

HDL®

KNX CATALOG

Since 1985, Your Reliable Partner

HDL Automation Co.,Ltd.

KNX CATALOG

2026 / 09

HDL®

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CATALOG

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What is KNX?

KNX is the world's leading open standard for intelligent building automation. It enables seamless integration and centralized control of lighting, shading, HVAC, security, energy management and more. As an internationally recognized protocol, KNX offers reliable communication, excellent interoperability and long-term flexibility for residential, commercial and hospitality projects.

One Standard

An internationally recognized standard that ensures long-term compatibility and flexibility.

Interoperability

Enables seamless communication between devices from different manufacturers.

Vendor Independent

Freedom to choose certified products without being tied to a single brand.

Reliable Communication

Stable wired communication designed for continuous and dependable operation.

Scalable

Suitable for projects of all sizes, from homes to commercial buildings.

Future-Proof

Continuously evolving through global standards while remaining backward compatible.

A Long-Term Commitment to KNX

For nearly two decades, HDL has been deeply involved in the development of the KNX ecosystem. Beyond developing certified KNX products, HDL has continuously contributed through standardization, testing, engineering training and industry collaboration, demonstrating a long-term commitment to advancing KNX technology worldwide.

2006

Joined the KNX Association as one of the first Chinese companies to adopt the KNX standard.

2009

Established a KNX Certified Training Centre.

2013

Participated in compiling China's national KNX standard GB/T 20965-2013.

2017

Became a Board Member of KNX China. HDL's KNX Test Center was certified by the KNX Association as the world's 16th independent KNX Test Lab.

2018

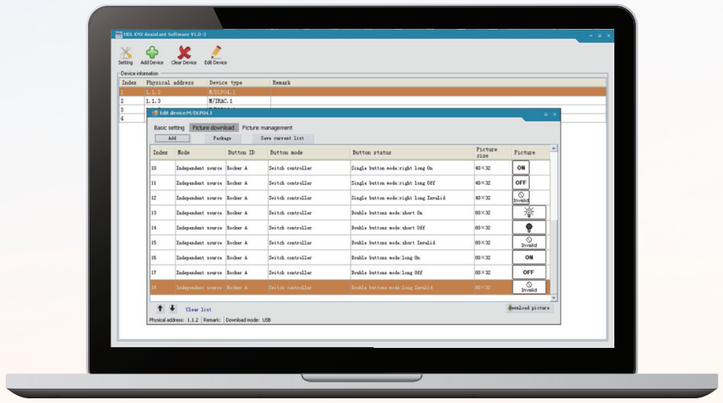
Serving as a KNX Shareholder Member, actively contributing to the continuous development of the KNX ecosystem.

2019 – Present

Organizing KNX training programs and supporting professional development, with more than 1,000 participants trained.

KNX Assistant Software

Free Software



HDL-KNX Assistant Software is designed to aid system creation, and commissioning.The software is being constantly improved to offeryou more customization and configurationpossibilities.

For KNX IR Emitter Module

Enable your system to learn new IR codes bydownloading them to the KNX IR EmitterModule using the HDL-KNX Assistant Software.

For KNX Smart Panel

Personalize your HDL smart screen by downloading icons to the panels using the HDL-KNX Assistant Software.

For KNX DALI Module

Manage your DALI devices and their automatic address allocation, and create 16 DALI device groups. Supports DALI DT8 configuration.

CONTROL PANELS / PANEL POWER INTERFACES

Beautifully designed and intelligently engineered, HDL control panels offer a seamless way to manage every aspect of a smart space. With intuitive operation, premium materials, and customizable functions, they bring comfort, convenience, and style to everyday living.

Source Series





MGWSIPD-LK.18

Source 7

Source 7 is a smart panel for effortless control of lighting, scenes, shading, HVAC, and music. It features built-in proximity, temperature & humidity, and LUX sensors, and supports multi-gateway cross-drive control.

- Stepless knob assures accruate positioning
- Enabling indoor communication between different rooms
- Capable of working as a gateway
- Compatible with SIP Door Stations

reddot winner 2022
interface design

SILVER AWARD 2022

reddot winner 2022

FINALIST 2022

DESIGN AWARD 2022

Contemporary Good Design WINNER 2021



MGWSIPD10-LK.18

Source 10

Source 10 is a powerful smart control screen with a 2000×1200 ultra-clear display and smooth performance powered by a quad-core processor. More than a panel, it brings gateway, intercom, and smart control together as the central hub of the home.

Awards: MUSE DESIGN AWARDS · FRENCH DESIGN AWARDS · A'DESIGN AWARD & COMPETITION WINNER 2025 GOLD

- Stepless knob assures accruate positioning
- Compatible with SIP Door Stations
- Built-in proximity sensor for detecting human motion
- Enabling indoor communication between different rooms
- Multiple font sizes available, suitable for the whole family
- Built-in temperature & humidity sensor



MPTL4C-D-ZB.18

Source Mini

Source Mini brings essential smart home control into one compact, intuitive interface. Built-in environmental sensing and room-to-room communication make everyday interaction more convenient, connected and responsive.

- 4-inch IPS capacitive touchscreen, 480 × 480
- Built-in temperature, humidity, proximity and light sensors
- Customizable favorites for devices and scenes
- Automatic screen wake-up and brightness adjustment





Xelent Series

The Xelent series offers a range of control panels with a refined and consistent design, combining visual quality with intuitive interaction. Clean lines, premium finishes, and well-structured layouts create a modern look across different applications.

MPBXL-8B-KS.18

MPBXL-6B-KS.18



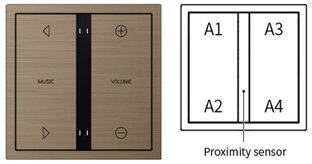
Color:

Metal: Brass Bronze Black **Plastic:** Ivory White Charcoal Gray

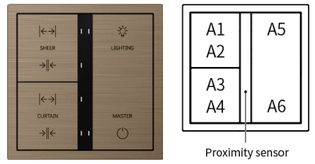
- ±1°C accurate temperature control
- Precise sensing adjustable from 10 to 100 cm
- Panel lock for smart energy savings
- Compatibility with EU, CH, and US wall boxes
- Supports horizontal and vertical installation

Xelent Series Button Smart Panel

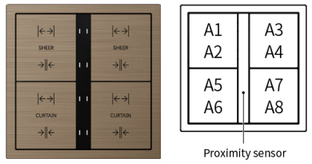
The Xelent series smart button panel offers flexible control of lighting, curtains, and scenes. Button layouts can be reconfigured via software, with customizable icons and RGB indicators for clear feedback.



MPBXL-4B-KS.18



MPBXL-6B-KS.18



MPBXL-8B-KS.18

Flexible Button Layouts

Standard 4/6/8-button panels can be reconfigured via software into different button layouts, allowing flexible adjustment of button counts to suit various control needs and application scenarios.

Example:



6 Buttons | 5 Buttons | 4 Buttons | 3 Buttons

Xelent Series Thermostat Panel

The Xelent series thermostat panel features a high-definition LCD display and an intuitive interface for clear HVAC control. Integrated sensing and system linkage enhance energy efficiency and user comfort.



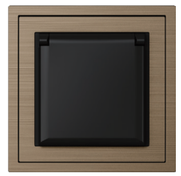
MPHXL-6B-KS.18

Xelent Series Non-Smart Panel

The Xelent series also includes a full range of non-smart panels, ensuring visual consistency while supporting complete solution integration.



EU Socket



Waterproof EU Power Socket



Italy Socket



Svizzera Socket



Universal Socket



USB and Type-C Wall Outlet



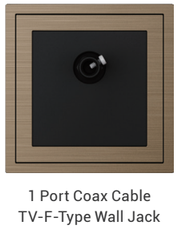
HDMI and USB Wall Outlet



1 Port Telephone Wall Jack



1 Port Cable TV Wall Jack



1 Port Coax Cable
TV-F-Type Wall Jack



1 Port Ethernet Wall Jack



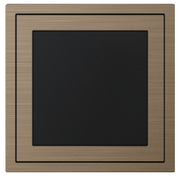
2 Ports Ethernet Wall Jack



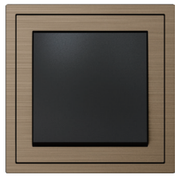
TV and Ethernet Wall Jack



Emergency Panel



Blank Panel



1 Button Rocker Switch



2 Button Rocker Switch





Tile Series

Tile is a series of smart control panels 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. It is able to keep the walls in a consistent and beautiful look while meeting various requirements of functionalities.

Features and Specifications

- Precise temperature detection and control
- Maximum sensing distance up to 80cm
- Button-locking function
- Eye-friendly indicator light mode
- Customizable button icons and colors



MPHT-6B-KT.18

Color: Plastic: Champagne Gold Space Gray Ash Gray Ivory White

Metal: Champagne Gold Space Gray Black

Tile Display

M/PTL35.1

Tile Display is a multi-function control panel for home automation. With 3.5-inch LCD screen and full-screen touch control, it is convenient for the users to control lighting, curtain, scene, air conditioning, floor heating, music and fresh air in an intuitive way. Tile Display can be combined with other panels in the Tile series for more functionality but with a consistent look.

Features and Specifications

- Built-in temperature, humidity and proximity sensors
- Adjustable LCD screen backlight brightness
- Automatic screen wake-up and sleep mode
- Screen lock and online upgrade support





Tile Series Thermostat 2.1

MPHT-6B-KT.18

Tile Series Thermostat 2.1 has a segmented LCD screen and mechanical buttons, each button supporting laser engraving, and it has air conditioning, underfloor heating, fresh air pages and mode, wind speed pages.

Features and Specifications

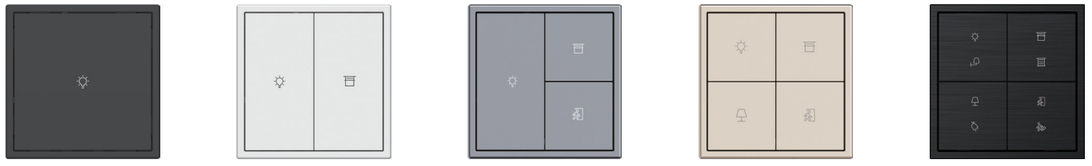
- Built-in temperature sensing
- Automatic indicator wake-up and sleep
- Customizable RGB indicators and button lock

Tile Series Push-Button Panel

Tile Series 1/2/3/4/8-button smart panel 2.1, with mechanical buttons, supports a variety of button modes and button control types. It can achieve basic control functions such as switch, dimming, colour temperature, RGB control, curtain, scene, etc.

Features and Specifications

- Built-in temperature and proximity sensing
- Button locking with customizable icons
- Customizable indicator color and brightness

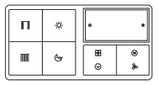


MPBT-1B-KT.18 MPBT-2B-KT.18 MPBT-3B-KT.18 MPBT-4B-KT.18 MPBT-8B-KT.18

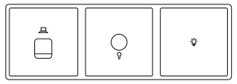
Flexible Combinations

The Tile series panels support both vertical and horizontal, allowing for versatile combinations and multi-function control.

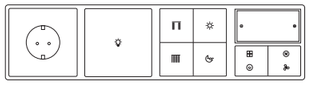
- Horizontal



2-gang

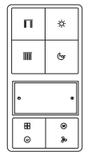


3-gang



4-gang

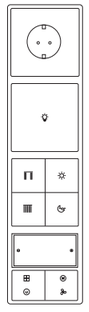
- Vertical



2-gang



3-gang



4-gang

Supported control types include

Scene

Sequence

Time Switch

Universal Switch



Single Channel Adjustment

Broadcast Scene

Broadcast Channel

Curtain Switch



GPRS control

Panel Control

Fire protection module

Music Control



Tile Series Non-Smart Panel

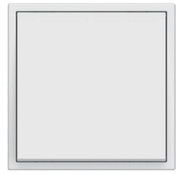
To provide users with better smart solutions, Tile Series 2.1 comes with various non-smart products for solution design.



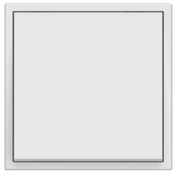
Card Holder Panel 2.1



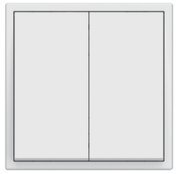
Emergency Panel 2.1



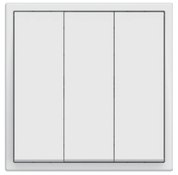
Blank Panel 2.1



1 Button
Rocker Switch 2.1



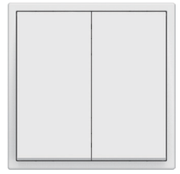
2 Buttons
Rocker Switch 2.1



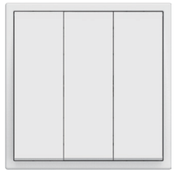
3 Buttons
Rocker Switch 2.1



1 Button
Momentary Switch 2.1



2 Buttons
Momentary Switch 2.1



3 Buttons
Momentary Switch 2.1



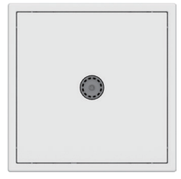
Induction Floor
Light Panel 2.1



TV and Ethernet
Outlet 2.1



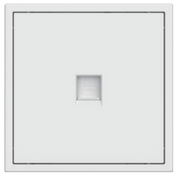
1 Port Coax Cable
TV-F-Type Wall Outlet 2.1



1 Port Cable
TV Wall Outlet 2.1



1 Port Telephone
Wall Jack 2.1



1 Port Ethernet
Wall Outlet 2.1



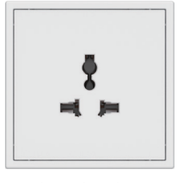
2 Port Ethernet
Wall Outlet 2.1



EU Socket 2.1



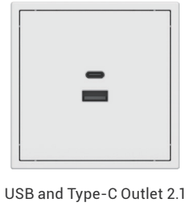
Waterpro of EU
Power Socket 2.1



Universal Socket 2.1



HDMI and USB Outlet 2.1



USB and Type-C Outlet 2.1



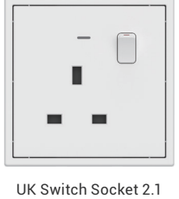
Shaver Socket 2.1



Italy Socket 2.1



Swiss Scoket 2.1



UK Switch Socket 2.1

Granite Series





M/PTL4.1

Granite Display

A compact touch panel that puts everyday smart home control within easy reach. Its square display brings multiple functions together in a clear interface, with shortcut scenes and intuitive navigation making frequent controls faster and simpler to access.

- 4-inch LCD with 720 × 720 resolution
- Proximity sensing with automatic screen wake-up
- Built-in temperature and humidity sensors
- Up to 32 scenes and 64 lighting controls



M/PTL43.1

Granite 4.3

A versatile full-screen touch panel designed to make multi-function control clear and well organized. Dedicated function pages simplify navigation, while portrait and landscape display options allow the interface to adapt naturally to different installations.

- 4.3-inch LCD with 480 × 800 resolution
- Built-in temperature and humidity sensors
- Adjustable LCD brightness with sleep mode
- Proximity sensing with automatic screen wake-up



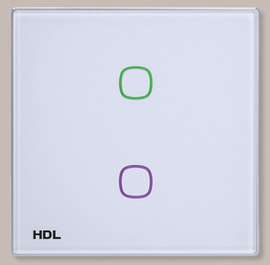
M/P3R.1 M/P2R.1

Granite

A refined push-button panel that pairs tactile control with customizable illuminated labels. RGB backlighting and status indicators make each function easy to identify at a glance, bringing both clarity and personality to everyday control.

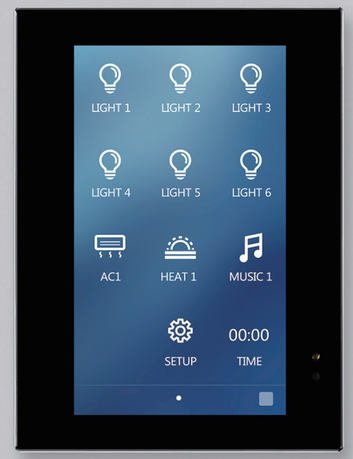
- Built-in temperature probe for real-time monitoring
- LED backlight and status indicator support
- Adjustable LCD backlight color and brightness
- Customizable icons with button mutual exclusion



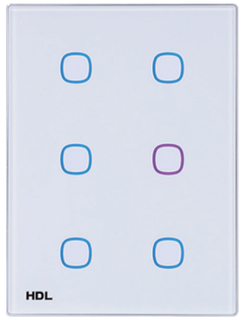


M/TBP2.1-A2





M/MPTLC43.1



M/TBP6.1-A2

Color: ■ Black □ White

iTouch

With its clean glass surface and softly illuminated touch buttons, iTouch brings a minimalist approach to everyday smart control. Customizable RGB indicators provide clear visual feedback while keeping the interface simple and uncluttered.

- 2-, 4- or 6-button configurations
- Customizable RGB indicator color and brightness
- Multiple key modes and control types
- On/off and dimming control



M/MPTLC43.1

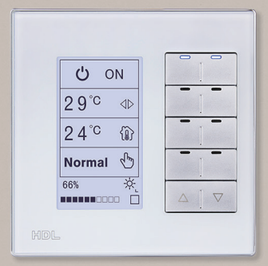
Color: ■ Black □ White

Enviro

Designed for flexible and personalized control, Enviro puts frequently used smart home functions exactly where users need them. Its customizable interface adapts to different lifestyles, while proximity sensing creates a responsive experience the moment someone approaches.

- 4.3-inch IPS true-color LCD screen
- Up to 60 customizable control buttons
- Built-in temperature and proximity sensors
- Automatic interface switching and energy-saving mode





M/DLP04.1-A2-48





M/MPT14.1-A2

DLP

A classic HDL smart panel that combines the familiarity of physical buttons with clear on-screen information. Its multi-page interface keeps a wide range of controls organized and accessible, making everyday operation straightforward and efficient.



M/DLP04.1-A2

Color: ■ Black □ White

- 8 control buttons and 2 page buttons
- 4 customizable general control pages
- Dedicated AC, floor heating and music pages
- Built-in temperature sensor



M/MPT14.1-A2

Color: ■ Black □ White

DLP Touch

DLP Touch evolves the familiar multi-page control experience with touch interaction and instant access to frequently used functions. Shortcut buttons, visual feedback and proximity sensing work together to make navigation faster and everyday control more intuitive.

- 8 control buttons and 4 shortcut buttons
- Customizable icons and RGB button indicators
- Built-in temperature and proximity sensors
- Automatic LCD wake-up and voice prompt

Panel Power Interface EU

Two interfaces, and one interface connects to KNX/EIB, the other connects to panel or sensor, etc. The power interface provides power supply and communication signal to KNX panels or sensors.



M/PCI.1-A

- Working voltage is 21~30V DC
- Cable diameter of KNX terminal: 0.6-0.8mm
- Working temperature: -5℃~45℃
- Storage temperature: -20℃~60℃

Panel Power Interface US

Two interfaces, and one interface connects to KNX/EIB, the other connects to panel or sensor, etc. The power interface provides power supply and communication signal to KNX panels or sensors.



M/PCI.3-A

- Working voltage: 21~30V DC
- Auxiliary power supply: 20~30V DC
- Cable diameter of KNX terminal: 0.6-0.8mm
- Working temperature: -5℃~45℃
- Storage temperature: -20℃~60℃

Panel Power Interface EU (with External Power Supply)

It has 2 power interfaces. The auxiliary power interface is connected to an external power supply to provide an auxiliary power input for the matching panel.



M/PCI2PE.1

- Working voltage: 21~30V DC
- Auxiliary power supply: 20~30V DC
- Cable diameter of KNX terminal: 0.6-0.8mm
- Working temperature: -5℃~45℃
- Storage temperature: -20℃~60℃

Panel Power Interface US (with External Power Supply)

It has 2 power interfaces. The auxiliary power interface is connected to an external power supply to provide an auxiliary power input for the matching panel.



M/PCI2PU.2

- Working voltage: 21~30V DC
- Auxiliary power supply: 20~30V DC
- Cable diameter of KNX terminal: 0.6-0.8mm
- Working temperature: -5℃~45℃
- Storage temperature: -20℃~60℃

Power Interface-With 2CH 10A Relay

Work in conjunction with KNX Granite Display, etc. and provide working power and communication signals to the panel..



M/PCI2PC2R.1

- With 2 10A relay channels
- With independent programming button and programming indicator
- Relay usage time & frequency statistics
- Relay health check (voltage detection)
- Working current: 25mA/30V DC
- Auxiliary current: 10mA/24V DC

Power Interface-With 3CH 10A Relay

It is a standard panel power interface with relay channels. The power interface has an independent device ID address, including 10A relay channels.



M/PCI2PC3R.1

- With 3 10A relay channels
- With independent programming button and programming indicator
- Relay usage time & frequency statistics
- Relay health check (voltage detection)
- Working current: 25mA/30V DC
- Auxiliary current: 10mA/24V DC

Source KNX Power Interface

KNX Power interface, built-in 2CH 10A relay circuit output, to provide power supply, RJ45 ethernet connection to Souce 7, Souce 10 and source Mini, Support 86*86 mm Size backbox installation.



- Input voltage: 21 - 30V DC
- Output channel: 2 channels, 5A/CH
- Resistive load: ≤660 W/ CH
- Capacitive load: ≤200 W/ CH

M/FME1R.1

Panel Power Interface EU

It is used with KNX smart panels to provide working voltage and communication signals for the panel.



- Working voltage: 21V~30V DC
- Rated voltage: 30V DC
- Rated current: 50mA
- Output power: 0.2A/5V DC
- Dimensions: 51.2mm×51.2mm×23.1mm

MPFPIT-1P-KT.18

Panel Power Interface with Auxiliary Power Supply EU

It is used with KNX thermostat panels and display panels to provide working voltage and communication signals for the panel.



- Working voltage: 21V~30V DC
- Rated voltage: 30V DC + 24V DC
- Rated current: 400mA
- Output power: 1A/5V DC
- Dimensions: 51.2mm×51.2mm×23.1mm

MPFPIT-2P-KT.18

Panel Power Interface with 2CH 10A Relay

It adopts KNX protocol for communication and control. It can be used as the power supply interface of the panel, and can be installed in the 86 wall box with the panel to realize the intelligent control of home lights, curtains, fans, sockets and other power-using devices.



- Working voltage: 21V~30V DC
- Rated voltage: 24V DC
- Rated current: 400mA
- Output power: 1A/5V DC
- Dimensions: 68.2mm×68.85mm×26.62mm

MPFPIT-0210-KT.17

Panel Power Interface with 4CH 10A Relay

It adopts KNX protocol for communication and control. It can be used as the power supply interface of the panel, and can be installed in the 86 wall box with the panel to realize the intelligent control of home lights, curtains, fans, sockets and other power-using devices.



- Working voltage: 21V~30V DC
- Rated voltage: 24V DC
- Rated current: 400mA
- Output power: 1A/5V DC
- Dimensions: 68.2mm×68.85mm×26.62mm

MPFPIT-0410-KT.17

CONTROLLER / ACTUATORS

Controllers are the intelligent core of a KNX system, enabling precise control of lighting, shading, climate, and other connected devices. Designed for reliable performance and flexible integration, they execute commands from sensors, control panels, and other system devices to ensure seamless automation throughout the building.



1CH 16A Flush-mounted Switching Actuator (EU)

It is a smart relay executive module installed in the wall box of the Eropean standard panel. In conjunction with the corresponding dry contact panel, the actuator enables smart control of electrical devices.



M/FME1R.1

- Support 1CH 16A relay control channel
- 4 dry contact input channels
- 4CH LED output, 12mA/CH
- With programming button and programming indicator
- Working current 25mA/30V DC
- Auxiliary current 53mA/24V DC

2CH 10A Flush-mounted Switching Actuator (EU)

It is a smart relay executive module installed in the wall box of the European standard panel. In conjunction with the corresponding dry contact panel, the actuator enables smart control of electrical devices.



M/FME2R.1

- Support 2CH 10A relay control channels
- 4 dry contact input channels
- 4CH LED output, 12mA/CH
- With programming button and programming indicator
- Working current 25mA/30V DC
- Auxiliary current 53mA/24V DC

3CH 10A Flush-mounted Switching Actuator

It is a smart relay executive module installed in the wall box of the Chinese standard panel. In conjunction with the corresponding dry contact panel, the actuator enables smart control of electrical devices.



M/FMC3R.1

- Support three 10A relay control channels
- 7 dry contact input channels
- 7CH LED output, 12mA/CH
- With programming button and programming indicator
- Working current 25mA/30V DC
- Auxiliary current 53mA/24V DC

4CH 16A High Power Switch Actuator

The actuator has 4 channels (16A for each channel) and 50A magnetic latching relay and has manual control switches.



M/R4.10.1

- Maximum output current of each channel:16A
- Heating function: PWM(1bit/1byte) control output
- Working voltage：21~30V DC Class 2
- Working current：15mA/30V DC
- Input voltage：120V/240V AC (50/60Hz)
- Operation times：>100,000

8CH 16A High Power Switch Actuator

The actuator has 8 channels (16A for each channel) and 50A magnetic latching relay and has manual control switches.

M/R8.16.1

- Maximum output current of each channel:16A
- Heating function: PWM(1bit/1byte) control output
- Working voltage：21~30V DC Class 2
- Working current：15mA/30V DC
- Input voltage：120V/240V AC (50/60Hz)
- Operation times：>100,000

12CH 16A High Power Switch Actuator

The actuator has 12 channels (16A for each channel) and 50A magnetic latching relay and has manual control switches.



M/R12.16.1

- Maximum output current of each channel:16A
- Heating function: PWM(1bit/1byte) control output
- Working voltage：21~30V DC Class 2
- Working current：15mA/30V DC
- Input voltage：120V/240V AC (50/60Hz)
- Operation times：>100,000

4CH 10A High Power Switch Actuator

The actuator has 4 channels and each channel outputs 10A current.



M/R4.10.1

- Maximum output current of each channel:10A
- Heating function: PWM(1bit/1byte) control output
- Working voltage：21~30V DC Class 2
- Working current：15mA/30V DC
- Input voltage：120V/240V AC (50/60Hz)
- Operation times：>100,000

8CH 10A High Power Switch Actuator

The actuator has 8 channels and each channel outputs 10A current.



M/R8.10.1

- Maximum output current of each channel:10A
- Heating function: PWM(1bit/1byte) control output
- Working voltage：21~30V DC Class 2
- Working current：15mA/30V DC
- Input voltage：120V/240V AC (50/60Hz)
- Operation times：>100,000

12CH 10A High Power Switch Actuator

The actuator has 12 channels and each channel outputs 10A current.



M/R12.10.1

- Maximum output current of each channel:10A
- Heating function: PWM(1bit/1byte) control output
- Working voltage：21~30V DC Class 2
- Working current：15mA/30V DC
- Input voltage：120V/240V AC (50/60Hz)
- Operation times：>100,000

16CH 10A High Power Switch Actuator

The actuator has 16 channels and each channel outputs 10A current.



M/R16.10.1

- Maximum output current of each channel:10A
- Heating function: PWM(1bit/1byte) control output
- Working voltage：21~30V DC Class 2
- Working current：15mA/30V DC
- Input voltage：120V/240V AC (50/60Hz)
- Operation times：>100,000

17CH Mix Actuator

It is used for controlling relays, dimmers, curtains and air conditioners.



M/MHR17U.1

- Supports 17CH relay control channels
- CH1-6 and 12-17 are TV8 5A relays
- CH7-11 are 10A magnetic latching relays
- Working current：14mA/30V DC
- Auxiliary current：97mA/30V DC

19CH Mix Actuator

It is used for controlling relays, dimmers, curtains and air conditioners.
The actuator supports 19CH control channels.



M/MHD02R17U.1

- 17 relay channels and 2 MOSFET dimming channels
- CH1-6 and 12-17 are TV8 5A relays
- CH7-11 are 10A magnetic latching relays
- MOSFET dimming output channel: 2CH/1A
- Working current：14mA/30V DC
- Auxiliary current：97mA/30V DC

4CH 16A High Power Switch Actuator with Current Detection

The actuator has 4 channels and 50A magnetic latching relay.



M/R4.16.1-CD

- Maximum output current of each channel:16A
- Heating function: PWM(1bit/1byte) control output
- Current detection function
- Working voltage：21~30V DC Class 2
- Working current：15mA/30V DC
- Input voltage：120V/240V AC (50/60Hz)
- Operation times：>100,000

8CH 16A High Power Switch Actuator with Current Detection

The actuator has 8 channels and 50A magnetic latching relay.

M/R8.16.1-CD

- Maximum output current of each channel:16A
- Heating function: PWM(1bit/1byte) control output
- Current detection function
- Working voltage：21~30V DC Class 2
- Working current：15mA/30V DC
- Input voltage：120V/240V AC (50/60Hz)
- Operation times：>100,000

12CH 16A High Power Switch Actuator with Current Detection

The actuator has 12 channels and 50A magnetic latching relay.



M/R12.16.1-CD

- Maximum output current of each channel:16A
- Heating function: PWM(1bit/1byte) control output
- Current detection function
- Working voltage：21~30V DC Class 2
- Working current：15mA/30V DC
- Input voltage：120V/240V AC (50/60Hz)
- Operation times：>100,000

DALI Controller

KNX-DALI Controller is a DALI-2 dimming control module based on KNX communication protocol. The device has single-loop control, zone/group control, scene control, and can realize intelligent control of lighting equipment and linkage control of intelligent equipment through APP.



MDL64-KT.53

- Supports up to 64 DALI drivers with address management
- Supports switching, dimming, color temperature and RGB/RGBW control
- Supports broadcast, channel, group and scene control with status feedback
- Configure DALI drivers and manage scenes via HDL KNX Assistant
- DALI-2 and KNX certified with online firmware upgrades

1CH 1A Flush-mounted Dimming Actuator (EU)

A smart dimming executive module installed in the wall box of the European standard panel, can be worked with the corresponding dry contact panel.

M/FME1D.1

- With one 1A dimming control channel
- With 4 dry contact switch signal input channels
- 4 LED switch signal output channels
- With programming button and programming indicator
- Working current：48mA/24V DC
- Auxiliary current：25mA/24V DC
- LED output：12mA/CH

4CH 10A 0-10V Dimming Actuator

Featuring four independent 0/1-10V dimming channels, this KNX actuator integrates a 10A relay on each channel for synchronized dimming and on/off control. It provides flexible control for 0-10V fluorescent lamps, LED lighting and other dimmable devices.



MDA04-R10-KT.13

- Configurable upper and lower dimming limits
- Scene, sequence and staircase lighting control
- Threshold switching and flash lighting functions
- Manual on/off control for individual channels
- Status response and restoration functions

6CH 10A 0~10V Dimming Actuator

It supports 6-channel 0/1-10V dimming, and each circuit is equipped with10A relay synchronous control to turn it on and off.



M/DA6.10.1

- The buttons can be manually controlled to control the switch and dimming
- Both current absorbing and output ballasts can be used
- Working current：15mA/30V DC
- Dimming output：0~10V DC, 24mA/CH
- Electrical life time：>100000
- Mechanical life time：>100000

2CH 3A Trailing Edge Dimming Actuator

It has 2 channels 3A output circuits, which supports multiple application functions. This series of dimming actuators are in full compliance with European Safety Standards and KNX standard protocol.



M/DM02.1

- Support leading and trailing edge mode
- Parallel channels can form heavy current output
- Manual switching, dimming for each channel
- Working current：20mA/30V DC
- Input voltage: AC100-240V (50/60Hz)
- Total output current：6A Max

4CH 1.5A Trailing Edge Dimming Actuator

It has 4 channels 1.5A output circuits, which supports multiple application functions. This series of dimming actuators are in full compliance with European Safety Standards and KNX standard protocol.



M/DM04.1

- Support leading and trailing edge mode;
- Parallel channels can form heavy current output
- Manual switching, dimming for each channel
- Working current：20mA/30V DC
- Input voltage: AC100-240V (50/60Hz)
- Total output current：6A Max

6CH 1.5A Trailing Edge Dimming Actuator

It has 6 channels 1.5A output circuits, which supports multiple application functions. This series of dimming actuators are in full compliance with European Safety Standards and KNX standard protocol.



M/DM06.1

- Support leading and trailing edge mode
- Parallel channels can form heavy current output
- Manual switching, dimming for each channel
- Working current：25mA/30V DC
- Input voltage: AC100-240V (50/60Hz)
- Total output current：9A Max

4CH 7A RGBW Driver

It has 4 RGBW driving channels, each channel has the output capacity of 7A. The four channels can be controlled separately or using RGBW combination control.



M/DRGBW4.1

- PWM linear dimming
- Dimming lower / upper limit setting
- Dimming fade time setting
- PWM constant voltage output
- LED type: common anode RGBW LED strip or single LED
- Working current：10mA/30V DC
- Input power (for LED): 12~40V DC

DMX512 Gateway

The gateway supports two-way control, and can record, play and delete DMX programs, can be widely used to control devices with built-in DMX protocol port for LED color control.



M/DMX512.1

- 3 working modes: DMX recorder mode, DMX dimming mode (EIB to DMX) and DMX to EIB conver_x0002_sion mode (1bit, 1byte data point)
- Supported communication signal: DMX512-1990, ArtNet DMX, HDL NET DMX
- Store and playback up to 24 programs, with up to 4 hours recording time
- Working current：5mA/30V DC
- Auxiliary power supply：40mA/24V DC

Infrared Emitter

The module can store up to 960 infrared codes. Used for general control, for example TV, DVD and other infrared receiving devices, and for controlling AC of any brand.



M/IRAC.1

- Various control modes: Single emitting control, Repeat emitting control, Sequence emitting control
- Support current detection with current up to 2A
- Working current：10mA/30V DC
- Transmitting carrier wave frequency：38kHz ± 20%
- Emission distance：7m
- Current detection：<2A

VRV/VRF Indoor Unit Gateway

Designed for connecting multi-split air conditioning systems to KNX for intelligent control, it is compatible with major VRV/VRF brands including Daikin, Hitachi, Toshiba, Mitsubishi Electric, Hisense, Haier, Panasonic, York, Mitsubishi Heavy Industries, Midea, LG, AUX, Bosch, Gree, TICA, Samsung, Chigo, Trane, Carrier, McQuay, and more.



MHVACSGW-KT.13

- Supports independent connection or panel co-existence
- Supports master/slave configuration and firmware upgrade via Bluetooth
- Power supply: 30V DC

VRV/VRF Outdoor Unit Gateway

It enables integration of multi-split air conditioners into smart home or BMS platforms for intelligent monitoring and centralized control, and is compatible with major VRV/VRF brands including Daikin, Hitachi, Toshiba, Mitsubishi Electric, Hisense, Haier, Panasonic, York, Mitsubishi Heavy Industries, Midea, LG, AUX, Bosch, Gree, TICA, Samsung, Chigo, Trane, Carrier, and more.



MHVACMGW-KT.13

- Integrates third-party RS485 devices such as fresh air and floor heating
- Equipped with an LCD screen for real-time status display
- Power supply: 30V DC, optional 12V DC

IR Learner

Learn various key commands (for example, AC, TV, DVD, satellite receiver, audio & video device, etc.)



HDL-MIR01L.01

- 2.0 USB Interface, driver free and easy to use
- Range of carrier wave frequency： 38kHz±20%

Master/Slave Timer Controller

It is capable of running standard time as the master clock or slave clock.



M/TM04.1

- With 4 independent channels and real-time clock
- Scene recall function
- Working modes: Master /slave mode
- Working voltage: 21~30V DC
- Working current: 10mA/30V DC

HVAC Module

It supports control of heating, cooling, high/medium/low fan speed. 7 independent floor heating control channels can be set.



M/FCU01.10.1

- Up to 7 digital temperature sensors supported
- 2.5m Digital Temperature Sensor (TS/C 1.0)
- 5 relay output channels
- 2 DC0-10V output channels (10mA/CH)
- Detecting temperature range：-30℃~+100℃
- Working current：20mA/30V DC
- Input voltage：120V/240V AC(50/60Hz)
- Mechanica and Electronic life time： >100000

FCHC Actuator

Used for controlling air conditioner, fan, compressor and floor heating.



M/FCHC.4.1

- Up to 6 digital temperature sensors can be connected
- 2.5m Digital Temperature Sensor (TS/C 1.0)
- Working current: 20mA/30V DC
- Input voltage: AC100-240V (50/60Hz)
- Output current: 8A (AC), 5A (DC)

4CH 10A Curtain Actuator

This series of product have the characteristics of high power (10A), low consumption and high reliability.



M/W04.10.1

- Each channel can control the upward, downward and stop operation of the curtain
- Working current: 12mA/30V DC
- Input voltage: 120V/240V AC, 50/60Hz
- Electrical life time: >100000
- Mechanical life time: >100000

Curtain Motor

Open / close / stop / open or close to a specific percentage, with “Touch Start” supported by default.



MWC1-KT.10

- Auto pause and modification while detecting obstacles
- Automatically complete the preset travel
- Compatible with bi-channel or multi-channel remote controllers
- Motor input voltage: 100 - 240V AC, 50/60Hz
- Motor rated consumption: 22W
- Motor rotate speed: 90rpm
- Motor sound level: < 30dB at silent mode

Blinds Motor 220V AC

It is used to control the roller blind travel up/down, travel up/down to a specified percentage position.



M/AG40B.1

- Automatic travel measurement and supports limit point presetting
- Enable short drag to start the motor
- Overheat protection and Power-down save function
- Working voltage: 21~30V DC
- Working current: 6mA / 30V DC
- Rated input current: 0.9A
- Motor rotate speed: 22rpm

Remote Controller

A dual-channel wireless remote controller designed for convenient curtain and blind control. It supports standard open, close and stop operations, as well as dedicated tilt control for compatible shading systems.



YR2188

- 2 independent control channels
- Open, close and stop control
- Up tilt, horizontal and down tilt positions
- 433.92 MHz RF wireless control
- Compatible with multiple HDL curtain motors

SENSORS

Sensors detect occupancy, movement, light, temperature, and other environmental conditions to provide real-time data for intelligent automation. Working seamlessly with controllers and control panels, they enable responsive control, enhanced comfort, and greater energy efficiency.



Airkit2 Pro Air Quality Sensor

It can be used to detect and display indoor air quality, including air quality indicators such as environmental temperature and humidity, Lux, PM2.5, PM1.0, PM10, CO2, TVOC and HCHO. By displaying numerical values on the screen, remote real-time viewing and linkage with other devices can be achieved to improve the air environment, playing an important role in device control, scene management and execution, and big data analysis.



MSQP-BM-KT.17
MSQP-BMC-KT.17
MSQP-BMDH-KT.17

- Built-in temperature, humidity, illuminance and microwave distance detection
- Built-in PM1.0, PM2.5, PM10, carbon dioxide and formaldehyde and TVOC detection
- Rated Current: 10mA/30V DC
- Temperature Detection Range: -10.0~55.0°C
- Formaldehyde Detection Range: 0~1.00 mg/m³
- Carbon Dioxide Detection Range: 400~5000 ppm

Occupancy Plus Sensor

It is a KNX protocol human presence detection sensor that can accurately detect the human presence status in scenes such as movement and static breathing.



MSMW24-KT

- Human presence detection with 24GHz millimeter wave radar technology
- Supporting illuminance and temperature monitoring
- 2 dry contact inputs for logical judgment
- Supporting easy lighting and HVAC control
- Rated voltage: 30V DC
- Rated current: 50mA/30V DC
- Input voltage: 21 – 30V DC

Presence Sensor

It contains PIR sensor, temperature sensor and brightness sensor.



M/SIS05.1

- 5 logical blocks and each block contains 10 object outputs
- 1 sensor status feedback function block
- 2 lighting control function blocks
- 1 constant brightness automatic adjustment function block
- 2 HVAC control blocks
- Single mode and master / slave mode are supported
- Working current: 7mA/30V DC

Ceiling Mount Indoor Microwave Sensor

The logic inputs include microwave sensor status, brightness value, temperature, dry contact input and external telegrams.



M/WS05.1-D

- With 2CH constant brightness control
- 5 logic blocks and each block contains 10 object outputs
- Single mode and master / slave mode are supported
- 2CH dry contact can be set as dry contact and LED status display
- Working current: 17mA/30V DC
- Temperature detection range: -30°C~70°C
- Brightness detection range: 0~15000LUX
- Microwave sensing range: Φ16m

Ceiling Mount OmniSense Sensor

It can detect movement at a distance of up to 24 meters, 6 detection areas in total can be selected.



M/HSD24.1

- With 2CH lighting control
- With 2CH constant brightness control
- 5 logic blocks and each block can control 10 object outputs
- Single mode and master / slave mode are supported
- 2CH dry contact can be set as dry contact and LED status display
- Working current: 10mA/30V DC
- PIR detection range: Φ30m

Mini PIR & Lux Sensor

Contain PIR sensor, temperature sensor, Lux sensor and external telegram.

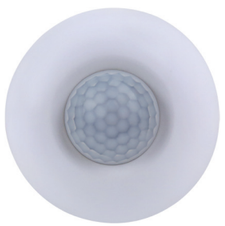


M/IS05.1

- With 2CH lighting control
- With 2CH constant brightness control
- 5 logic blocks and each block can control 10 object outputs
- Single mode and master / slave mode are supported
- Working current: 5mA/30V DC
- PIR detection range: Φ8m

Ceiling Mount PIR & Lux Sensor

It contains PIR sensor, temperature sensor, Lux sensor, dry contact and external telegram.



M/HS05.1-D

- With 2CH lighting control
- With 2CH constant brightness control
- 5 logic blocks and each block can control 10 object outputs
- Single mode and master / slave mode are supported
- 2CH dry contact can be set as dry contact and LED status display
- Working current: 5mA/30V DC
- PIR detection range: Φ8m

Ceiling Mount Outdoor Microwave Sensor

Include LUX sensor, microwave sensor,humidity sensor, temperature sensor, dry contact and external telegram.



M/WS05.1-A

- 2CH constant brightness control function
- 5 logic blocks and each block contains 10 target outputs
- Single mode and master / slave mode are supported
- 2 dry contact input interfaces can work as dry contact or LED indicators
- Working current: 20mA/30V DC
- Microwave sensing range: Φ28m (Installation height:3m)

GATEWAYS

Gateways enable seamless communication between KNX and third-party systems by bridging different communication protocols. They simplify system integration, support centralized control, and create a unified automation platform for smarter buildings.

KNX Gateway

Works with Apple Home

KNX Gateway enables data exchange between different protocols while integrating scene, automation, security and device management functions for flexible and efficient system control.



- Scene and automation functions
- KNX TP1 device management via ETS
- Real-time device status monitoring
- Intranet communication and remote access
- Third-party driver management
- Data backup and recovery

M/GWASC.1

KNX-RS485 Interface Mini

Used for bidirectional data exchange between KNX and RS485.



- Support up to 200 control targets
- Up to 200 characters for each target
- 24 sequences supported
- Working voltage: 21~30V DC
- Working current: 10mA/30V DC

M/RS485MNI.1

48CH Dry Contact Module

Support 48-channel dry contact input, which enables control of lights, curtains, scenes, etc..



- Switch dry contact input and output
- Can be used to detect dry contacts when as input channel
- Output pulse signal to drive an LED status indicator when as output channel
- Support up to 10 scenes, and up to 100 output targets
- Working current: 3mA/30V DC
- Auxiliary current: 10mA/24V DC

M/S48.1

24-Zone Dry Contact Module

Support 24-channel dry contact input and each of which can be individually controlled with up to 13 different control targets.



- Dry contact type can be set as mechanical switch or electric switch
- Working voltage: 21~30V DC
- Working current: 10mA/30V DC

M/S24.1

8-Zone Dry Contact Module

It has 8-channel dry contact input and supports 2 control modes, including dry contact input control and logic control.



- Level 1-4 logic controls can be set
- Have 18 logic blocks
- Have 10 logic output blocks, each logic block can independently control 8 targets
- Working voltage: 21~30V DC
- Working current: 5mA/30V DC

M/S08.1

4-Zone Dry Contact Module

It has 4 input channels and 4 output channels.



- Dry contact input and temperature sensor input are available
- Support 4CH dry contact input and 4CH LED state output
- 0-10V dimming output signal enable to control 0-10V devices, such as LED lights
- Support sensor control, logic control, dimming control
- Working current: 5mA/30V DC
- DC0~10V output current: 3mA

M/S04.1

INFRASTRUCTURE DEVICES / ACCESSORIES

A reliable KNX system starts with a solid foundation. Infrastructure devices and accessories ensure stable power supply, seamless communication, and efficient installation, providing the reliability and flexibility required for projects of any scale.



Net/IP Router

It enables data exchange between KNX net/IP line and TP1 bus, and data download and data monitoring are available via ETS software.



M/IPRT.1

- Up to 4 channels for data debugging and monitoring
- 6 dual-color LED lights indicate all communication status
- Working voltage: 21~30V DC
- Working current: 5mA/30V DC
- Power consumption: typ. 520mW, max. 800mW

USB Interface

It is a KNX system device with a USB interface that establishes bidirectional data transfer between the computer and the KNX Bus.



M/USB.1

- Support KNX address management, application parameter management, and KNX Bus device diagnostics;
- Support telegrams with maximum 228 bytes length;
- Working voltage: 21~30V DC;
- Working current: 10mA/30V DC.

Line Coupler

It is used as a line coupler or repeater (for address extension).



M/LCR.1

- The coupler is connected to KNX zone/line to enable zone/line isolation
- 6 LEDs display data transmission status
- 1 LED for programming status display
- Working voltage: 21~30V DC
- Communication: KNX/EIB
- Main line current: < 30mA
- Sub line current: 3mA

Dual Power Supply Module

It is a high-performance, dual-output power supply module, featuring two independent 640mA output channels.



MEP640-KT.13

- Provides KNX bus voltage and 24V DC auxiliary power
- Supports manual reset function via button
- Built-in overload, short-circuit, overvoltage, and over-temperature protection
- Input voltage: 100~240V AC, 50/60Hz

960mA Power Supply Module

It can provide up to 960mA current to KNX/EIB bus.



M/P960.1

- Overload protection and over current protection
- Output short circuit protection
- Input voltage: AC100~240V(50/60Hz)
- Output voltage: 30V DC

HDL Cable

HDL dedicated bus cables provide reliable connections for KNX devices. Available as fast-connect cables with preset lengths and connectors, or by length, with both shielded and unshielded options.



- 4 core shield cable: red, black, white, yellow
- Strong signal transmission capability
- Strong anti-jamming capability
- Twisted Pair: 2 twisted pair (red and black, white and yellow)
- Insulation resistance(70℃): >5X106ohm/km
- Conductor resistance(20℃): <35 ohm/km
- Cable withstand voltage: AC 300V
- Impedance: 120 ohm
- Twisted No.: 40/m

CASE STUDIES

Across different regions and industries, HDL KNX empowers smarter living and more efficient buildings. From luxury homes and hotels to commercial and public projects, our solutions have been successfully applied worldwide, delivering reliable performance and seamless user experiences.

Aman Residences

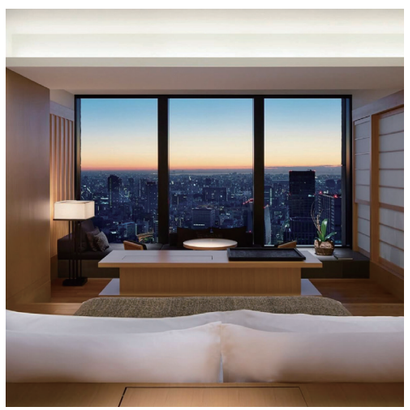
Japan

Lighting HVAC Shading Security Panel Integration

Aman Residences Tokyo, the world's first standalone Aman-branded residence, sets a new benchmark for ultra-luxury living. HDL delivered a tailored KNX smart home solution for all 91 residences, seamlessly integrating lighting, shading, HVAC and security into one intelligent platform. Designed to meet the project's uncompromising standards, the system provides personalized automation, exceptional reliability and a refined living experience worthy of one of the world's most prestigious residential developments.







Gokturk Kemer Villas

Türkiye

Lighting HVAC Shading Panel Phone Integration Security Intercom Water Valve

Located in Istanbul, Gokturk Kemer is a premium residential community comprising 81 luxury villas across 330,000 m². HDL deployed a KNX-based smart home solution featuring centralized control of lighting, HVAC, shading, and customized scenes through smart panels and mobile devices. Deep integration with video intercom and third-party safety systems, including water leakage, fire, earthquake, and water valve protection, provides comprehensive security and reliable automation. With over 10,000 HDL devices installed, the project demonstrates the scalability, stability, and flexibility of KNX for large-scale luxury residential developments.







Wave Island Apartments

Italy

Lighting HVAC Shading Panel Integration

Wave Island is a luxury residential development comprising 169 premium apartments surrounding a landmark resort-style swimming pool. HDL implemented a KNX smart home solution featuring intelligent lighting, shading, HVAC control, and seamless third-party integration. By combining DALI lighting, automated curtain control, and integrated climate management with LG heat pumps and fresh air systems, the solution delivers a comfortable, energy-efficient, and highly personalized living experience.







Parcolago Apartments

Switzerland

Lighting HVAC Shading Panel Integration

Located in Paradiso, Parcolago Apartments combine contemporary architecture with breathtaking views of Lake Lugano. HDL implemented a KNX smart home solution that seamlessly integrates with third-party systems, delivering a personalized and flexible living experience. Intelligent lighting with DALI gateways and PIR sensors provides energy-efficient control of brightness and color temperature, while smart shading automatically balances natural and artificial light to enhance comfort, convenience, and everyday living.







State Opera Prague

Czech

Integration Lighting Scene Control Energy Management

Located in the heart of Prague, the historic State Opera is one of the Czech Republic's most iconic cultural landmarks. HDL delivered a KNX-based lighting control solution with DALI integration, enabling precise control of brightness, color temperature, and preset lighting scenes for professional stage performances. The system also provides real-time monitoring of lighting status and energy consumption, improving operational efficiency while creating immersive visual experiences for audiences.







Center of Islamic Civilzation

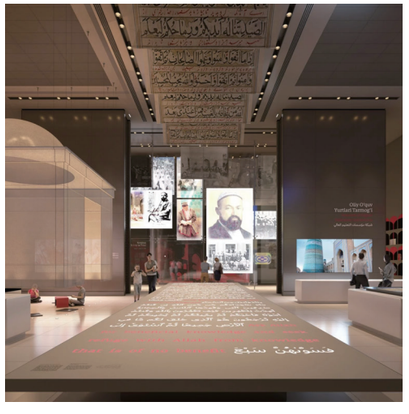
Uzbekistan

Panel Lighting HVAC Shading Floor Heating Audio Sensors

Located in Tashkent, the Center of Islamic Civilization is a landmark cultural and research complex dedicated to preserving Islamic heritage and sharing its legacy with future generations. HDL's KNX solution brings multiple building systems together under unified intelligent control, meeting the complex operational needs of this large-scale public facility. The result is a more comfortable and responsive environment for visitors, along with streamlined management and greater operational efficiency.







InterContinental London - The O2

United Kingdom

Security Panel Lighting HVAC Shading

Located on London's Greenwich Peninsula, InterContinental London – The O2 is one of the city's landmark luxury hotels. HDL implemented a KNX Smart Hotel Solution for all 453 guest rooms, featuring multifunction smart panels for centralized control of lighting, shading, HVAC, and access control. Personalized welcome and leave-room modes automate room settings to enhance guest comfort while improving operational efficiency, delivering a seamless five-star hospitality experience.







Sheraton Novi Sad Hotel

Serbia

Lighting HVAC Shading Integration

Located in Novi Sad's vibrant business district, Sheraton Novi Sad Hotel combines contemporary hospitality with a wide range of leisure and business facilities. HDL's KNX solution brings intelligent control across guest rooms, meeting spaces, wellness areas, and other key areas of the hotel, creating an environment that adapts effortlessly to different needs and occasions. From expressive lighting experiences to intuitive comfort control, the system enhances the guest experience while helping the hotel improve operational efficiency and optimize energy use.







Jumeirah Bali

Indonesia

Lighting Panel Integration Scene Control

Located within the prestigious Pecatu Indah Resort, Jumeirah Bali is the first UAE luxury hotel brand in Bali, offering an exceptional blend of elegant villas and world-class hospitality. HDL's KNX smart control solution brings intelligent lighting and scene control to the hotel's key public spaces, including the lobby, restaurants, ballroom, spa, and fitness center. With centralized lighting management, customized scene settings, and seamless integration with third-party KNX devices, the solution creates refined guest experiences while enhancing operational efficiency and long-term system flexibility.





