, air conditioning and music control
- Supports HDL Buspro online upgrading

MPTAC01.48-A

Parameters

- Working voltage: DC12~30V (From MPPI.48)
- Power consumption: 40mA/DC24V
- Temperature setting range: 0~30
- Dimensions: 86×86×10.7 (mm)

Functions

- The panel can control air conditioner's temperature, mode, fan speed and power.
- Supports cooling, heating, dehumidification and fan speeds.
- Supports high, medium, low, auto fan speeds.
- Supports temperature and status display of air conditioner.
- Supports IR, backlight intensity, and power saving mode.
- Supports firmware updates via HDL Buspro software.



8 Buttons Switch

MP8B.48

2/4/6 Buttons Switch

MP2B.48 / MP4B.48 / MP6B.48

DIY Concept

Do It Yourself

Selectable plate and frame this is ideal in situations where you may need to regularly change or adjust the functionalities of different buttons.

The text on the buttons is easily adjustable, removable, and replaceable to suit your individual and changing needs. You simply print what you want, fix it to the button and cover it with the plastic sleeve.

This also makes it a very economical option as opposed to committing yourself to ones with design at the outset.

Parameters

- Power supply: DC12-30V
- BUS power consumption: 15mA/DC24V
- Installation: Wall mounting
- Dimensions: 86×86×10.5(mm)

Functions

- Working with MPPI.48 panel power interface
- 4/6/8 control buttons
- Multi modes for button: Single on/ off, single on, single off, combination on, combination off, combination on/off, double click/ single on/ off, double click/combination on/off, momentary, short press/long press, short press/long momentary etc.
- Multi control types for button: Scene, sequence, timer, universal switch, single channel control, curtain, GPRS, panel, broadcast scene, broadcast channel, security, music
- Customize button labels
- Key lock function
- Key led status can be adjustable
- Support easy programming
- Support HDL Buspro online upgrading

MP2B.48



MP4B.48



MP6B.48



Customize different plate and frame color

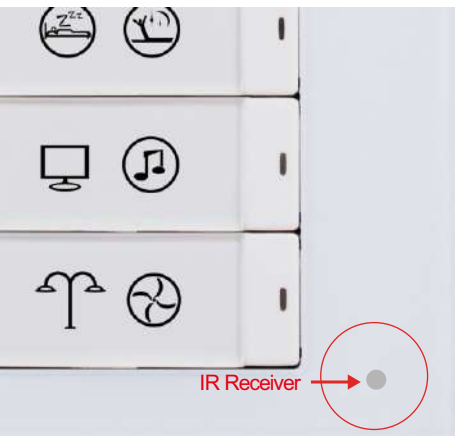


Black glass 2 button switch Black glass 4 button switch Black glass 6 button switch Black glass 8 button switch

IR Remote

Control

Built-in IR receiver (You need to replace a plate with an IR receiving hole to enable the IR remote control function)



4/6/8 Buttons Switch

MP2B.46 / MP4B.46 / MP6B.46 / MP8B.46

Modern Series Intelligent Switch

MPH101.48 / MPH102.48 / MPH104.48 / MPH108.48

MP2B.46



MP8B.46



MP4B.46



MP6B.46



Parameters

- Power supply: DC12-30V
- BUS power consumption: 15mA/DC24V
- Installation: Wall mounting
- Dimensions: 86×116.5×10.5(mm)

Functions

- Working with MPPI.46 panel power interface , 4/6/8buttons
- Multi Modes for Button: Single on/ off, single on, single off, combination on, combination off, combination on/off, double click/ single on/ off, double click/combination on/off, Momentary, short press/long press, short press/ long momentary etc.
- Multi control types for Button: Scene, sequence, timer, universal switch, single channel control, curtain, GPRS, panel, broadcast scene, broadcast channel, security module, music
- Customize button labels
- Key lock function
- Key led status can be adjustable
- Support easy programming
- Support HDL Buspro online upgrading

Customize different plate and frame color



Black glass 2 button switch Black glass 4 button switch Black glass 6 button switch Black glass 8 button switch

MPH101.48



MPH102.48



MPH104.48



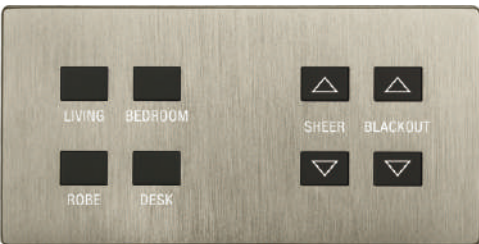
Parameters

- Power supply: DC12-30V
- BUS power consumption: 15mA/DC24V
- Installation: Wall mounting
- Dimensions: 86×86x23(mm)

Functions

- Multi Modes for Button: Single on/ off, single on, single off , combination on, combination off, combination on/off , Momentary, double click/ single on/ off , double click/combination, on/off, etc
- Multi control types for Button: Scene, sequence, timer, universal switch, single channel control, curtain, GPRS, panel, broadcast scene, broadcast channel, security module, Music, etc.

MPH108.48



- Dimensions: 172x86x23(mm)

Panel Power Interface

MPLPI.46-A / MPLPI.48-A / MPPI.46 / MPPI.48

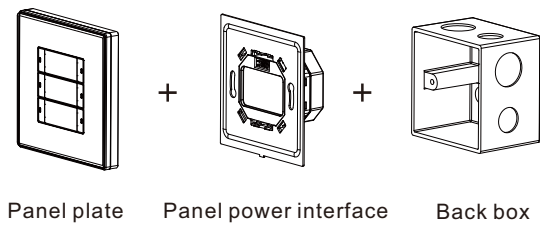
MPLPI.46-A / MPLPI.48-A



MPPI.46 / MPPI.48



Installation Diagram



- ### Parameters
- Power supply: DC12-30V
 - Communication interface: HDL Buspro
 - Installation: Standard GI and EU(US) Box
 - Dimensions: 80×110.5×28.5(mm)(US) 80×80×28.5 (mm)(EU)
- ### Functions
- The HDL-MPLPI.48-A /HDL-MPLPI.46-A Panel Power Interface is a universal base for different switches
 - It has an HDL-Bus interface and must work in conjunction with panel or sensor.

- ### Parameters
- Power supply: DC12-30V
 - Communication interface: HDL Buspro
 - Installation: Standard GI and EU(US) Box
 - Dimensions: 80×110.5×28.5(mm)(US) 80×80×28.5 (mm)(EU)
- ### Functions
- This docking base is the universal base for different switches.
 - It has the HDL-Bus interface. It must work in conjunction with panel or sensor

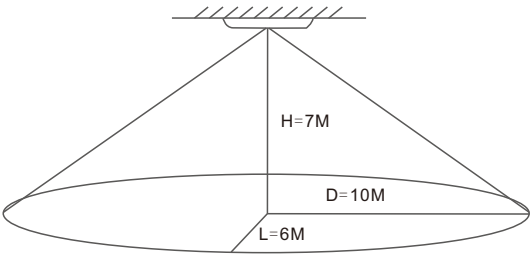
Outdoor Doppler Sensor

MSOUT.4W

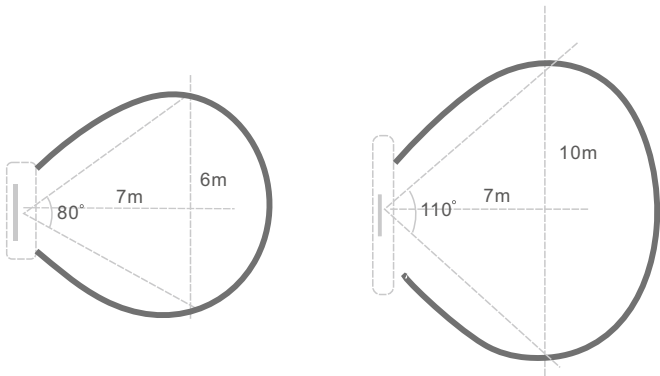
MSOUT.4W



- ### Parameters
- Working voltage: DC12-30V
 - Power consumption: 31mA/DC24V
 - Temperature detection range: -40°C~60°C
 - Illumination detection range: 0~15000LUX
 - Humidity detection range: 20~95%RH
 - Microwave detection range: H:7m D:10m L:6m
 - Housing material: ABS: stainless steel
 - Installation: Screw fixation
 - Dimensions: 126X78X42 (mm)
- ### Functions
- Built-in LUX sensor, microwave sensor, humidity sensor, temperature sensor, dry contact, universal switch
 - Two logical relations: OR, AND
 - It has 24 logic blocks. Both true logic and false logic can trigger the targets respectively. Each logic can set 20 targets
 - Adjustable microwave sensitivity, range is 1-100
 - Each logic supports trigger delay time from 0 to 3600s
 - The range of universal switch number in logic is 201-248, each logic has 2 universal switch numbers, universal switch can close automatically, the time range is 1-3600s
 - Tamper-proof function.
 - Supports security function
 - Sensor has heating function. It can make sure that the circuits can work normally while the temperature is below -5°C
 - Supports online upgrading



Detection Range



Vertical Direction

Horizontal Direction

Temperature, Humidity Sensor / Indoor Doppler Sensor

MASTH.2C / MSW01.4C

12 in 1 Multi-Function / Air Quality Sensor

MS12. 2C / MASLA.2C

MASTH.2C



MSW01. 4C



MS12. 2C



MASLA.2C



Parameters

- Power supply: DC12-30V
- Bus power consumption: 25mA/DC24V
- Temperature detection range: -20~36℃
- Illumination detection range: 0~5000Lux
- Humidity detection range: 20-95℃
- Installation: Ceiling mount
- Dimensions: 80(diameter)x32(mm)

Functions

- Equipped with brightness sensor, temperature sensor, humidity sensor,two dry contact inputs, two universal switches, logic state etc which can be used as input conditions
- Two logic relations: Or, And
- With up to 24 logic block functions, max eight logic input conditions,up to 20 target outputs for logic conditions
- Security warning function,need to be used with the security module

Parameters

- Working voltage: DC12-30V
- Power consumption: 32mA/DC24V
- Temperature detection range: -40° ~60° C
- Illumination detection range: 0~5000LUX
- Humidity detection range: 20~95 RH
- Microwave detection range H: 7m D:12m L:6m

Functions

- Built-in LUX sensor, microwave sensor, humidity sensor, temperature sensor, dry contact, universal switch
- Two logical relations: OR, AND
- It has 24 logic blocks, Both true logic and false logic can trigger the targets respectively. Each logic can set 20 targets
- Adjustable microwave sensitivity, range is 1-100
- Each logic supports trigger delay time from 0 to 3600s
The range of universal switch number in logic is 201248
- each logic has 2 universal switch numbers
Support security function
- Support online upgrading

Parameters

- Power supply: DC12-30V
- Static power consumption: 40mA/DC24V (Relay off)
- Dynamic power consumption: 90mA/DC24V (Relay on)
- Signal output: HDL Buspro signal
- Temperature detection range: 0℃~45℃
- Illumination detection range: 0-5000 Lux
- PIR sensing range in diameter: 6m (install height-3m)
- Ultrasonic sensor in diameter: 8m
- Installation: Ceiling mount
- Dimensions: 110(diameter)x35(mm)

Functions

- Equipped with a temperature sensor, brightness sensor, infrared motion sensor, ultrasonic sensor, two dry contact inputs, two external input conditions
- With infrared receiver function, can receive eight infrared remote control codes
- With infrared transmitter function, capable of sending 99 infrared remote control codes
- With four logic relations: OR, AND, NOR, NAND
- With up to 32 logic block functions, can be set nine input conditions, each logic block can be set 10 output targets
- 2 relay outputs
- Security function, to be used with the security module
- Support HDL Buspro online upgrading

Parameters

- Power supply: DC12-30V
- Bus power consumption: 25mA/DC24V
- Signal interface: HDL Buspro signal
- Temperature detection range: 0℃~45℃
- Illumination detection range: 0-5000 Lux
- Air quality detection: cigarettes, cooking odors, hydrogen, carbon monoxide,ethanol, methane, isobutane, alcohol
- Installation: Ceiling mount
- Dimensions: 80(diameter)x32(mm)

Functions

- Equipped with brightness sensor, air quality sensor, two dry contact inputs, two universal switches, logic state etc which can be used as input conditions
- Two logic relations: Or, And
- With up to 24 logic block functions, max seven logic input conditions, up to 20 target outputs for logic conditions
- Security function, to be used with the security module
- Support HDL Buspro online upgrading

Ceiling Mounted Ultrasonic / Ceiling Mount PIR Sensor

MSPU03.4 / MSP02.4C

HDL 7 IN 1 Sensor / HDL 8 IN 1 Sensor

MSP07M.4C / MSP08M.4C

MSPU03.4C



Parameters

- Power supply: DC12-30V
- Bus power consumption: 30mA/DC24V
- Detection range in diameter: 6m(Installation height: 3m)
- Rang for Lux sensor: 0-500Lux
- Dimensions: 63x63x38(mm)

Functions

- Equipped with brightness sensor, ultrasonic sensor and universal switch which can be used as logic conditions.
- 24 logic blocks, 20 output targets can be set in each logic block.
- Two logic relations: Or, And
- Sensitivity adjustable, range from 1-10
- Universal switch numbers were assigned to 201-248 in the logic conditions, 2 switch numbers for each logic, universal switch has auto-off function(from 1 to 3600 seconds)
- Logic can trigger the control target no matter it's valid or not
- Security function, to be used with the security module
- Support HDL Buspro online upgrading

MSP02.4C



Parameters

- Power supply: DC18-30V
- Bus power consumption: 20mA/DC24V
- Detection range in diameter: 6m(Installation height: 3m)
- Illumination detection range: 0-5000 Lux
- Dimensions: 63×63×46.6(mm)
- Cutting Size: 45mm(Diameter)

Functions

- Equipped with brightness sensor, PIR sensor and universal switch which can be used as logic conditions.
- 24 logic blocks, 20 output targets can be set in each logic block.
- Two logic relations: Or, And
- Sensitivity adjustable, range from 1-10
- Universal switch numbers were assigned to 201-248 in the logic conditions, 2 switch numbers for each logic, universal switch has auto-off function(from 1 to 3600 seconds)
- Logic can trigger the control target no matter it's valid or not
- Security function, to be used with the security module
- Support HDL Buspro online upgrading

MSP07M.4C



Parameters

- Power supply: DC18-30V
- Bus power consumption: 25mA/DC24V
- Detection range in diameter: 8m(Installation height: 3m)
- Temperature detection range: -20°C~60°C
- Illumination detection range: 0-500 Lux
- Dimensions: 84mm(diameter)×37.5mm

Functions

- Built-in infrared motion sensor, LUX sensor, dry contact, temperature sensor and universal switch control
- Seven logics for brightness sensor, temperature sensor, PIR sensor, two dry contact inputs and logical condition
- Two logic relations: OR, AND
- Adjustable infrared motion sensitivity, range from 1-10
- It has 24 logic blocks. The range of universal switch number in logic function is 201-248. each logic has 2 universal switch number. The universal switch has Auto-Off function, delay time is 1-3600s
- Logic can trigger the control target no matter it's valid or not. Up to 10 logic block functions to trigger the control target
- Supports upgrade from HDL Buspro
- Constant illuminance function

MSP08M.4C



Parameters

- Power supply: DC12-30V
- Bus power consumption: 30mA/DC24V
- IR transmit frequency38KHz
- Detection range in diameter: 8m(Installation height: 3m)
- Illumination detection range: 0-500 Lux
- Dimensions: 84mm(diameter) ×37.5mm

Functions

- Built-in infrared motion sensor, LUX sensor, IR in/out, dry contact, temperature sensor and external conditions.
- Six logics for brightness sensor, temperature sensor, PIR sensor, two dry contact inputs.
- Two logic relations: OR, AND.
- Adjustable infrared motion sensitivity, range from 1-10.
- It has 20 logic blocks. The range of universal switch number in logic function is 201-240, each logic has 2 universal switch number. The universal switch has Auto-Off function, delay time is 1-3600s.
- Logic can trigger the control target no matter it's valid or not. Up to 10 logic block functions to trigger the control target.
- Up to 240 IR sending control target, the universal switch number is 1-240.It can upload multiple IR code
- Supports upgrade from HDL Buspro
- Constant illuminance function

10A Relay Module

MR0410. 431 / MR0810. 432 / MR1210.433

16A Relay Module

MR0416.431 / MR0816.432 / MR1216.433

MR0410.431



- Output channel: 4channel Relay
- Dimensions: 72×90×66(mm)
- 4 channel relay output
- Maximum 4 separate areas
- Each area has 8 scenes, maximum runtime of scene: 60 minutes

MR0810.432



- Output channel: 8 channel Relay
- Dimensions: 144×90×66(mm)
- 8 channel relay output
- Maximum 8 separate areas
- Each area has 16 scenes, maximum runtime of scene: 60 minutes

Parameters

- Power supply: DC15-30V
- Static BUS power consumption: 15mA/DC24V
- Dynamic BUS power consumption: 40mA/DC24V
- Current in each channel: 10A
- life time for relay unit: More than 60,000 times
- Protection: Need MCB for each channel
- Installation: Standard 35mm Din Rail
- Capacity load of Relay: < 150μF

Functions

- 4/8/12 channel relay output
- 4/8/12 separate areas
- Each area has 8/16/24 scenes, maximum runtime of scene: 60 minutes
- Each area has 2 sequences, each sequence has 12 steps
- Each channel has lights protection delay : 0-60 minutes
- Each channel has switch on delay time : 0-25 seconds
- Manual buttons ON and OFF for each channel
- Remote program and management are available
- Can go back to previous scene or designated scene once the system restart
- LED lights available for indicates of each channel
- Staircase lamps function and Mutual exclusion function
- Support easy programming
- Support HDL Buspro online upgrading

Parameters

- Power supply: DC15-30V
- Powerconsumption: Static power consumption : 10mA/DC24V
Dynamic power consumption: 35mA/DC24V
- Current in each channel: 16A
- life time for relay unit: More than 60,000 times
- Protection: Need exterior protection switch
- Installation: Standard 35mm Din Rail
- Capacity load of Relay: < 300μF

Functions

- 4/8/12 channel relay output
- Maximum4/8/12 separate areas,
- Each area has 8/16/24 scenes, maximum runtime of scene: 60 minutes
- Each area has 2 sequences, each sequence has 8 steps
- Each channel has lights protection delay: 0-60 minutes
- Manual buttons ON and OFF for each channel
- Remote program and management are available
- Can go back to previous scene or designated scene once the system restart
- Each channel has switch on delay time: 0-25 seconds
- Each area has 2 sequence, the maximum step units of each sequence is same as channel units
- Staircase lamps function and Mutual exclusion function
- Support easy programming
- Support HDL Buspro online upgrading

MR0416.431



- Output channel: 4 channel Relay
- Dimensions: 72×90×66(mm)
- 4 channel relay output
- Maximum 4 separate areas
- Each area has 8 scenes, maximum runtime of scene: 60 minutes

MR0816.432



- Output channel: 8 channel Relay
- Dimensions: 144×90×66(mm)
- 8 channel relay output
- Maximum 8 separate areas
- Each area has 16 scenes, maximum runtime of scene: 60 minutes

MR1216.433



- Output channel: 12 channel Relay
- Dimensions: 216×90×66(mm)
- 12 channel relay output
- Maximum 12 separate areas
- Each area has 24 scenes, maximum runtime of scene: 60 minutes

Leading Edge TRIAC Dimmer

MD0206.432 / MD0403.432 / MD0602.432

Leading / Trailing Edge MOSFET Dimmer

MDT0203.433 / MDT04015.433/ MDT0601.433

MD0206.432



- Output channel: 2CH/6A
- Fuse:10 A aR type
- TRIAC: 25A bidirectional TRIAC , minimum load 40W
- Maximum 2 separate areas, each area has 12 scenes

Parameters

- Power supply: 110/220V
- BUS Working voltage: DC12-30V
- BUS power consumption: 28mA/DC 24V
- Dimming curves: linear, x^{15} , x^{20} , x^{30}
- Dimensions: 144X90X66 (mm)

Parameters

- Power supply: AC110/240V
- BUS Working voltage: DC12-30V
- BUS power consumption: 25mA/DC24V
- Dimming curves: linear, x^{15} , x^{20} , x^{30}
- Dimensions: 216×90×66(mm)

MDT0203.433



MD0403.432



- Output channel: 4 CH/3A
- Fuse: 8 A aR type
- TRIAC : 25A bidirectional TRIAC , minimum load 40W
- Maximum 4 separate areas, each area has 12 scenes

Functions

- Maximum 2/4/6 separate areas, each area has 12 scenes
- Maximum 6 sequences, each sequence has 12 steps
- 512 dimming step, 4 dimming curves
- Low, high or max threshold are available in each channel to suit the different loads;
- Manual buttons ON and OFF for each channel
- Can go back to previous scene or designated scene once the system restart
- Short circuit protection over temperature protection
- Support easy programming
- Support HDL Buspro online upgrading

Functions

- Maximum 2/4 /6 separate areas, each area has 12scenes
- Each output channel has LED indicator for status and manual switch
- Maximum 6 sequences, and 12 steps for each sequence
- Low Threshold, High Threshold, Maximum Threshold are all available for each channel
- Each channel can choose leading edge or trailing edge
- Can select specified scene or scene before power off when the device restarts
- Short circuit and over heat protection
- 4 dimming curves
- Supports online upgrading

MDT04015.433



MD0602.432



- Output channel: 6CH/2A
- Fuse: 4 A aR type
- TRIAC : 16A bidirectional TRIAC , minimum load 40W
- Maximum 6 separate areas, each area has 12 scenes

MDT0601.433



2CH 10A Mosfet Power Amplifier / TRIAC Constant Current Module

MDB0210.433 / MCR01A.40

LED Dimmer / 64CH DALI Ballast Dimming Actuator

MDLED0605.432 / MC64-DALI.431

MDB0210.433



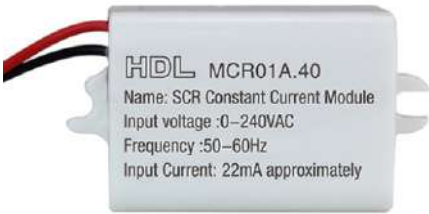
Parameters

- AC power input: AC110/230V
- Output channel: 2CH,10A/CH
- Maximum output channel current in tota: 16A
- Dimming mode: Trailing edge

Functions

- Mosfet dimming mode
- It must work in conjunction with dimmer
- Each output channel has LED status indicator and manual control switch
- It has short circuit protection and over heat protection
- When the temperature of the aluminum alloy radiator on the mosfet power amplifier reaches 80°C, the output power starts to decrease; when it reaches 85°C, stop to output power; when it goes down to 80°C, the output power starts to work again
- Two output channels can be combined into one channel, the output current increase to 16A (The input is the first channel)

MCR01A.40



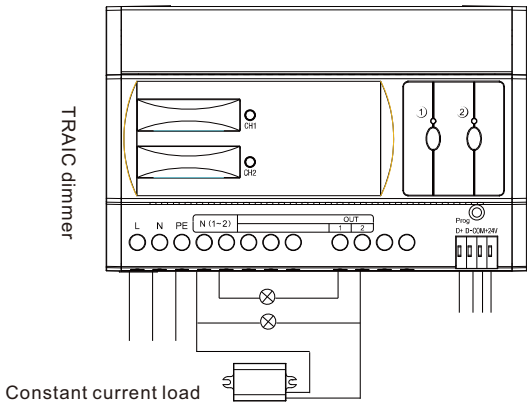
Parameters

- Power supply: DC 0-240V
- Load constant current: < 15mA
- Working condition: Working temp: -4°C~45°C
 - Working relative humidity: up to 90%
 - Storage temperature: -20°C~+60°C
 - Storage relative humidity: up to 93%
- Dimensions: 37.4×26.7×22.6(mm)

Functions

- 1 load channel
- 15mA constant current
- Working with TRIAC dimmer
- Connected in parallel when working with the lamp

Diagram of constant current



Note: above picture is set HDL TRIAC dimmer as an example,the module can supply minimum 15mA current for TRIAC,this module can solve the flicker problem when dimming the Lamps such as some LEDs and low voltage Halogen.

MDLED0605.43



Parameters

- Power supply: DC15-30V
- Static BUS power consumption: 20mA/DC24V
- Dynamic BUS power consumption: 40mA/DC24V
- Output: 6CH/5A
- LED power input: 12-30VDC
- Dimensions: 144×90×66(mm)

Functions

- Maximum 6 separate areas, each area has 12 scenes
- Maximum 6 sequences, each sequence has 12 steps, each step has 60 minutes as interval time;there are four types of sequence: Forward/Backward/Random/Forward& Backward;
- Low, high or max threshold are available in each channel to suit the different loads;
- Can go back to previous scene or designated scene once the system restart
- Manual buttons ON and OFF for each channel
- Short circuit protection,over load protection
- 5A output current in each channel
- PWM constant voltage output for LED Lamp and LED strip
- Support easy programming
- Support HDL Buspro online upgrading

MC64-DALI.431



Parameters

- Power supply: DC15-30V
- BUS power consumption: 15mA/DC24V
- DALI independent power supply: AC110/220V
- Interface: HDL Buspro, DALI
- Installation: Standard 35mm Din Rail
- Dimensions: 72x90x66(mm)

Functions

- Transform HDL signal into DALI signal
- Up to 64 DALI channels
- Scene controller
- Support maximum 16 independent areas
- Available function for each channel: Low and high threshold, system failure, DALI component electrify restore
- Fire emergency function
- After device reboot, there is a option to run the designated scene or return back to the last 20 seconds scene before power off
- Support HDL Buspro online upgrading

Ballast Dimmer, 0-10V Output / 6CH input & output Module

MRDA0610.432 / MSC06.432

6CH 10A / 12A Leading Edge Dimming Actuator

MDH0610 / MDH0620

MRDA0610.432



- Current in each relay channel: 10A
- Capacity load: <150μF
- Support input DC24V
- Sink/output 100mA current for each 0-10v channel, 6 channel total no less than 300mA
- Suitable for 0-10V Fluorescent dimming control
- Suitable for 0-10V LED dimming control

Parameters

- Power supply: DC 15-30V
- Power consumption: 30mA/DC24V
- Installation: Standard 35mm Din Rail
- Dimensions: 144×90×66(mm)

Functions

- 6 channel relay output
- Manual buttons ON and OFF for each channel
- LED lights available for indicates of each channel
- Maximum 6 separate areas, each area has 12 scenes
- Maximum 6 sequences, each sequence has 12 steps, each step has 60 minutes as interval time; there are four types of sequence: Forward/Backward/Random/Forward& Backward;
- Low, high or max threshold are available in each channel to suit the different loads;
- Can go back to previous scene or designated scene once the system restart
- Support easy programming
- Support HDL Buspro online upgrading

MSC06.432



Parameters

- Working voltage: DC15-30V
- Static power consumption: 30mA/DC24V
- Dynamic power consumption: 80mA/DC24V
- Dimensions: 144×90×66 (mm)
- Installation: 35 mm Din Rail

Functions

- Supports input types: Dry contact, Voltage (0~10000mV), Analogy Voltage(0~10000mV, Electricity (4000~20000μA),Analogy Electricity (4000~20000μA).
- Analogy function: it can convert the value of voltage and current conversion into other types, such as temperature, Illuminance, humidity, pressure.
- Out1 to out6 are 10A relay outputs. Out 7 and out 8 are optional, can set 0-10V output or 4mA-20mA output.
- For inputs and outputs, each channel can be set separately.
- It supports online upgrading via HDL Buspro software.
- It supports easy programming.

MDH0610



Parameters

- Input Voltage: AC220V±10%
- Frequency: 50Hz±2%
- Power consumption with load: Less than 10W
- Output channel: 6 channels
- Out current in each channel: Max. 12A/24A
- Total current in channe: Less than 60A/120A
- Connection: Three phase and five wires
- Dimensions: 470×290×162(mm), 600×290×162(mm)

Functions

- 10 Bit dimming accuracy.
- 6-channel dimming outputs.
- LED indicator status.
- Scene controller.
- Maximum 6 separate areas, each area has 99 scenes and the maximum running time is 60 min-utes.
- Up to 99 sequences, each sequence has 99 steps and the time interval is 60 minutes for each step, each sequence has 4 running modes of "forward", "backward", "forward and backward" and "random".
- Low, high, max threshold for each channel.
- Each channel has emergency bypass button and debugging bypass button.
- Each scene, area, sequence, channel should mark up.
- Each channel has current load testing.
- Each channel has MCB status testing.
- MCB switch trip warning.
- Bad lights warning.
- Communication: HDL Buspro.
- Provides 400mA current(DC24V) for HDL Buspro.
- Fire protection switch.
- Short circuit and overload protection, earth protection.
- Remote programming and management.

A device can be restored to previous scene or specified scene, sequence.

MDH0620



12CH 10A Leading Edge Dimming Actuator

MDDH1210

3CH 650mA LED Driver / 48Channel DMX Controller

MLED03650MA / MC48IP-DMX.431

MDH1210



Parameters

- Input Voltage: AC220V±10%
- Frequency: 50Hz±2%
- Power consumption with load: Less than 10W
- Output channel: 12 channels
- Out current in each channel: Max. 12A
- Total current in channe: Less than 120A
- Connection: Three phase and five wires
- Dimensions: 600×290×162(mm)

Functions

- 10 Bit dimming accuracy.
- 12-channel dimming outputs.
- LED indicator status.
- Scene controller.
- Maximum 12 separate areas, each area has 99 scenes and the maximum running time is 60 min-utes.
- Up to 99 sequences, each sequence has 99 steps and the time interval is 60 minutes for each step, each sequence has 4 running modes of "forward", "backward", "forward and backward" and "random".
- Low, high, max threshold for each channel.
- Each channel has emergency bypass button and debugging bypass button.
- Each scene, area, sequence, channel should mark up.
- Each channel has current load testing.
- Each channel has MCB status testing.
- MCB switch trip warning.
- Bad lights warning.
- Communication: HDL Buspro.
- Provides 250mA current(DC24V) for HDL Buspro.
- Fire protection switch.
- Short circuit and overload protection, earth protection.
- Remote programming and management.
- Device can be restored to previous scene or specified scene, sequence.

MLED03650MA



Parameters

- Input power: DC10-30V
- Voltage for LED driver: DC10-30V
- Power consumption without load: <2W
- Output channel: 3 channels
- Max Current of each channel: 650mA
- Dimensionsl: 96mm×58.5mm×22.5mm

Functions

- 3 outputs for common anode RGB LED strip and single LED
- Power Input: DC10-30V
- Control Signal: DMX512
- Constant voltage with PWM output
- Built-in DMX512 buffer function

MC48IP-DMX.431



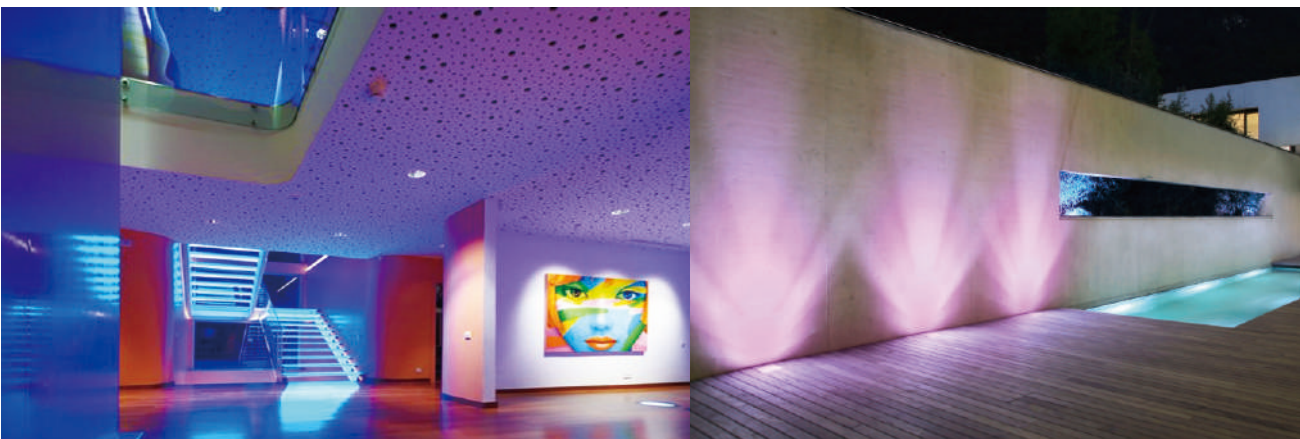
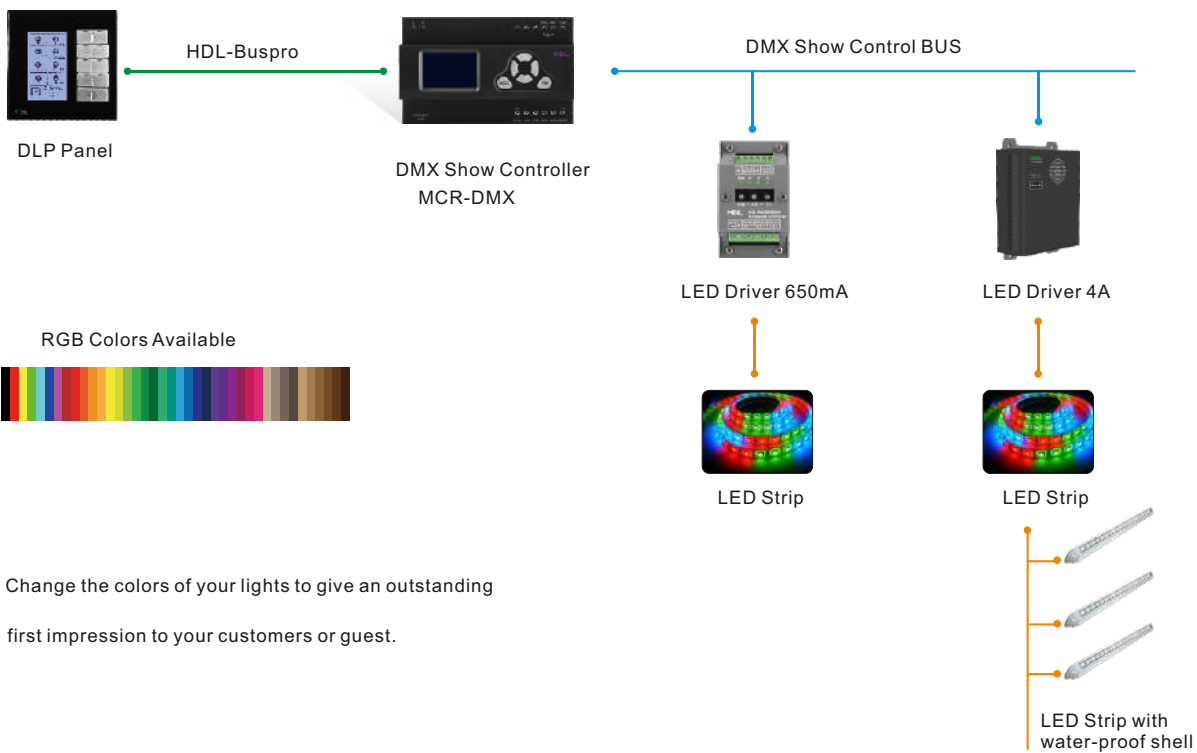
Parameters

- Power supply: DC12-30V
- BUS power consumption: 40mA/DC24V
- Installation: Standard 35mm Din Rail
- Dimension: 72x90x66(mm)
- Built in ethernet port

Functions

- Up to 48 areas
- Each area has 99 scenes, maximum scene run time:60 minutes
- Up to 99 sequences, each sequence has 99 steps, maximum step run time: 60 minutes, 4 modes for the sequences "Forward", "Backward", and "Back and forth", "Random".
- Supports self-program and test functions
- Supports remote program and manage functions
- Low, high, max threshold for each channel
- HDL Buspro and Ethernet double way data communication
- Intelligent data exchange, reducing data traffic
- Device can be restored to previous scene or designated scenes

How to combine HDL Buspro
MCR-DMX



2 Channel Curtain Module / HVAC Module
MW02.431 / MAC01.431

MW02.431



Parameters

- Power supply: DC15-30V
- BUS power consumption: 35mA/DC24V
- Controllable curtain: 2 curtains
- Motor type: Capacitive single phase
- Channel max output current: 5A
- Lifetime for relay unit: 60,000 times
- Installation: Standard 35mm Din Rail
- Dimensions: 72x90x66(mm)

Functions

- 2 channel curtain control
- Hardware and software interlock for forward or backward
- Forward and backward delay

MAC01.431



Parameters

- Power supply: DC15-30V
- BUS power consumption: 95mA/DC24V
- Max relay current load: 5A
- Installation: Standard 35mm Din Rail Installation
- Dimensions: 72x90x64(mm)

Functions

- Fan speed: High, medium or low
- Control mode: cooling, heating, dehumidification
- To control AC fan speed and mode smartly by AC control panel
- Supports input from up to four temperature sensors
- One master module supports up to 8 slave modules
- DC0-10V fan speed control method
- Supports HDL Buspro online upgrading

6CH Floor Heating Module / 4CH Electric Fan Controller

MFH06.432 / MFAN04.432

4 Zone Dry Contact Module / 8 Zone Dry Contact Module

MSD04T.40 / MSD08.40

MFH06.432



Parameters

- Power supply: DC15-30V
- Dynamic power consumption: 150mA/DC24V
- Static power consumption: 30mA/DC24V
- Output channel: 6
- Maximum channel current: 10mA/DC24V (0-10V output)
1A/220VAC (Relay output)
- Lifetime for relay unit: 5,000,000 times
- Protection: External breaker
- Dimensions: 140x90x66(mm)

Functions

- 6 channels floor heating or cooling control
- 2 output ways in each channel: relay output and 0-10V output
- Temperature adjustment range: 5°C~40°C (0.5°C accuracy)
- Timing or manually floor heating system flush function by timer or manually
- Supports controlling external high power relay modules
- Supports HDL Buspro online upgrading

MFAN04.432



Parameters

- Bus voltage: DC18-30V
- Power consumption: 80.5mA/DC24V
- Dimensions: 144mmx90mmx66mm
- Installation: 35 mm Din Rail

Functions

- The MFAN04.432 can simultaneously support four fans
- The MFAN04.432 can be controlled via a HDL panel
- Each channel can output 8 fan speeds; 0 being off and 7 being maximum
- Through output different voltage to control wind speed
The MFAN04.432 can be easily programmed
- The MFAN04.432 communicates via the HDL Buspro protocol

MSD04T.40



Parameters

- Buspro power supply: 12-30VDC
- Buspro power consumption: 10mA/DC24V
- Dimensions: 45x45x16(mm)

Functions

- 4-channel dry contact input with tamper detection.
- Supports temperature input
- LED indicators display status
- Support switch type: Mechanical switch, Single on, Single off, Single on/off, Combination on, Combination off, Combination on/off, Multi-function, Parallel switch, Temperature sensor.
- Support switch mode: Switch mode, Dimma-ble two-way, dimmable increase, dimmable reduced.
- Control Target type: Scene, Sequence, Uni-versal Switch, Single channel lighting controll Broadcast Scene, Broadcast channel, Curtain Control, Panel Control, GPRS control, Secu-riety Module, etc.
- Security function, need to be used with the security module.
- Temperature alarm, when the temperature is beyond the range it will be alarm.
- Supports online upgrading by HDL Buspro.

MSD08.40



Parameters

- Power supply: DC12-30V
- BUS power consumption: 10mA/DC24V
- Dimensions: 45x45x16(mm)

Functions

- 8-channel dry contact input with tamper detection function.
- Supported switch type: Mechanical switch, Single on, Single off, Single on/off, Combination on, Combination off, Multi-function, Parallel switch.
- Supported switch mode: Switch mode, Dimmable two-way, dimmable increase, dimmable reduced.
- Control target type: Scene, Sequence, Universal Switch, Single channel lighting control, Broadcast Scene, Broadcast channel, Curtain Control, Panel Control, GPRS control, Secu-riety Module etc.
- Tamper-proof, need 1K Ohm resistor in parallel to dry contact.
- Security function, need to be used with the security module.
- Supports online upgrading by HDL Buspro.

Infrared Code Learner / IR Emitter with Current Detector
MIR01L /MIR01F.20

MIR01L



Parameters

- Frequency of IR: 38K Hz ± 20%
- Installation: USB 2.0 Interface
- Dimension: 98x70x38(mm)
- For Learning IR codes, sending learned IR codes for test
- Indicator LED flashing when learning code

MIR01F. 20



Parameters

- **Buspro power supply:** DC12-30V
- **Buspro power consumption:** 15mA/DC24V
- **IR codes store:** Maximum 200 IR codes
- **Sending carrier wave frequency:** 38KHz
- **Distance for IR Control:** 6m
- Dimension: 45×40×13(mm)

Functions

- Current detecting function for identify device On/Off status.
- **Maximum 200 IR Codes can be stored.**
- **To send the IR codes by using a IR LED.**
- **Supports upgrade from HDL Buspro.**

4CH IR Emitter with Current Detection / 24 Zone Dry Contact Module
MIRC04.40 / MS24.232

MIRC04.40



Parameters

- Buspro power supply: DC12-30V
- BUS power consumption: 30mA/DC24V
- IR Transmit carrier frequency: 38KHz
- Dimension: 45x45x16(mm)
- Distance for IR control: 6m

Functions

- Current detection: Detect the device status (on/off) by current.
- Drive the transmitting tube directly
- 4 IR emission channels
- Supports 24 devices and 100 learning IR codes.
- Supports up to 99 UV switches

MS24.232



Parameters

- Power supply: DC24V
- BUS power consumption: 12mA/DC24V
- Dimensions: 144 x 90 x 66mm
- Installation: Standard 35 mm Din Rail

Functions

- 24 channels dry contact input
- Switch types include: Mechanical switches, Single-on, Single-Off Single-On/Off, Combination on, Combination off, Combination , On/Off, Invalid Switch, (Both mechanical switches and combination switches can set 49 control targets)
- Control target type: Scene, Sequence, Universal, Switch, Single Channel, Broadcast scene, Broadcast channel, curtain control, panel control, GPRS and so on.
- Security alerts feature need to be used together with Security Command Module

RS232 / RS485 Gateway
MRS232.431 / MRS232U.431

HDL-BUS EIB Gateway / 1 Port Programming Gateway
MCEIB.231 / MBUS01IP.431

MRS232.431



Parameters

- Working voltage: DC15~30V
- BUS power consumption: 15mA/DC24V
- Baud rate: 1200, 2400, 4800, 9600, 14400, 19200, 38400, 57600, 115200bps
- Data bit: 8
- Stop bit: 1, 2
- Communication: HDL Buspro/RS232/RS485
- Dimensions: 72x90x66(mm)

Functions

- Realize mutual control between devices in RS232 and HDL Buspro.
- Achieve remote transmission from RS232 to RS485.
- It can achieve that RS232 controls HDL Buspro and HDL Buspro controls RS232.
- It can input up to 99 control commands, each control commands can input up to 33 ASCII characters.
- It can achieve that RS485 controls HDL _uspro and HDL Buspro controls RS485.
- RS232 Baud rate: 1200, 2400, 4800, 9600, 14400,19200, 38400, 57600, 115200bps. User can set the RS232 interface Baud rate.
- Communication: HDL Buspro, RS232,RS485
- Supports online upgrades.

MRS232U.431



Parameters

- Working voltage: DC15~30V
- BUS power consumption: 15mA/DC24V
- Baud rate: 1200, 2400, 4800, 9600, 14400, 19200, 38400, 57600, 115200bps
- Data bit: 8
- Stop bit: 1, 2
- Communication: HDL Buspro/RS232/RS485
- Dimensions: 72x90x66(mm)

Functions

- Communication: HDL Buspro, RS232,RS485.
- It can achieve that RS232 controls HDLBuspro and HDL Buspro controls RS232.
- It can achieve that RS485 controls HDL Buspro and HDL Buspro controls RS485.
- It can input up to 100 control commands, each control commands can input up to 33 ASCII characters.
- Target number :1~10
- User can set the RS232 interface Baud rate.

MCEIB.231



Parameters

- KNX Power supply: DC15-30V
- KNX power consumption: 5mA/DC24V
- Interface: HDL Buspro EIB-BUS (KNX)
- Programming software: HDL Buspro setup tool
- Installation: Standard 35mm Din Rail
- Dimensions: 72x90x66(mm)

Functions

- HDL Buspro and KNX two ways data converting
- Supports multiple types of data points
- Can be set up to 254 goals in two-way conversion control

MBUS01IP.431



Parameters

- Power supply: DC12-30V
- BUS power consumption: 40mA/DC24V
- HDL Buspro subnet numbers: 1 HDL Buspro subnet
- Signal interface: HDL Buspro, RJ45
- Installation: Standard 35mm Din Rail
- Dimensions: 72x90x66(mm)

Functions

- HDL Buspro and Ethernet double way data communication
- support internet remote access connection
- Intelligent data exchange, reducing data traffic

IntelliCenter Model / 750mA Power Supply Module

MSERVER/D.20 / MSP750.431

1200mA / 2400mA Power Supply Module

MSP1200.431 / MSP2400.232

MSERVER/D.20



Parameters

- Working voltage: 12~30VDC
- Power consumption: 2.5W max.
- Communication: 1RJ45, HDL Buspro, KNX Bus
- BUS Terminal: 0.6-0.8mm diameter single core cable
- Operation system: iRidium Server software
- Dimensions: 72x90x66(mm)

Functions

- Supports continuous monitoring and management the devices in HDL BusPro and KNX-bus network via the iRidium Server software.
- Supports installing SD card to expand the storage capacity.
- Supports easy programming.
- Exchange data between devices in HDL BusPro and KNX bus network .
- Support online upgrades.
- Supports HDL Buspro and KNX Bus communication.

MSP750.431



Parameters

- Input voltage: AC85-260V 50~60Hz
- Output current: 750mA
- Output voltage: DC24V
- Output ripple wave: Less than 150mV
- Dimensions: 72x90x66(mm)

Functions

- Protection: Short circuit and over current protection
- Voltage Supply: DC24V
- Ripple Wave: Less than 150mV

MSP1200.431



Parameters

- Input voltage: AC85-260V 50~60Hz
- Output current: 1200mA
- Output voltage: DC24V
- Output ripple wave: Less than 150mV
- Dimensions: 72x90x66(mm)

Functions

- Protection: Short circuit and over current protection
- Voltage Supply: DC24V
- Ripple Wave: Less than 150mV

MSP2400.232



Parameters

- Input voltage: AC220V/AC110V±10%
- Frequency: 50~60Hz
- Output current: 2.4A
- Output voltage: DC24V
- Dimensions: 144×90×66 (mm)

Functions

- Protection: over voltage and short circuit
- Power Supply: DC24V

Security Command Module / Logic Automation Module

MSM.431 / MCLog.431

HDL BUS 6 Lines / HDL 6 Ports Switch

MBC06.431 / MBR06.431

MSM. 431



MCLog. 431



MBC06.431



MBR06.431



Parameters

- Working Voltage: DC15-30CV
- Power Consumption: 15mA/DC24V
- Dimmensions: 72mm x 90mm x 66mm
- Installation: Standard 35mm DIN Rail
- Interface: HDL Buspro

Functions

- 8 Separate zones for different security purposes
- Multiple security modes: Away, Holiday, Daytime, Nighttime, Timing, Etc.
- Multiple alarm modes: Invasion, Gas, Fire, Temperature, Emergency, Etc.
- Multilevel security protection
- Can set up security protection for 8 zones simultaneously
- Availability to check the alarm log
- Send commands to the GPRS SMS Controller or DialOut to send SMS messages or call to the emergency contact to ask for help or alarm's notifier in case of security problem
- Online upgrading is available

Parameters

- Power supply: DC15-30V
- BUS power consumption: 15mA/DC24V
- Installation: 35mm Din Rail Installation
- Dimensions: 72x90x66(mm)

Functions

- Editable daily events
- Maximum 12 logic blocks, each block has 20 logic tables, tables can be connected with each other
- Maximum 4 input conditions and 20 output targets in each logic table
- Logic table input conditions: Time, status of channel, external inputs, universal switch etc
- Logic relations: and, or, nand, nor
- Support HDL Buspro online upgrading

Parameters

- Interface: 6 fast connections for HDL Buspro
- Installation: Standard 35mm Din Rail
- Dimensions: 72mm x 90mm x 66mm
- Protection: Ip20

Functions

- Simple method to interconnect 6 different HDL Buspro Lines.
- Easy installation and maintenance

Parameters

- Working voltage: DC 12-30V
- Power consumption: 10mA/24VDC
- Ports: 6
- Devices for each port: 0-63
- Communication: HDL Buspro
- Housing material: Nylon, PC
- Installation: 35mm Din rail installation
- Dimensions: 72x90x66(mm)

Functions

- Filter data
- Check the data
- Supports 6 bus cables, each bus cable can connect up to 63 devices
- Communication: HDL Buspro
- Supports online upgrading

HomePlay Network Player

MZBOX-A50B.30

MZBOX-A50B.30



Better Together

Quickly and intuitively browse through the entirety of your music collection.

With the ability to directly play files from network attached storage devices (NAS), an onboard Micro SD card slot, an onboard USB port, and your connected iOS & Android devices total audio management has never been easier.

This coupled with native MP3, WMA, AAC, AAC+. ALAC, FLAC, APE, and WAV format support makes all your music just a tap or click away.



Multi-platform Compatibility

At HDL we know that everyone has their preferred method of audio storage. That's why we've given HomePlay tri e multi-platform compatibility.

With Bluetooth and WiFi connectivity, a LAN port, and a USB port HomePlay can directly connect to your audio library. Seamlessly controlled through the HDL On app, you can stream all of your favorite tracks to any room to create your ideal audioscape.

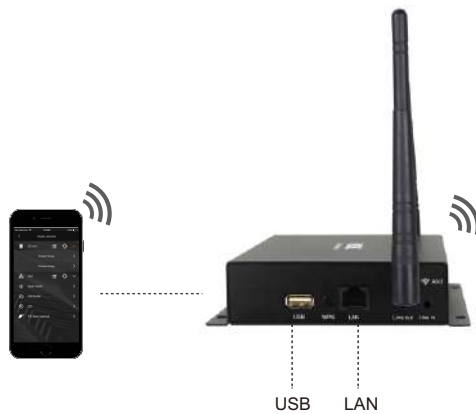


Parameters

- Power Amplifier Rated output: 32W+32W(8Ω/ohms,1kHz, 0.7%)
- Speaker Impedance: 4-32Ω
- Dynamic Range: >87dB
- S/N Ratio: >88 dB
- Stereo Separation: >81.5dB (1KHz)
- Frequency Response: 20Hz to 20KHz (±3dB)
- Dimensions: (HxWxD) 144mm(184mm with antenna) x112mm x31mm

Functions

- Multi format support
- High fidelity audio streaming
- Simultaneous multi source multi room streaming
- Fully compatible with HDL room scenes and sequences
- Supports music playback via connecting external audio devices



Hotel Doorbells / Air Condition Switch

MPB01.48 / MPB03.48 / MPAC01.48

Parameters

- Power supply: DC12-30V
- BUS power consumption: 24mA/DC24V
- Installation: Wall mounting
- Dimensions: 86×86x22.2 (mm)

Functions

- PRIVACY status display;
- Visiting function ;
- Support HDL Buspro online upgrading

Parameters

- Power supply: DC12-30V
- BUS power consumption: 25mA/DC24V
- Installation: Wall mounting
- Dimensions: 86×86×22.2(mm)

Functions

- Visiting function, time setup
- Backlight brightness adjustable
- Do not disturb
- Support HDL Buspro upgrading
- Please clean

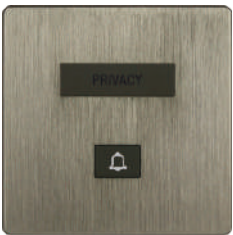
Parameters

- Power supply: DC12-30V
- BUS power consumption: 25mA/DC24V
- Installation: Standard GI box
- Dimensions: 86×86×22.2(mm)

Functions

- Control temperature, speed, mode, on/off
- Air conditioning mode: cooling, heating
- Speed: high, low, medium
- Display indoor temperature and air condition status etc
- Support HDL Buspro online upgrading

MPB01.48



MPB03.48



MPH101.48 MPH102.48 MPH104.48 MPH108.48

MPAC01.48



Hotel Master Card Switch

MPCH01.48 / MHIC.48

MPCH01. 48



Parameters

- Power supply: DC12-30V
- BUS power consumption: 24mA/DC24V
- Card type: MIFARE ONE S50 13.56MHZ
- Installation: Wall mounting
- Dimensions: 86×86×32(mm)

Functions

- Insert key for power
- Identification, insert a different card, run the corresponding scene
card types: Guest card, service card, cleaner card, maintainer card, administrator card etc
- Can be set mechanical switch when plug the card, the switch can be set 1 to 49 targets.
- Other key mode can be set 1 to 99 targets
- Support HDL Buspro online upgrading

MHIC.48



Parameters

- Power supply: DC12-30V
- BUS power consumption: 24mA/DC24V
- Card type: MIFARE ONE S50 13.56MHZ
- Installation: Standard GI and EU box
- Dimensions: 86×86×20.5(mm)

Functions

- Works with MPPI.48 panel power interface
- Insert key for power
- Identification, insert a different card, run the corresponding scene
- Card types: guest card, servicing card, cleaner card, maintainer card, administrator card etc
- Can be set mechanical switch when Plug the card, the switch can be set 1 to 49 targets. other key mode can be set 1 to 99 targets
- Supports HDLBuspro online upgrading

Hotel Door Bell

MHBRF.1010 / MHB.1010 / MPTB01RF.48

MHBRF.1010



Parameters

- Power supply: DC12-30V
- Bus Power consumption: 45mA/DC24V
- Dimension: 105 x 170 x 40mm
- Installation: Back Box for HDL

Functions

- Show different Number of Room, DND, Clean Room, and Laundry
- Door Bell • Open the Door by RF card & history record function
- Support HDL Buspro online upgrading

Parameters

- Power supply: DC12-30V
- Bus Power consumption: 45mA/DC24V
- Dimension: 105 x 170 x 40mm
- Installation: Back Box for HDL

Functions

- Show different Number of Room, DND, Clean Room, and Laundry
- Door Bell
- Support HDL Buspro online upgrading

MHB.1010



Parameters

- Working Voltage DC12-30V(From MPPI.48)
- Buspro power consumption 45mA/DC24V
- Card type MIFARE ONE S50 13.56MHz

Functions

- Backlight RGB can be optional.
- Door bell for visitors.
- The touch sensitivity can be adjusted.
- Supports to upgrade from HDL-Bus.

MPTB01RF.48



RF Card Reader & Master Control

MPTC03.48 / MPTC03.46

Hotel I/O Module / RCU Hotel Guest Room Control Unit

MHI0U.432 / MHRCU.433

MPTC03.48



Parameters

- Working voltage: DC13-30V
- Power consumption: 60mA/DC24V
- Dynamic power consumption: 300mA/DC24V
- Dimension: 86×116×20.4(mm)(US)
86×86×20.4(mm)(EU)

MPTC03.46



Functions

- Master card for energy & power management.
- 3 touch buttons, sensitivity can be adjusted
- Button color RGB can be adjusted
- The touch button can be as the panel button to use, or work with HDL touch door bell panel, to be displayed DND, Clean, Wait.
- Control of mechanical switch can be configured when insert the card or take off the card, maximum 49 targets can be controlled by the switch. Maximum 99 targets can be controlled by other button modes
- Support HDL online upgrading

MHI0U.432



Parameters

- Power supply: DC15-30V
- BUS power consumption: 30mA/DC24V
- Dynamic power consumption: 180mA/DC24V
- Communication: HDL Buspro
- Buspro terminal: 0.75-0.85mm diameter single-core cable
- Dimension: 144×90×56.3 (mm)

Functions

- OUTPUTS:
- Channel 1 and 2 are dimming outputs, total current no more than 2A
 - Channel 3 to 10 are switch outputs, each channel 5A
 - Channel 11 and 12 are curtain switch control
- INPUTS:
- 14-channel dry contact input
 - 3-channel indoor doorbell control and 3-channel status indicator output
 - 1-channel outdoor door bell control and 3-channel states indicator output
 - 1-channel door bell switch control

MHRCU.433



Parameters

- Power supply: DC20-30V
- Static power consumption: 60mA/DC24V
- Dynamic power consumption: 300mA/DC24V
- Signal interface: HDL Buspro,RJ45, INNER Buspro Rj45 interface: UDP/IP network interface
- STRIAC: 16A TRIAC, minimum load is 30w
- Buspro terminal: 0.75-0.85mm single-core cable
- Dimension: 216×90×56 (mm)

Functions

- The host control functions:
- 48 Channel control
 - Total 99 scenes, each scene's running time is (0-250second)
 - Can run the scene according to the status of card master
 - Hotel host have RJ45 port for connectivity with another room and reception or manager center, with hotel management software this module can integrate with third party property manager software Mix control function:
 - Channel NO.1~13 are Relay output, each channel 5A.
 - Channel NO. 14-17, are relay output, each channel 10A
 - NO.18 - 21 channels for dimming, each channel 1A
- Dry contract:
- 24 channels dry contract input
- Door bell function:
- 5 channels state indicator output
- LED output function
- 6channels normal switch state indicator output

Hotel Room Control Host / 4CH 0.5A Universal Dimming Actuator

MHC48IP.431 / MHD04A.231

5 CH Switch Actuator / 20 CH Hotel Room Mix Control Module

MHR05L.231 / MHD02R18U.232

MHC48IP.431



Parameters

- Working power: DC12~30V
- Bus Power Consumption: 30mA/DC24V
- Installation: 35mm DIN rail installation
- Dimension: 72 x 90 x 66mm

Functions

- 48 channels control, each channel has parameter for lower limit, higher limit , the maximum limit
- There are totally 99 scenes, each scene's running time is 0-60 minute.
- Each channel has protection delay time (0-250 second).
- Each channel can delay the turn ON time (0-250 Second).
- It can run the scene according to the status of card master
- Monitors and controls A/C, curtain, lighting, room status, service from monitor software.
- There is an RJ45 port on the hotel host, it can connect to each room, reception or manager.center. With hotel manage software, this module can integrate with third party management software .

MHD04A.231



Parameters

- Working voltage: DC15~30V
- Static power consumption: 40mA/DC24V
- Dynamic power consumption: 55mA/DC24V
- Output channel: Can switch four 0-10V dimming channels output to MOSFET tube dimming output
- MOSFET tube output channel: 0.5A
- Protection: Connect a breaker in each channel
- Dimension: 72 x 90 x 66mm

Functions

- The dimming module can switch four 0-10V dimming channels output to MOSFET tube dimming output.
- The dimming module ID supports hardware identification, and adopts dial code control;
- It also can control air conditioners, curtains etc. via modifying the configuration of software and program;
- Inner Bus communication is adopted.

MHR05L.231



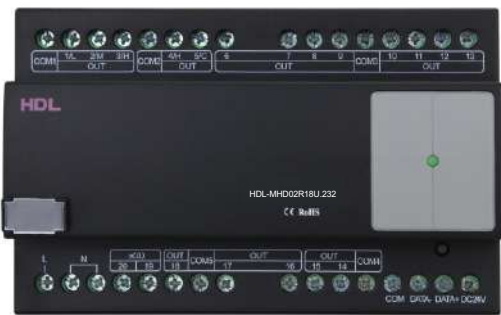
Parameters

- Working voltage: DC15~30V
- Static power consumption: 23mA/DC24V
- Dynamic power consumption: 75mA/DC24V
- Input channel: 2CH mains supply input 2CH emergency supply input
- Output channel: 5 channels
- Relay: 2CH/10A magnetic latching relay 1CH/5A TV8 relay
- Electronic life time of relay: >60000 (Resistance Load)
- Protection: Connect a breaker in each channelm
- Dimension: 72 x 90 x 66mm

Functions

- The relay module ID supports hardware identification, and adopts dial code control;
- COM1, OUT3 and COM3,OUT5 are 2CH magnetic latching relay; COM2 and OUT4 is a TV8 relay chan-nel, E-L1,E-L2 and E-N are 2CH emergency supply input; M-L1, M-L2 and M-N are 2CH mains supplyinput; L1,N1 and L2,N2 are output channels;
- The relay module has 2 relay channels with emergency function and 3 universal relay control channels;
- It also can control air conditioners, curtains etc. via modifying the configuration of software and program;
- The relay module can be extended to several module groups and used in some more sophistâcated scenes;
- Inner Bus communication is adopted.

MHD02R18U.232



Parameters

- Working power: DC15-30V
- Static power consumption: 30mA/DC24V
- Dynamic power consumption: 350mA/DC24V
- Relay output: 5A/10A resistive loads
- Dimming output: 2A silicon-controlled rectifier outputs
- Dimension: 144×90×66 (mm)

Functions

- Channel 1 to 5 are normal FCU controls, such as con-trols on cooling, heating and fan speeds. Channel 1,2 and 3 control fan speed, channel 4,5 are cooling and heating valves
- Channel 6 to 13 are ordinary relay outputs. Each channel is 5A rated outputs. The load types are Incandescent lamp, Halogen lamp, Low-voltage halogen lamp, LED lights. It is not recommend connect to capacitive load.
- Channel 14 to 18 are ordinary outputs. Each channel is 10A rated outputs. The load types are Incandescent lamp, Halogen lamp, Low-voltage halogen lamp, LED lights. It is not recommend connect to capacitive load.
- Channel 19 to 20 are silicon-controlled rectifier outputs. Each channel is 2A rated output.
- Communication: INNER-Buspro.



buspro
WIRELESS

Utilizing a wireless mesh IEEE 802.15.4 communication network, the HDL wireless panel range can be installed anywhere in a building without needing a physical connection to the Buspro mainframe. Using frequencies of 780-794 MHz (China), 864-882 MHz (Europe), and 904-928 MHz (North America), the connection can fulfill the long distance communication frequency standard applying in different countries, which ensures efficient and precise data transmission.

Wireless Intelligent Switch

MPL8-RF.18-A / MPL8-RF.16-A

Parameters

- Power supply: DC5V (from wireless power interface)
- Power consumption: 55mA/DC5V
- Installation: Wall mounting
- Dimensions: EU:86×86×10.5(mm) US:86×116×10.5 (mm)

Functions

- Built-in temperature sensor.
- Specified pages for AC, floor heating, music, etc.
- Multi key mode: Single on-off, Single on, Single off, Combination on-off, Combination on, Combination off, Double click/single switch, Double click/combination switch, Momentary, Clock, Short/Long press, Short Press/Long jog.
- Multi key control modes: Scene, Sequence, Timer switch, Universal switch, Single channel lighting control, Broadcast scene, Broadcast channel, Curtain switch, GPRS control, Panel control, Security module, Z-audio control
- Supports online upgrading.



All in one

In a single HDL-MPL8-RF panel there are seven different pages dedicated to the control of common automation systems. The following systems are included, four pages dedicated to lighting, one page dedicated to HVAC, one page for floor heating, and one page for background music. Each page can hold multiple targets enabling the user to take complete control over all aspects of their automation solutions, with one unifying HDL-MPL8-RF panel.



Customizable

The HDL-MPL8-RF panel is completely customizable, and has an extensive range of fascia colours, and materials available. This tailoring even extends to the LED button status indicators which have adjustable light intensity levels. The module can also be incorporated into a double panel installation, or can be flush mounted. These customization options allow a user to have their exact requirements not only met, but exceeded.

MPL8-RF.18-A



The HDL-MPL8-RF is a wireless panel which is able to work in conjunction with the wireless power interface. Featuring an improved and customizable LCD display, the HDL-MPL8-RF enables users to find information effortlessly.



Electronic icons

The new HDL-MPL8-RF has an improved LCD screen that is capable of displaying multiple icons, which can then be customized via an extensive updatable icon library. Messages, device status, and percentage information can all be displayed, enabling a user to find information effortlessly.

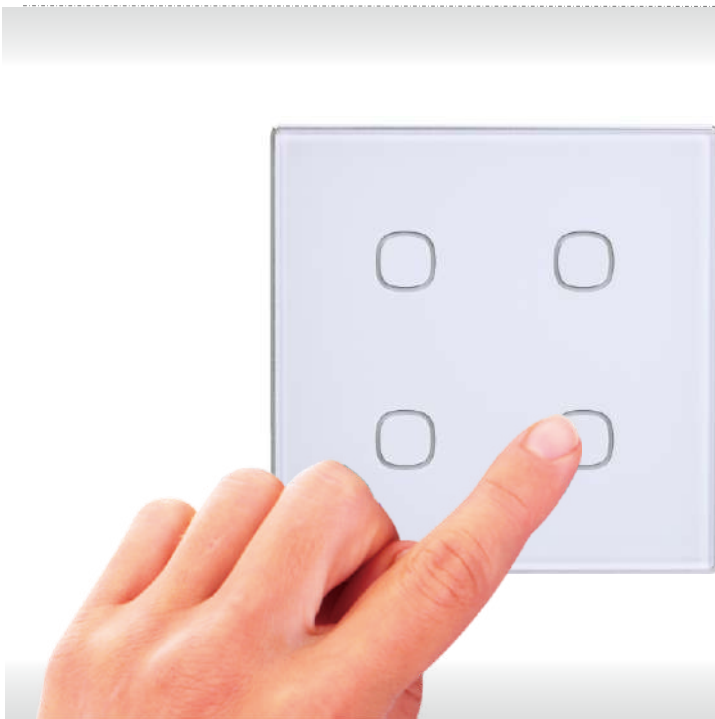
MPL8-RF.16-A



Wireless Touch Button Switch

MPT4-RF.18-A

MPT4-RF.18-A



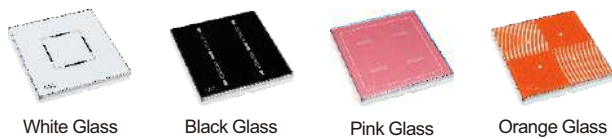
RGB LED backlight

Each button is illuminated by an RGB LED back light which can change colour or intensity when used for different applications, based on the preference of the user. This customisable button back light ensures that the unit can blend into any situation or environment.

The color, icons and pattern of the plate can be customised



Based on your personal favorites or your requirements



Parameters

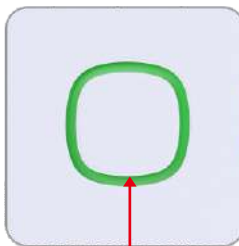
- Power supply: DC5V (from wireless power interface)
- **Wireless transmit power:** +10dbm
- **Wireless receive sensitivity:** -90dbm
- Installation: Wall mounting
- Dimensions: 86×86×10.5(mm)

Functions

- Multi Key Mode: Single on, Single off, Single on/off, Combination on, Combination off, Combination on/off, double click/single switch, double click/Combination switch, Momentary, Short/Long Press, Short Press/Long Jog.
- Multi Key control Type: Scene, Sequence, Timer switch, Universal switch, Single channel lighting control, Curtain switch, GPRS control, Panel control, Broadcast control, Broadcast channel, Security module, Z-audio control
- Adjustable backlight color and intensity
- Supports online upgrading



Status without backlight color



All RGB color are selectable

Wireless Touch Button Switch

MPT2-RF.18-A / MPT2-RF.16-A / MPT4-RF.16-A / MPT6-RF.16-A

MPT4-RF.16-A



MPT2-RF.18-A



MPT2-RF.16-A



Parameters

- Power supply: DC5V (from wireless power interface)
- **Wireless transmit power:** +10dbm
- **Wireless receive sensitivity:** -90dbm
- Installation: Wall mounting
- Dimensions: EU:86×86×10.5(mm) US:86×116×10.5 (mm)

Functions

- Multi Key Mode: Single on, Single off, Single on/off, Combination on, Combination off, Combination on/off, dblick/single switch, dblick/Combination switch, Momentary, Short/Long Press, Short Press/Long Jog.
- Multi Key control Type: Scene, Sequence, Timer switch, Universal switch, Single channel lighting control, Curtain switch, GPRS control, Panel control, Broadcast control, Broadcast channel, Security module, Z-audio control
- Indicator inten sity is adjustable
- Supports online upgrading

MPT6-RF.16-A



Wireless iSmart Panel

MPE04R-RF.18

MPE04R-RF.18

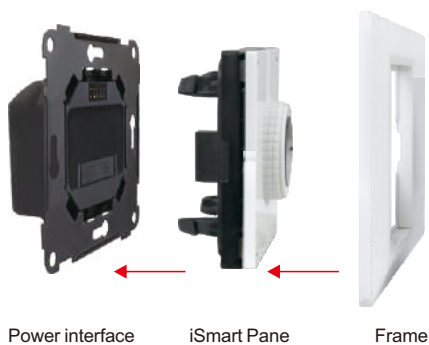
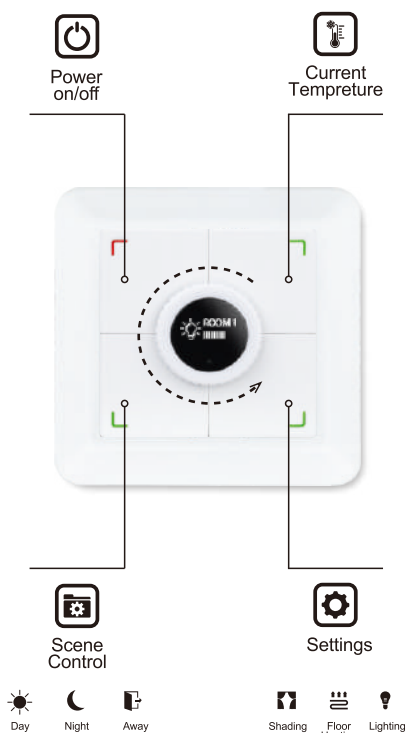


Parameters

- Power supply: DC5V (from wireless power interface)
- Power consumption: 64mA/DC5V
- **Wireless transmit power:** +10dbm
- **Wireless receive sensitivity:** -90dbm
- Installation: wireless power interface, wall box
- Dimensions: 55.5×55.5×16.8(mm)

Functions

- Floor heating controller
- Five preset modes: Day, Night, Away, ECO, and Home
- Current temperature display (internal and external)
- **Supports five simultaneous control channels,**
- Multi key control mode: Scene, Sequence, Timer switch, **Universal switch, Single channel lighting control, Broadcast scene, Broadcast channel, Shad-ing control , GPRS control, Panel control, Security module, Z-audio control, Universal control, Link page, DALI area dimmer, RGB control, IR control, Logic adjust, Logic scene.**
- **Supports dimming**
- **Adjustable LED indicator adjustment**
- **Supports online upgrades**



Wireless Power Interface (L+N Type)

MPWPID00LN.18-A / MPWPID00LN.16-A

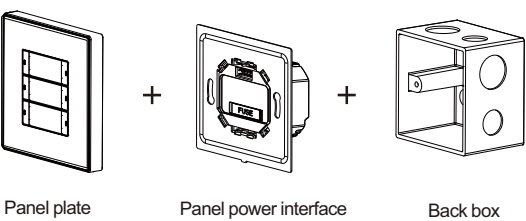


Parameters

- Product name: Fire line and null line for power supply
- Working voltage: AC85-270V 50/60Hz
- The maximum output current: 100mA/5VDC
- Fuse: 2A, aR type
- Dimension: EU:80×80×39(mm) US:80×110.5×39(mm)

Functions

- Supply DC5V power for wireless panels
- Power protection



MPWPID00LN.18-A / MPWPID00LN.16-A



Wireless power interface, which is used the fire line and null line to provide power. And it should work with wireless panel. There are two sizes, EU and US.

3CH Wireless Dimming Power Interface

MPWPID03L.18-A / MPWPID03L.16-A / MPWPID03LN.18-A / MPWPID03LN.16-A

MPWPID03L.18-A / MPWPID03L.16-A



Parameters

- Working voltage: AC85-270V 50/60Hz
- Output channel: 3 channels
- Output current: 1st channel ≤ 1.2A 2nd and 3rd channel total currents ≤ 2A
- Fuse: 6A, aR type
- Dimension: EU: 80×80×39(mm) US: 80×110.5×39(mm)

Functions

- Supply DC5V power for wireless panels.
- 1st channel is MOSFET dimming 2nd and 3rd are TRIAC dimming/switch
- Short circuit protection
- Over heating protection

1CH Wireless Switch Power Interface Sensor

MPWPIR01T.18-A / MPWPIR01T.16-A

MPWPIR01T.18-A / MPWPIR01T.16-A



Parameters

- Working voltage: AC85-270V 50/60Hz
- Output channel: 1CH relay
- Output current: 16A 250VAC
- Fuse: 2A, aR type
- Dimension: EU: 80×80×39(mm) US: 80×110.5×39(mm)

Functions

- Supply DC5V power for wireless panels
- 1CH relay output
- Measure the temperature (This is the proprietary function for MPWPIR01T.18-A)
- Power protection

3CH Wireless Switch Power Interface

MPWPIR03.18-A / MPWPIR03.16-A

Parameters

- Working voltage: AC85-270V 50/60Hz
- Output channel: 3CH relay
- Output current: 3A 250VAC(resistive load) 2A 250VAC(capacitive load)
- Mechanical life time of relay: 1×10⁷ times
- Electronic life time of relay: 1×10⁵ times
- Fuse: 10A
- Dimension: EU: 80×80×39(mm) US: 80×110.5×39(mm)

Functions

- Supply DC5V power for wireless panels
- 3 relay output channel
- Power protection

MPWPIR03.18-A / MPWPIR03.16-A

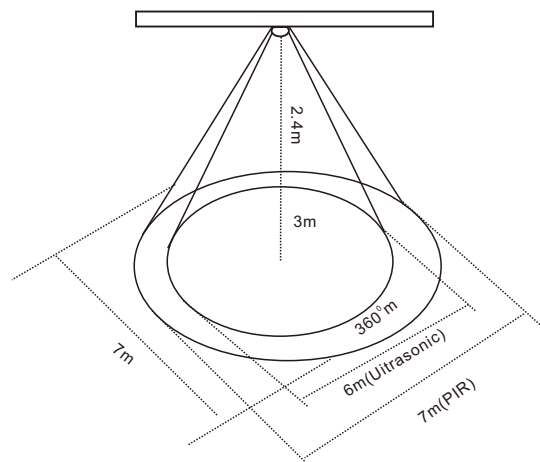


Wireless Ceiling Mount Ultrasonic & PIR Sensor
MSPU05-RF.1C

MSPU05-RF.1C



This module is both a PIR and ultrasonic sensor utilizing wireless communication protocols. Several logic inputs can be used to control multiple targets, and the module can be connected to other security modules.



Detection range

Parameters

- Working voltage: 85-265VAC
- Current: 4.2mA/220VAC
- Relay output: 5A
- Brightness detection range: 0~300LUX
- PIR detection range (Radius): 3.5m (Installation height:2.4m)
- Ultrasonic detection range (Radius): 3m (Installation height;2.4m)
- Wireless transmission power: +10dbm
- Wireless sensitivity: -90dbm
- Indoor communication distance: ≤30m
- RSSI Received Signal Strength Indication: >-80dbm
- Dimension: Φ95×38mm

Functions

- Support 1CH 5A relay output
- Check the real-time status
- Built-in PIR sensor, Lux sensor, Ultrasonic sensor, Button, UV switch, logic. total in 8 input logic conditions logic block
- Adjustable infrared sensitivity, sensitivity range:1-100
- Adjustable ultrasonic sensitivity, sensitivity range: 1-100
- Adjustable ultrasonic sensitivity, sensitivity range:1-100
- With 24 logic blocks, each logic block has 8inputs and 20 outputs commands
- Target types: scene, sequence, universal switch, single channel lighting control, broadcast scene, broadcast channel, GPRS control, Panel control, Z-Audio control
- With two logic relationships: OR, AND
- Security function
- Support online upgrading

Wireless PIR & Lux Sensor
MSPU03-BRF.10

Parameters

- Working voltage: 3V 1400mAh (From battery)
- Working current: 21mA
- Standby current: 24μA
- Indoor communication distance: ≤30m
- RSSI Received Signal Strengt Indication: >-80dbm
- (China) WPAN: 780-786MHz
- (Europe) SRD : 864-870MHz
- (North America) ISM : 904-928MHz
- Default password : HDL-SecurityKey0
- Dimension 54x54x51.5(mm)

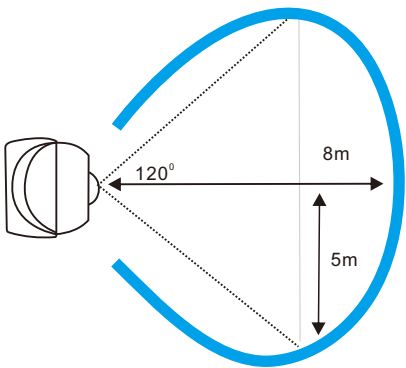
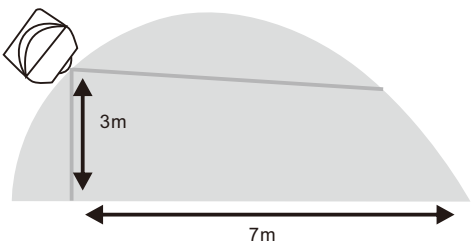
Functions

- Build in PIR sensor, LUX sensor, Temperature sensor
- LUX detection: detect current brightness
- Temperature detection: detect current temperature
- Battery energy detection: detect current battery energy
- Broadcast function: can broadcast its status, such as:movement, brightness, temperature, battery energy, you can select from the configuration.
- Target type: invalid, scene, sequence, universal switch, single channel lighting control, curtain switch, GPRS control, broadcast scene, broadcast channel, security, z-audio control.
- Can adjust the detection range.
- Supports IEEE.802.15.4
- Supports online upgrading
- Supports easy programming

MSPU03-BRF.10



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.



Detection range

Wireless IR Emitter

MIR01R-RF.10

MIR01R-RF.10



Wireless IR Emitter, adopt HDL wireless communication way, download IR codes are saved in database or that learning by IR leaner via HDL Buspro programming software, sach as to control the IR equipments such as AC, TV, Fan and so on.

Parameters

- Working power: 5V DC (From USB)
- Working current: 20mA
- IR emission carrier frequency: 38KHz
- IR Control distance (channel 1): 5m
- Indoor communication distance: ≤30m (Barrier free)
- RSSI Received Signal Strength Indication: >-80dbm
- China (WPAN): 780MHz to 786MHz
- Europe (SRD): 864MHz to 870MHz
- North America (ISM): 904MHz to 928MHz
- Default PSK: HDL-SecurityKey0
- Dimensions: Φ120x37(mm)

Functions

- Drive the LED transmitting tube directly
- 3 IR emission channels
- Supports 10 devices and 100 learning IR codes.
- Supports for many remote controller types, find the brand which you need, through the test to choose the right one.
- Can update IR codes from database, also can update IR codes that learning by HDL IR learner.
- Sequence function, to call the sequence by universal switch, the UV switch number is 201-208.
- Temperature detect and broadcasting functions
- Build in time chip, time and clock function
- Supports IEEE.802.15.4
- Supports online upgrading
- Supports easy programming

Buspro / Wireless Gateway

MBUS / GW-RF.40

MBUS/GW-RF.40



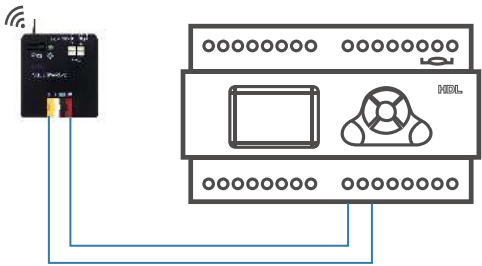
The HDL-MBUS/GW-RF.40 is a wireless converter enabling Buspro wired devices to be incorporated in to a Buspro wireless network.

Parameters

- Input voltage: 85~260VAC, 50/60Hz
- Power consumption: 1.15W
- Output: 24VDC 100mA
- Wireless transmission power: +10dbm
- Wireless sensitivity: -90dbm
- Indoor communication distance: ≤30m (barrier free)
- RSSI received signal strength indication: >-80dbm
- Dimension: 48.2x43.6x21.3 (mm)

Functions

- Supports IEEE.802.15.4
- Provides power to HDL Buspro devices, while enabling them to be connected to a Buspro wireless network.
- Online upgrades are supported for both the HDL-MBUS/GW-RF.40, and the module it is connected to.
- Supports easy programming



Wireless Gateway Module

MCIP-RF02.10

MCIP-RF02.10



As a wireless gateway module the MCIP-RF02.10 can support RJ45, HDL-Buspro, and RF, and create a meshed network using standard IEEE 802.15.4. The frequency can then be selected from between 780-794, 864-882, and 904-928 MHz. The module is also able to create a transmission bridge between devices, extending the RF scope. Via the on board buttons RF parameter setting is enabled.

Wireless Central Frequency

- (China) WPAN: 780MHz-786MHz
- (Europe) SRD: 864MHz-870MHz
- (North America) ISM: 904MHz-928MHz

Parameters

- Working power: 12~30VDC
- Communication: RJ45, HDL Buspro, Wireless
- Wireless transmit power: +10dbm
- Wireless receive sensitivity: -90dbm
- Communication distance indoor: ≤50m (barrier free)
- Work mode: Mesh mode, bridge mode
- BUS Terminal: 0.75-0.85mm Diameter Single Core
- Additional function: RF433MHz receiving

Triple communication interfaces

The wireless MCIP-RF02.10 Gateway supports three essential communication types, RJ45, HDL-Buspro, and RF. These communication methods allow a user to control the wireless system via a pad or smart phone, while maintaining conventional wired system functionality.



RJ45



HDL-BUS



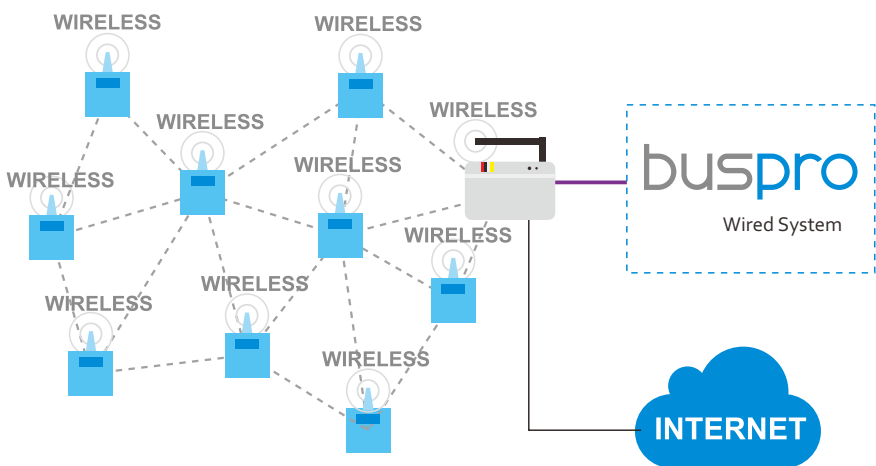
WIRELESS

Dual Working Modes

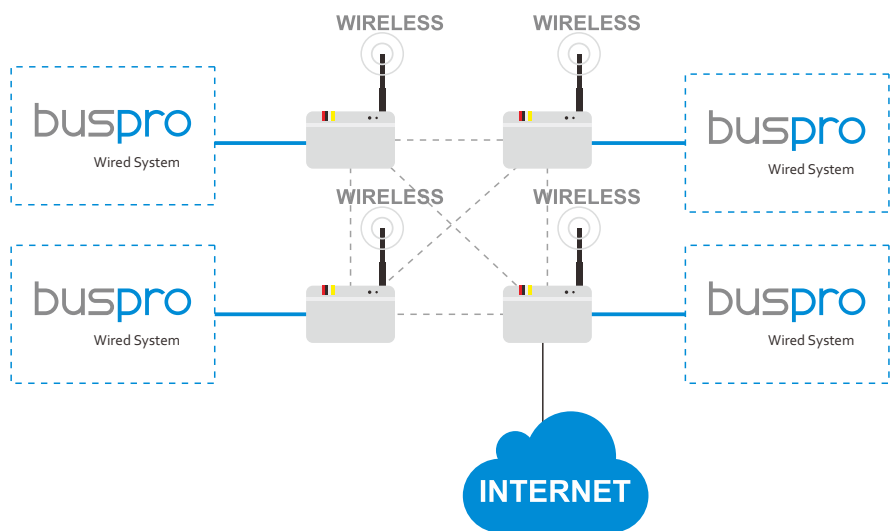
With two working modes the gateway is suitable for any automation solution. the first mode is the mesh network mode; this mode enables all the wireless devices active on the network to connect to each other. The mesh also supports wired system integration through the RJ45 and HDL Buspro ports.

The second mode is bridge mode; the function of this mode is to act as a transmission bridge. This enables multiple gateways and their associated wired devices to communicate with each other wirelessly. The scope of the system can then be further extended via RF.

Mesh network working mode



Bridge working mode



Wireless 1 Channel Motorized Curtain

MWM70-RF.12



MASTER

MWM70-RF.12



The module is a wireless motorized curtain controller, which supports both master and slave modules. The unit utilizes standard IEEE 802.15.4 wireless communication protocols, with frequencies of 780-794, 864-882, and 904-928 MHz. The new generation clutch and planetary reducer gears, enable the controller to operate at a barely audible 40db.

Common Parameters

- Voltage range: AC220V±20% 50Hz
- Slave interface: 6P network interface
- Rated power: 70W
- Rated torque: 1.0Nm
- Rated speed: 112rpm
- Line speed: 16cm/s
- Communication: wireless
- Insulation class: E
- IP class: IP41

Special parameters for Master

- Power supply: AC220V
- Communication: Wireless
- Master interface: RJ11(6P6C) network port

Functions

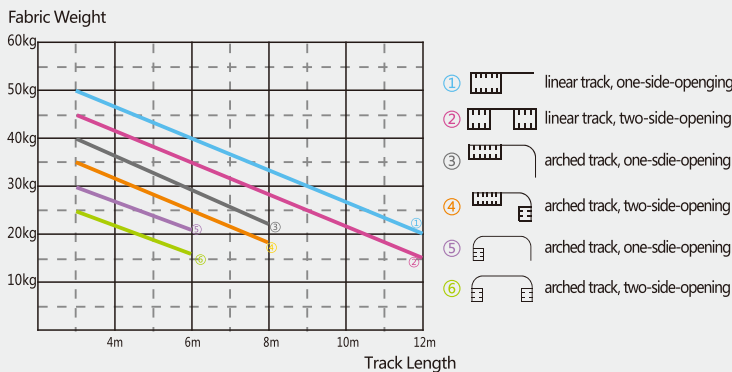
- Over LOAD protection. The curtain will stop in case of external disturbance
- Supports the following control commands: Open, Close, Stop and Percentage
- Included additional pieces to adjust the curtains to the supports
- Easy programming for control panels and switches
- Supports manual mode when the power off
- Motor running mode: forward or reverse
- Pulse coding for position control
- Over HEAT protection. In case of high temperature, the motor will switch off temporarily
- Over HEAT protection. In case of high temperature, the motor will switch off temporarily
- The position of the curtain can be measured and displayed in user interfaces
- Trigger manually the Open and Close of the curtain
- Solid and robust structure with modern style
- Supported Master and Slave mode
- Extremely silence working mode

Technical Specifications

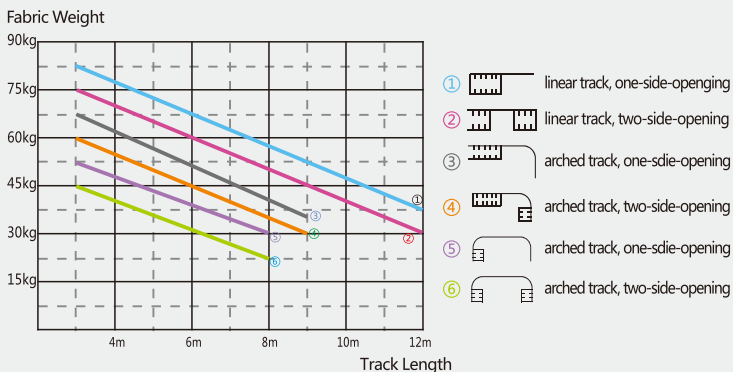
- Direct-powered by 220V AC, Maximum pulling force 8Kg(one motor), maximum curtain weight 50Kg (one motor), 80Kg (2 motors).
- Built-in new generation clutch, precise planetary reducer, noise level 40dB.
- Percentage control enabled.
- Drag and run enabled.
- Integrated with multiple user interfaces, HDL panel, iLife on iPad, Touchlife on Android pad, Touchlife on 7-inch touch screen.
- Suitable for all small to medium-scale curtain applications, linear and arched, one- and two-side opening.
- Recommended maximum track length 12m; refer to load curves below



Load curves(one-motor type)



Load curves(two-motor type)



1/2CH Relay

MPR01-RF.28 /MPR02-RF.28/MPC01-RF.28

1CH Trailing Dimmer / 4 CH Dry Contact Input

MPD01-RF.28/MPS04-RF.28/MPDA04-RF.28

MPR01-RF.28



Parameters

- Input voltage: AC100-240V(50/60Hz)
- Output current: 10A (Resistive load) 5A(capacitive load)
Maximum peak inrush-current: 78A
- Power consumption: 1.7W max.
- Communication: Buspro wireless
- Wireless transmit power: +10dbm
- Wireless receiving sensitivity: -90dbm
- Indoor communication distance: ≤30m
- RSSI Received Signal Strength Indication: >-80dbm

MPR02-RF.28



Parameters

- Input voltage: AC100-240V(50/60Hz)
- Output current: 10A (Resistive load) 5A(capacitive load)
Maximum peak inrush-current: 78A
- Power consumption: 1.45W max.
- Communication: Buspro wireless
- Wireless transmit power: +10dbm
- Wireless receiving sensitivity: -90dbm
- Indoor communication distance: ≤30m
- RSSI Received Signal Strength Indication: >-80dbm

MPD01-RF.28



Parameters

- Input voltage: AC100-240V(50/60Hz)
- Maximum output current: 1A
- Power consumption: 1W max.
- Communication: Buspro wireless
- Wireless transmission power: +10dbm
- Wireless sensitivity: -90dbm
- Indoor communication distance: ≤30m
- RSSI Received Signal Strength Indication: >-80dbm

MPS04-RF.28



Parameters

- Input voltage: AC100-240V(50/60Hz)
- Power consumption: 0.3W max
- Communication: Buspro wireless
- Wireless transmission power: +10dbm
- Wireless sensitivity: -90dbm
- Indoor communication distance: ≤30m
- RSSI Received Signal Strength Indication: >-80dbm

MPC01-RF.28



Parameters

- Input voltage: AC100-240V(50/60Hz)
- Output current: 5A
- Power consumption: 1.45W max.
- Communication: Buspro wireless
- Wireless transmission power: +10dbm
- Wireless sensitivity: -90dbm
- Indoor communication distance: ≤30m
- RSSI Received Signal Strength Indication: >-80dbm

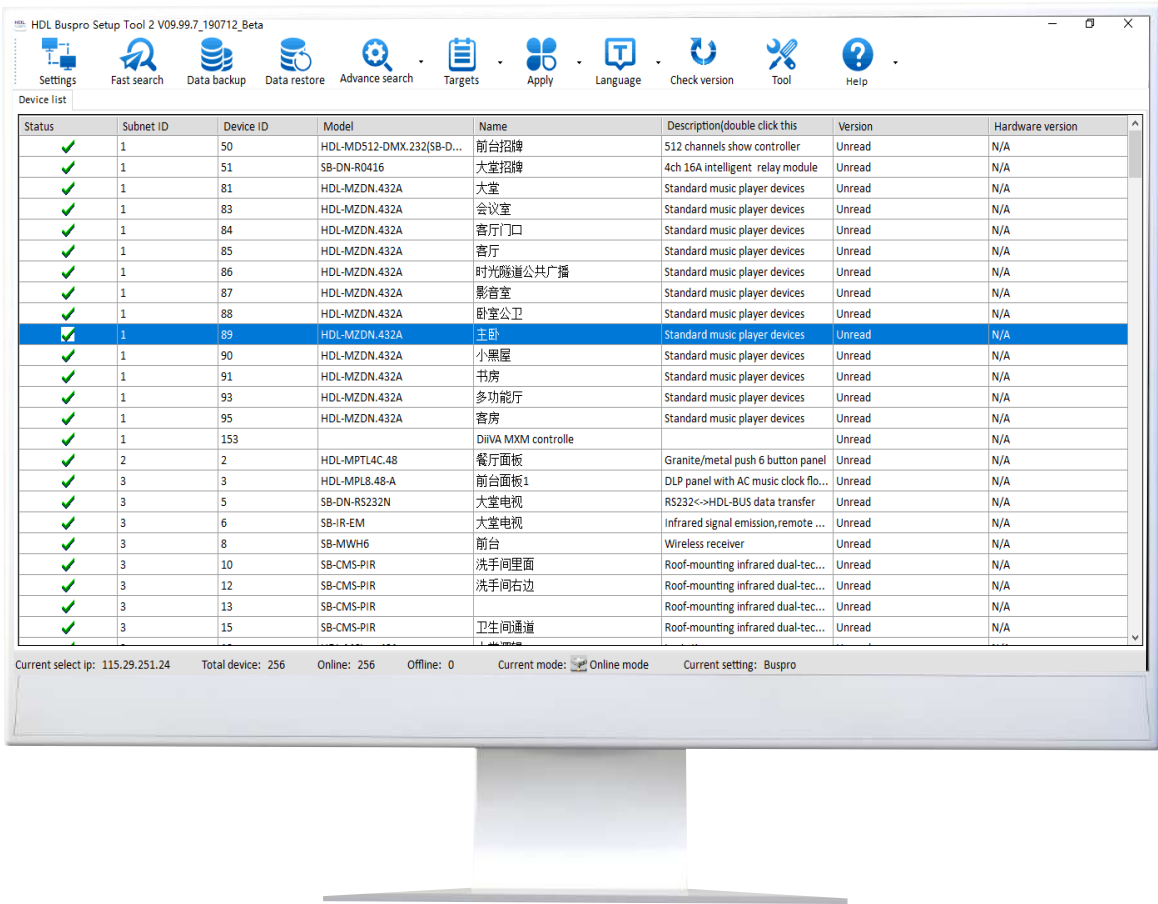
MPDA04-RF.28



Parameters

- Input voltage: AC100-240V(50/60Hz)
- Power consumption: 2.7W max.
- Current of each 0-10VDC output channel: 0-30mA
- Communication: Buspro wireless
- Wireless transmit power: +10dbm
- Wireless receiving sensitivity: +90dbm
- Indoor communication distance: ≤30m
- RSSI Received Signal Strength Indication: >-80dbm

HDL Buspro System Program Software



HDL Buspro Setup Tool

HDL Buspro Setup Tool (HBST) is the configuration application of HDL Buspro and Buspro Wireless. Installed on a Windows PC, it is designed for engineers to set up the IP addresses, parameters, logic conditions and other subjects in a solution.

IHMS consists of the local server, cloud server, client, room cards management tool and APIs.

- Setup a solution
- Test a device
- Modify a project's original settings
- Examine a possible problem
- And more...

Intelligent Hotel Room Management Software



HDL Intelligent Hotel Management System

HDL Intelligent Hotel Management System (IHMS) works with HDL's smart hotel system. It enables the hotel to manage its guest rooms, room cards and services on a desk top computer, while allowing guest to control room devices via a wall panel, mobile app or smart speaker.

IHMS consists of the local server, cloud server, client, room cards management tool and APIs.

- Server. It syncs and updates the data of all connected clients.
- Client. It has a user-friendly interface. Hotel staff can view the room status and proceed service requests.
- Cloud service. When the cloud service is enabled, hotel guest can control curtains, lights, HVAC and other devices via a mobile app or smart speaker.