



Smarter Home  
Sweeter Life

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## THE **Akuvox** COMPANY

As the industry leader in smart living technology, the Akuvox Company designs, develops and supplies smart intercom and smart home products and solutions for mid-to-high-end markets globally. Our mission is simple: harnessing technology's prowess to improve people's lives with better communication, greater security, and more convenience.

Present in over 110 countries and regions, our products and solutions serve as the cornerstone of seamless living experiences. From private residences to bustling commercial spaces, from healthcare facilities to public safety realms — we cater to a world of diverse needs.







Meet akubela, the embodiment of smart home brilliance by Akuvox. Drawing inspiration from a cappella's captivating music shaped solely by human voices, akubela echoes purity and harmony. Much like a cappella's heavenly melodies, an akubela home envelops you with warmth, caring for both your soul and your family's needs.

With a unique focus on communication, security, and sustainability, akubela specializes in state-of-the-art smart home products and solutions. We strive to craft the perfect fusion of the latest technologies and impeccable industrial design, elevating your daily life from every angle and perception.

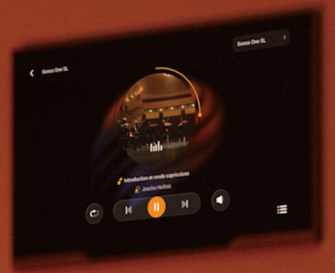




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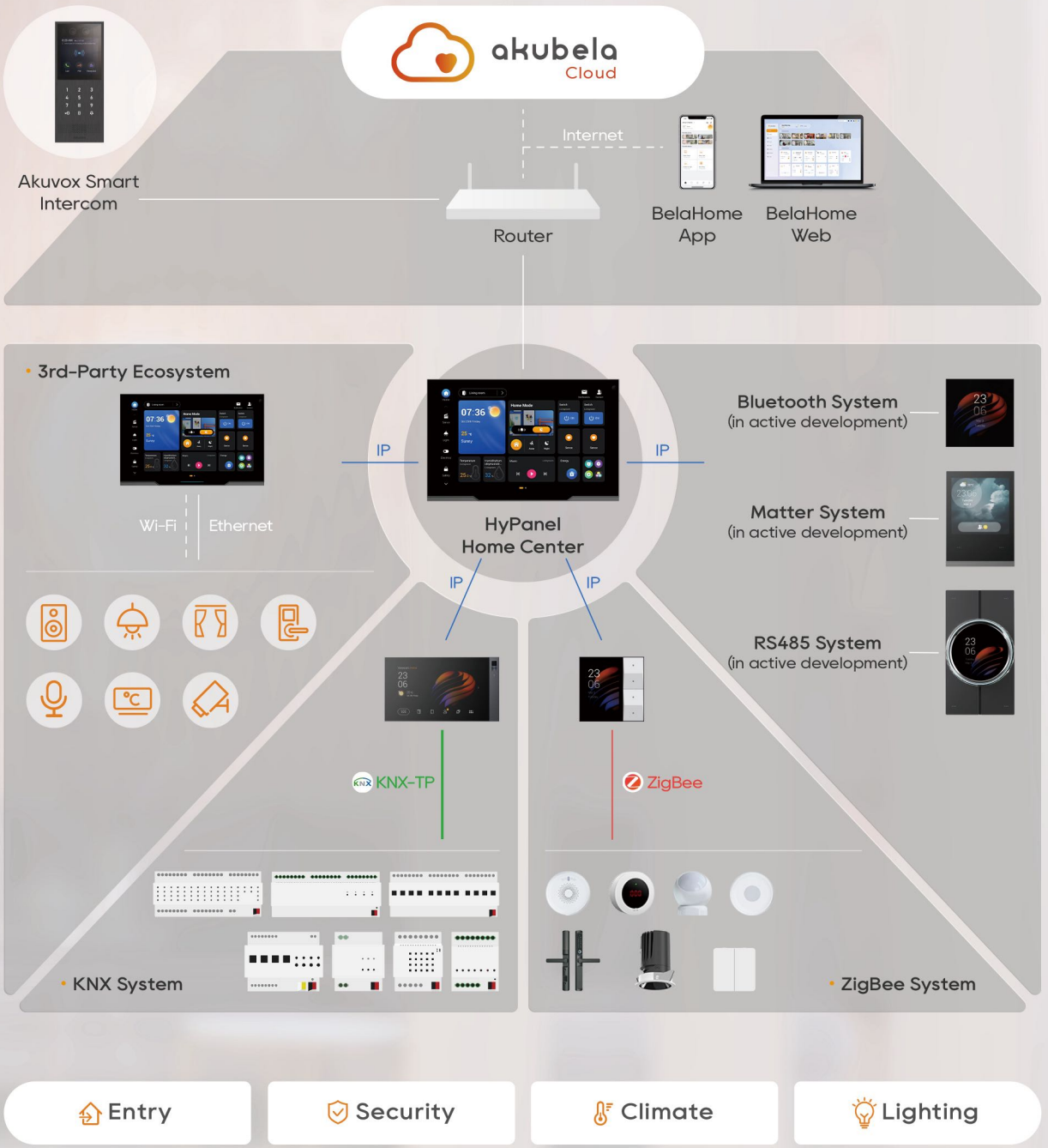
# Whole-House Connectivity

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Relying on robust systems complying with international communication standards, akubela creates a smart control network that covers every corner of the entire house.

akubela whole-house connectivity branches off the IP network backbone and utilizes the wired KNX solution for enhanced system stability and security, integrating with smart sub-systems through KNX-certified accessories. To ensure efficient and flexible communication, akubela enables ZigBee and Wi-Fi to connect with multiple smart devices. To ensure compatibility, akubela has a combined solution of KNX, ZigBee, Wi-Fi, and Ethernet to integrate with third-party ecosystems seamlessly. akubela Bluetooth, Matter, and RS485 systems are also under active development, making akubela fully future-proof.

akubela Smart Home is robust, versatile, and cross-compatible, combining home automation, intercom, and security. All systems can be managed and maintained through the akubela Cloud.





## Highlights



Wired and wireless technologies are seamlessly blended together – KNX, ZigBee, Bluetooth, Wi-Fi, Ethernet, RS485, and IR, ensuring a reliable, flexible, and secure system operation and providing users with a smart interconnected experience.

akubela allows a distributed layout, one panel per space. Each HyPanel acts as a connection center in its respective smart home space, establishing connections between each other via Wi-Fi or Ethernet.



The BelaHome App offers effortless remote control for centralized management of your whole-house intelligence. Customize scenes and automate your home to meet personalized preferences.



# akubela **KNX** Smart Home

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Built for Whole-House Connectivity

akubela creates a powerful IoT network combining wired KNX, wireless technologies, and HyPanels as smart control interfaces.



# Highlights



## Interoperable

Thanks to KNX's interoperability, akubela HyPanels can centrally manage and control various smart home sub-systems such as lighting, climate, access, security, HVAC, curtains, music, energy consumption and more.

## Reliable

KNX is known for its reliability, providing stable and secure data transmission between devices. This reliability is crucial for physical security and real-time control tasks such as lighting and heating control, contributing to the overall quality of the smart home system.



## Quality

KNX-certified products also adhere to ISO, EN, and GB standards. This commitment to quality guarantees consistent performance, resilience to interference, and the ability to recover from faults or disruptions, ensuring the smart home system operates smoothly over time.

# akubela Solutions

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Welcome to akubela Smart Home, where we provide one of the easiest way for creating a cozy, safe, and inviting living environment. Our smart home solutions offers a wealth of features ranging from smart control, building intercom, access control, and security to a host of management features, such as streamlined remote management, hassle-free deployment, and easy 3rd-party system integration.

All this is to ensure that we cater to your unique requirements with precision.





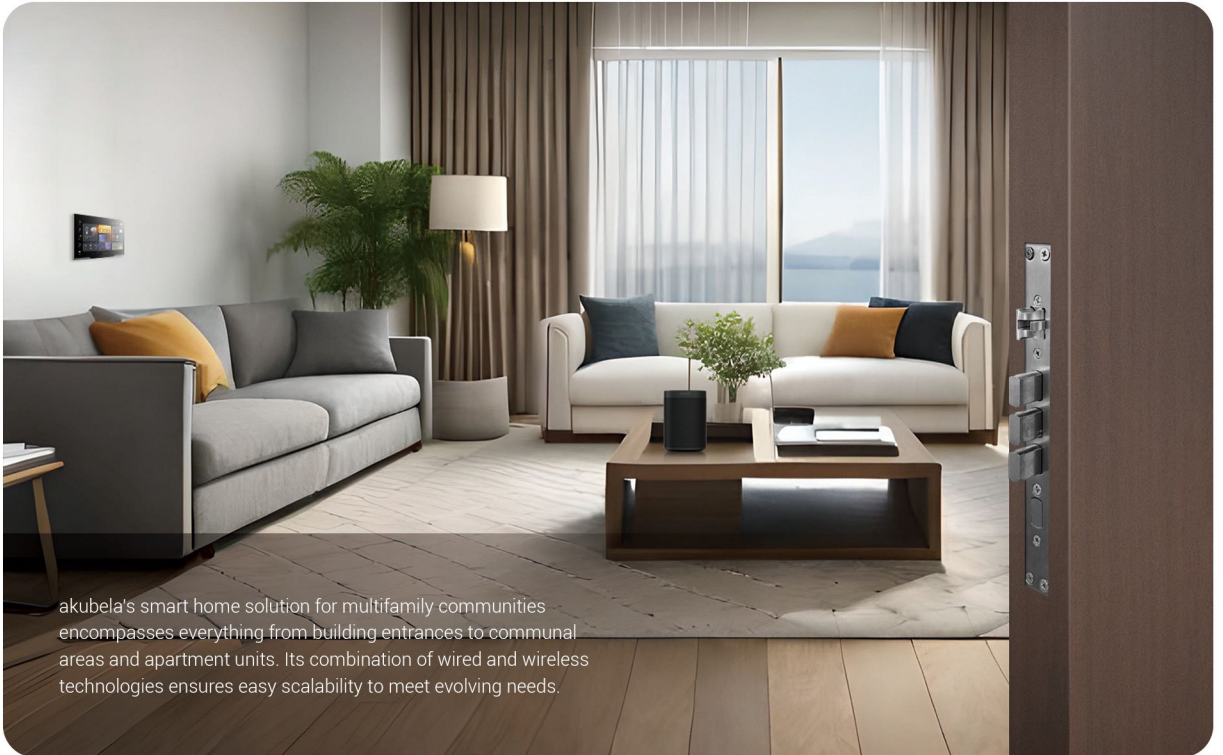


# Unified Smart Home Solution for Multifamily Communities

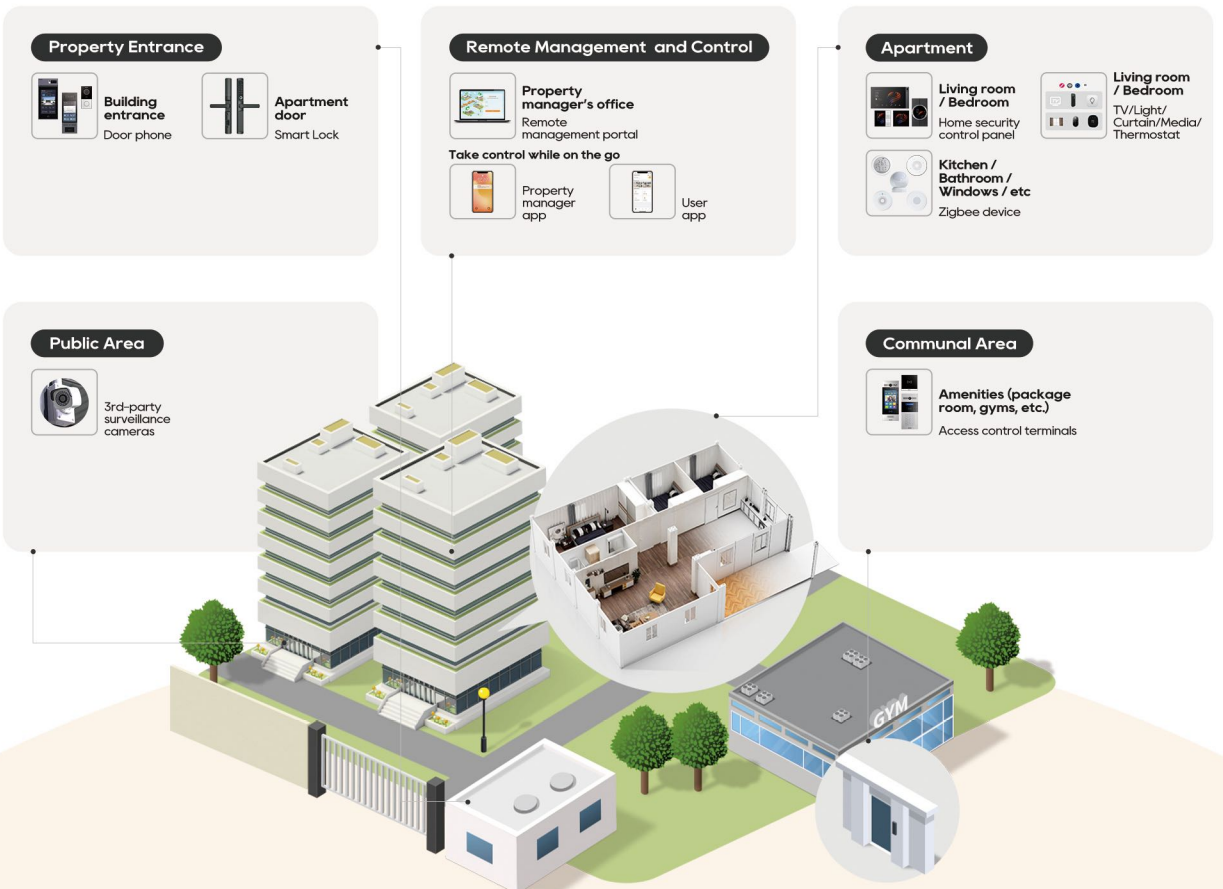
Maximize Property Value  
Operate Smarter

- **All-in-one cloud-based solution** combining building intercoms, smart apartments, and community access control.
- **Hassle-free deployment** by leveraging wired and wireless technologies and effortless with remote management from PCs.
- **Seamless integration** with existing systems like property management using akubela's cloud API and SDK.





akubela's smart home solution for multifamily communities encompasses everything from building entrances to communal areas and apartment units. Its combination of wired and wireless technologies ensures easy scalability to meet evolving needs.





### Smart Control

Experience whole-house automation, seamlessly controlling lighting, shades, climate, entry, media, cameras, alarm systems and more, enjoying unparalleled convenience and comfort.

### 24/7 Home Security

Enjoy peace of mind with 24/7 in-unit security monitoring and instant alerts to the panel, the app and the property management's phone in response to anomalies, ensuring potential threats are swiftly addressed.



### Premium Door Communication

Residents can see and talk to visitors via high-quality video intercom calls and grant them access via akubela's smart home control panels or apps, enhancing door entry security.

### Flexible Access Control

A variety of access control methods meet diverse needs, including QR codes, apps, face recognition, Bluetooth, NFC, cards, PINs, Apple Watch, and Siri.







### Seamless Elevator Integration

Elevator integration allows visitors to access only authorized floors or sends the elevator to a specified floor, e.g. summoning it to the 1st floor upon residents' entry.

### Smart Home Initiated upon Building Entry

Thanks to the integration of building intercoms and smart home systems, your home automatically arms or disarms itself, activates personalized home scenes, and sends you notifications when older individuals and children leave or arrive – in response to building access activities.

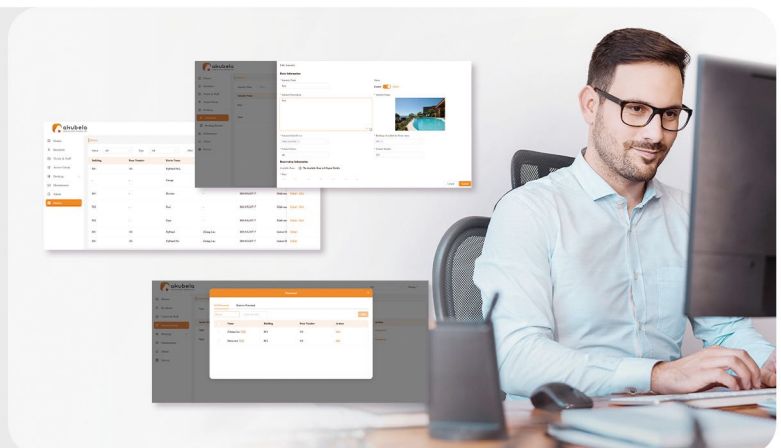


### Streamlined Amenity Operation

Residents can easily reserve public facilities, like gyms, through the smart home control panel or the app, while property managers can monitor amenity status via the management portal.

### Centralized Remote Management

Property managers can oversee the entire system—including smart home and smart intercom devices, residents, access, community notices, logs, and more—from a unified web portal.





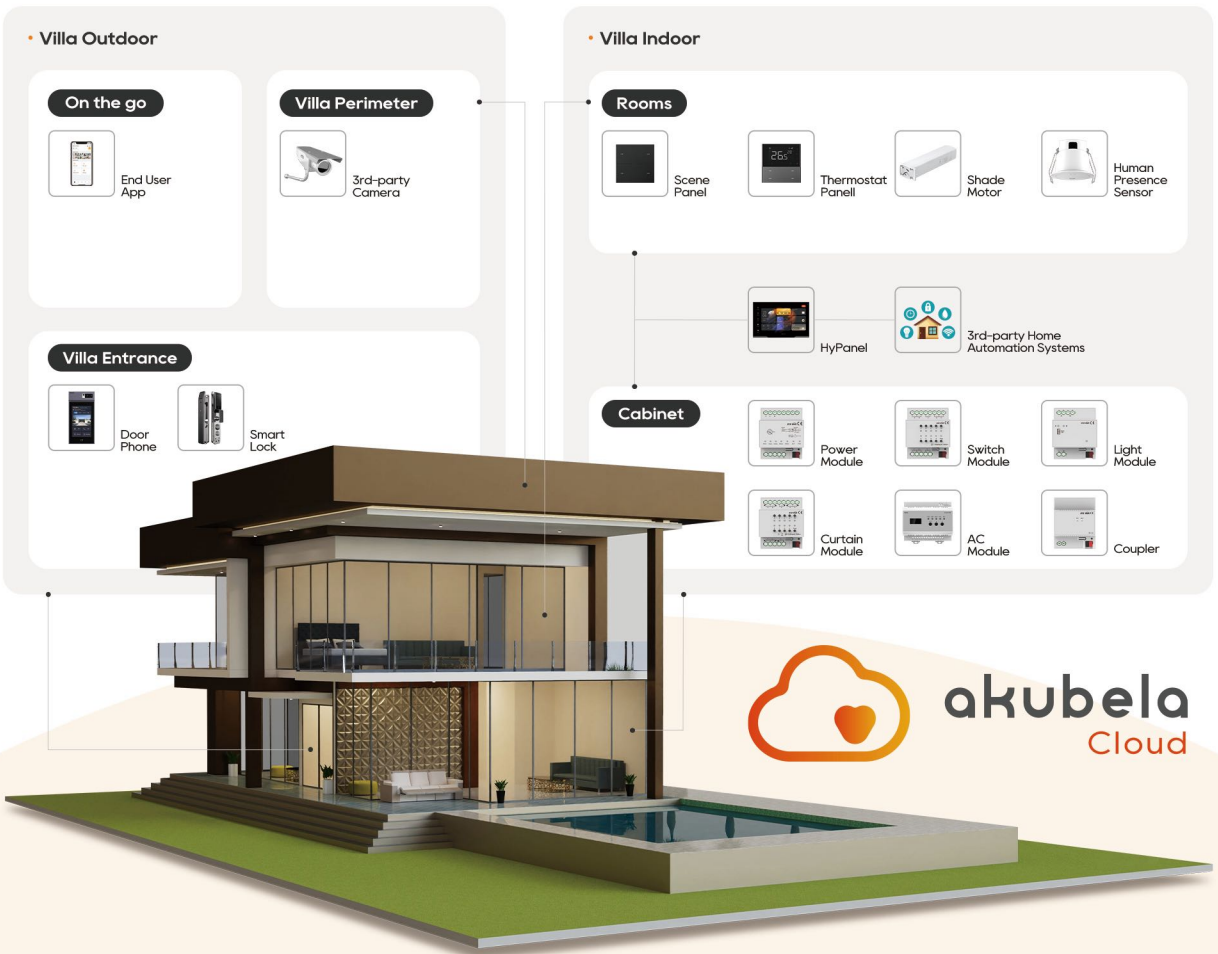


## akubela KNX Whole-House Solution for Villas

Future-Proof Your Villa with  
Hybrid Connectivity

- Seamless intercom and smart home systems integration, with one app to control both
- Smart control panels with built-in KNX modules, eliminating additional KNX gateways
- Support a variety of connectivity like RS485 and wireless ZigBee, easy to expand systems







### Effortless Indoor-Outdoor Communication

With the seamless connection of intercom, smart lock and smart home, residents can use akubela's HyPanels or app for for video calls with visitors. Within the house, group calls across rooms are made easy from one HyPanel to another - no more shouting across the house.

### Tech-forward and Stylish Door Entry

The cutting-edge door phone and smart lock not only offer a variety of access control methods that cater to diverse user preferences, but also boast tech-forward designs that further enhance villas' curb appeal.



### Stay Connected with Home from Anywhere

Use the akubela app to send group messages, keeping family members connected at all times. The app also allows residents to receive alarm alerts, unlock doors, and monitor doorsteps from anywhere.

### Stable Whole-House Control

Achieving reliable automation across large villa spaces is a challenge. akubela KNX solution deliver stable link and secure data transmission between devices, and effortless central control of lighting, climate, security, energy and more.







### Voice Assistant Integration

Enjoy the convenience of voice control for a hands-free experience. With just simple voice commands, your smart home is instantly accessible.

### Activate Your Smart Home Upon Entering Your Villa

As you enter or leave your villa, it can automatically disarm or arm itself while triggering customized home scenes, all thanks to the seamless integration of building intercoms and smart home technology.

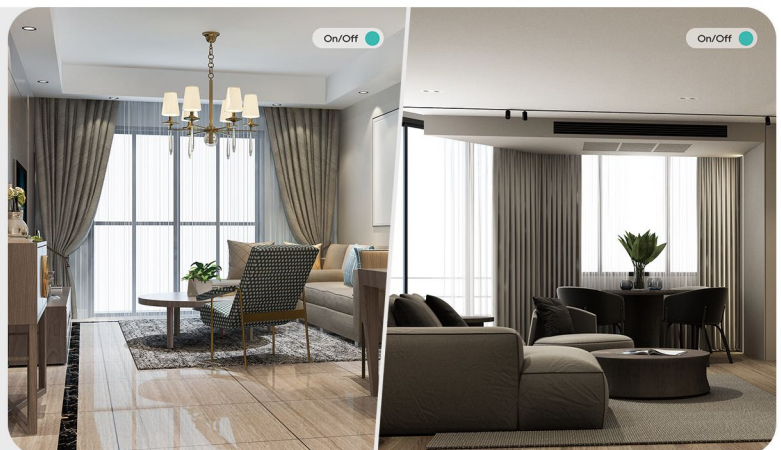



### Real-Time Monitoring from Curb to Couch

Stream outdoor live video footage from both door phone cameras and 3rd-party surveillance cameras on HyPanels, safeguarding villas. Plus, with home alarm systems in place, your home is under constant protection with instant alerts for mitigating risks effectively.

### Enhanced Energy Saving

Optimize energy consumption with the lighting, cooling or heating systems operating only when detecting human presence, which also ensures home systems are active when needed.





## akubela Smart GRMS Solutions

Elevate Guest Experience  
Enhance Operational Efficiency

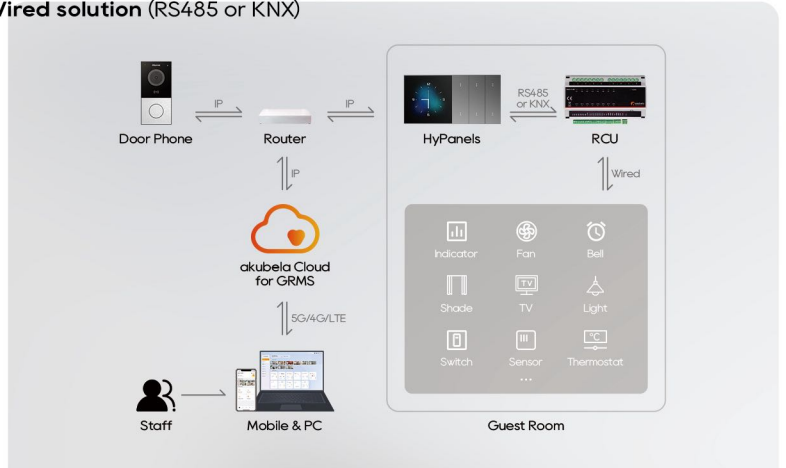
- Designed for small to mid-scale hotels and rental apartments
- Integrated smart intercom, home automation, and guest room management
- Suitable for new builds and retrofitting existing properties



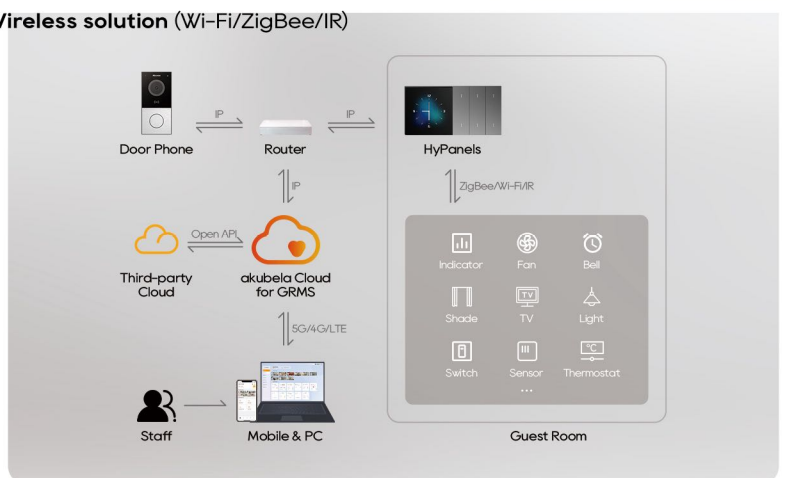
-  Climate
-  Lighting
-  Shade
-  Access
-  Security
-  Room Service



**Wired solution (RS485 or KNX)**



**Wireless solution (Wi-Fi/ZigBee/IR)**



**What akubela Offers**

akubela offers three GRMS solutions based on different connectivity methods: wired RS485 or KNX, wireless technologies, and wired-and-wireless hybrid solution. All solutions feature the akubela HyPanel KeyPlus as the interactive hub and offer a wealth of management features.



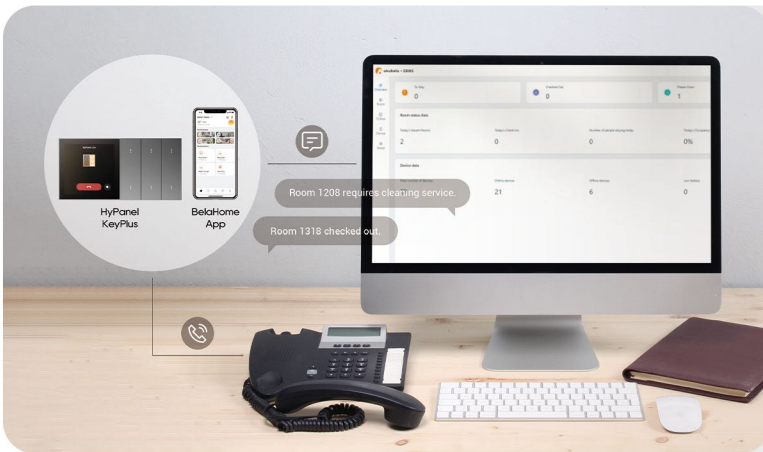
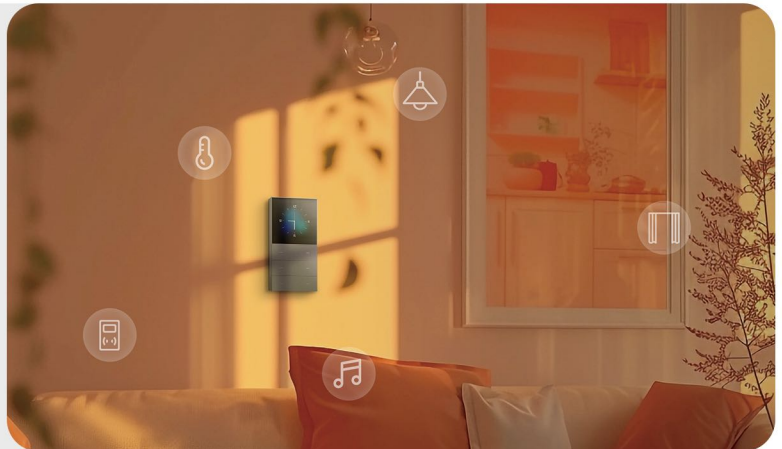


### An Inviting Atmosphere with Welcome Scene

As guests enter their room, they are greeted with a warm voice message, perfect lighting, and ideal temperature settings. Curtains open automatically to reveal the view, adjusting based on the time of day.

### A Comfortable Stay with Smart Room Control

Throughout their stay in the room, guests can control their environment through akubela's HyPanel KeyPlus panel, BelaHome app or voice commands with ease. With one touch or voices, guests can activate scenes to suit their moods or activities.



### Exceptional Room Services with Smart Intercom

More than just a control panel, the akubela HyPanel KeyPlus enables high-quality communication with the reception desk for room service requests, eliminating the need for traditional phones.

### Guaranteed Security and Safety

Safety is paramount in the hospitality industry, and akubela transforms passive security into proactive protection. Our state-of-the-art security solutions address every aspect, allowing guests to relax and enjoy their stay.



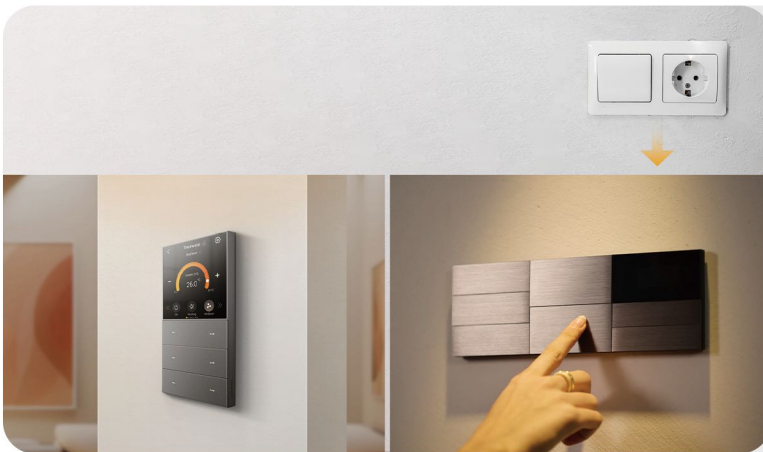
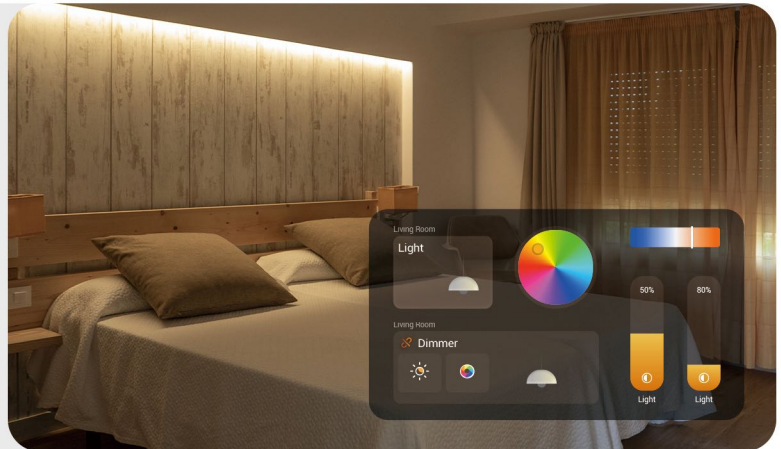


### Streamlined Management and Improved Staff Productivity

From initial setup to daily operations, everything can be configured and maintained remotely and efficiently via the akubela's cloud portal or app. This approach minimizes downtime and operational disruptions while reducing the need for on-site visits, thereby alleviating staff burnout.

### Situational Awareness for Enhanced Safety and Reduced Costs

Real-time displays of alarm alerts for all room areas and energy consumption of different devices enable operators to take immediate action, preventing potential dangers and stopping unnecessary waste.



### Hassle-free Retrofitting

For existing hotels and rental apartments that require smart upgrades, retrofitting is easy. Simply replace the existing wall switches with akubela's HyPanels and smart switches using existing live and neutral wires, eliminating costly and time-consuming rewiring.

### Easy Integration with 3rd-party Systems

akubela makes its GRMS cloud's API and SDK available. This not only facilitates easy integration with 3rd-party systems, but also enables hotel to craft its unique solutions that give them a competitive edge in the market.





# Smart Home Control Panel

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HyPannels









# HyPanel Supreme

Smart Home Magic, One Wave Away



- Android 12 OS
- 12.35-inch multi-touch screen with metal frame
- 2.5K (2560x1600) ultra HD resolution
- 5-megapixel camera with a physical privacy shutter
- 16-million-color ambient light
- Built in with 6-gang relays, 8 channels digital input, RS485
- Built in with various sensors, such as gesture sensors
- Built-in voice assistant
- ZigBee 3.0 / Wi-Fi 6 / Bluetooth 5.0 / Ethernet connections

# HyPanel Supreme

Model	PHX1-KNX-EU	PHX1-ST
Power Supply	KNX 21 ~ 30VDC AUX 21 ~ 30VDC	12 ~ 24VDC
Network	Wi-Fi6 2.4G/5G & Bluetooth 5.0 & ZigBee 3.0 & ETH	
Material	Metal	
Screen Size	12.35"	
Screen Resolution	2560 × 1600 pixels	
Sensors Built In	Gesture recognition, proximity, light, temperature, humidity sensors	
Camera	5-megapixel camera with privacy shutter	
RS485	-	Support
Input	0 ~ 5VDC digital input x1	0 ~ 5VDC digital input x8
Output	-	3A 100 ~ 240VAC/gang, dry contact x4 2A 0 ~ 30VDC/gang, dry contact x2
Infrared Remote Control	-	
NTC	-	
Installation	EU Standard 86 Box	EU/UK/US backbox
Working Humidity	10% ~ 90%RH, without condensation	
Working Temperature	-10°C ~ 50°C	
Storage Temperature	-20°C ~ 70°C	





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# HyPanel Ultra

## Smart Home Synergy with Visual Brilliance



- Android 12 OS
- 10.36-inch multi-touch screen with metal frame
- 2K (2000x1200) ultra HD resolution
- 16-million-color indicator light
- Built in with 6-gang relays, 8 channels digital input, RS485
- Built-in sensors
- Built-in voice assistant
- ZigBee 3.0 / Wi-Fi 6 / Bluetooth 5.0 / Ethernet connections

# HyPanel Ultra

Model	PH81-KNX-EU	PH81-ST
Power Supply	KNX 21 ~ 30VDC AUX 21 ~ 30VDC	12 ~ 24VDC
Network	Wi-Fi6 2.4G/5G & Bluetooth 5.0 & ZigBee 3.0 & ETH	
Material	Metal	
Screen Size	10.36"	
Screen Resolution	2000 × 1200 pixels	
Sensors Built In	Proximity, light, temperature, and humidity sensors	
Camera	-	
RS485	-	Support
Input	0 ~ 5VDC digital input x1	0 ~ 5VDC digital input x8
Output	-	3A 100 ~ 240VAC/gang, dry contact x4 2A 0 ~ 30VDC/gang, dry contact x2
Infrared Remote Control	-	
NTC	-	
Installation	EU Standard 86 Box	EU/UK/US backbox
Working Humidity	10% ~ 90%RH, without condensation	
Working Temperature	-10°C ~ 50°C	
Storage Temperature	-20°C ~ 70°C	





# HyPanel Pro

The Mastermind of Your Smart Home



- Android 10 OS
- 8-inch multi-touch screen
- 1280 x 800 resolution
- Dual microphones
- 5-megapixel camera with a physical privacy shutter
- Infrared remote control
- Built-in sensors
- Built-in voice assistant
- ZigBee 3.0 / Wi-Fi / Bluetooth 4.2 / Ethernet connections

# HyPanel Pro

Model	PG71-KNX-EU	PG71-PoE-EU	PG71-R2-EU
Power Supply	KNX 21 ~ 30VDC AUX 21 ~ 30VDC	IEEE802.3af PoE & 12 ~ 24VDC	180 ~ 260VAC, 50Hz
Network	Wi-Fi 2.4G/5G & Bluetooth 4.2 & ZigBee 3.0 & ETH		
Material	Metal		
Screen Size	8"		
Screen Resolution	1280 × 800 pixels		
Sensors Built In	Proximity, light, temperature, and humidity sensors		
Camera	5-megapixel camera with privacy shutter		
RS485	-	Support	-
Input	0 ~ 5VDC digital input x1	-	-
Output	100 ~ 240VAC dry contact ×2	-	2-gang relay
Infrared Remote Control	Support		
NTC	-	-	-
Installation	EU/UK backbox		
Working Humidity	10% ~ 90%RH, without condensation		
Working Temperature	-10°C ~ 55°C		
Storage Temperature	-20°C ~ 70°C		

Model	PG71-R1-US	PG71-PoE-US	PG71N-R2-EU	PG71N-PoE-EU
Power Supply	100 ~ 260VAC, 50/60HZ	IEEE802.3af PoE & 12 ~ 24VDC	180 ~ 260VAC, 50Hz	IEEE802.3af PoE & 12 ~ 24VDC
Network	Wi-Fi 2.4G/5G & Bluetooth 4.2 & ZigBee 3.0 & ETH			
Material	Metal			
Screen Size	8"			
Screen Resolution	1280 × 800 pixels			
Sensors Built In	Proximity, light, temperature, and humidity sensors			
Camera	5-megapixel camera with privacy shutter	-	-	-
RS485	-	Support	-	Support
Input	-	-	-	-
Output	1-gang relay	-	2-gang relay	-
Infrared Remote Control	Support			
NTC	-	-	-	-
Installation	US backbox		EU/UK backbox	
Working Humidity	10% ~ 90%RH, without condensation			
Working Temperature	-10°C ~ 55°C			
Storage Temperature	-20°C ~ 70°C			





## HyPanel Lux (RT61)

Your Everyday Luxury



- Android 10 OS
- 2.1-inch multi-touch screen
- 480 x 480 resolution
- Four AG glass buttons
- Metal knob with 16-million-color RGB light ring
- Infrared remote control
- Built-in sensors
- Built-in voice assistant
- ZigBee 3.0 / Wi-Fi / Bluetooth 4.2 / Ethernet connections

# HyPanel Lux (RT61)

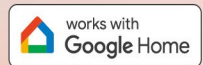
Model	RT61-KNX-EU	RT61-PoE-EU	RT61-R2-EU
Power Supply	KNX 21 ~ 30VDC AUX 21 ~ 30VDC	IEEE802.3af PoE & 12 ~ 24VDC	180 ~ 260VAC, 50Hz
Network	Wi-Fi 2.4G/5G & Bluetooth 4.2 & ZigBee 3.0 & ETH		
Material	V0 fireproof PC + 4 AG glass buttons + 1 metal knob		
Screen Size	2.1"		
Screen Resolution	480 x 480 pixels		
Sensors Built In	Proximity, light, temperature, humidity and gravity sensors		
Camera	-	-	-
RS485	-	Support	-
Input	0 ~ 5VDC digital input x1	-	-
Output	100 ~ 240VAC dry contact x2	-	2-gang relay
Infrared Remote Control	Support		
NTC	-	-	-
Installation	EU/UK backbox	EU/UK backbox	EU/UK backbox
Working Humidity	10% ~ 90%RH, without condensation		
Working Temperature	-10°C ~ 55°C		
Storage Temperature	-30°C ~ 70°C		

Model	RT61-PoE-US	RT61-D1-EU	RT61-D1-US
Power Supply	IEEE802.3af PoE & 12 ~ 24VDC	180~260VAC, 50Hz	100 ~ 260VAC, 50/60Hz
Network	Wi-Fi 2.4G/5G & Bluetooth 4.2 & ZigBee 3.0 & ETH		
Material	V0 fireproof PC + 4 AG glass buttons + 1 metal knob		
Screen Size	2.1"		
Screen Resolution	480 x 480 pixels		
Sensors Built In	Proximity, light, temperature, humidity and gravity sensors		
Camera	-	-	-
RS485	Support	-	-
Input	-	-	-
Output	-	1-gang dimmer	1-gang dimmer
Infrared Remote Control	Support		
NTC	-	-	-
Installation	US backbox	EU/UK backbox	US backbox
Working Humidity	10% ~ 90%RH, without condensation		
Working Temperature	-10°C ~ 55°C		
Storage Temperature	-30°C ~ 70°C		





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## HyPanel Lux (CT61)

The Halo of Smart Home Brilliance

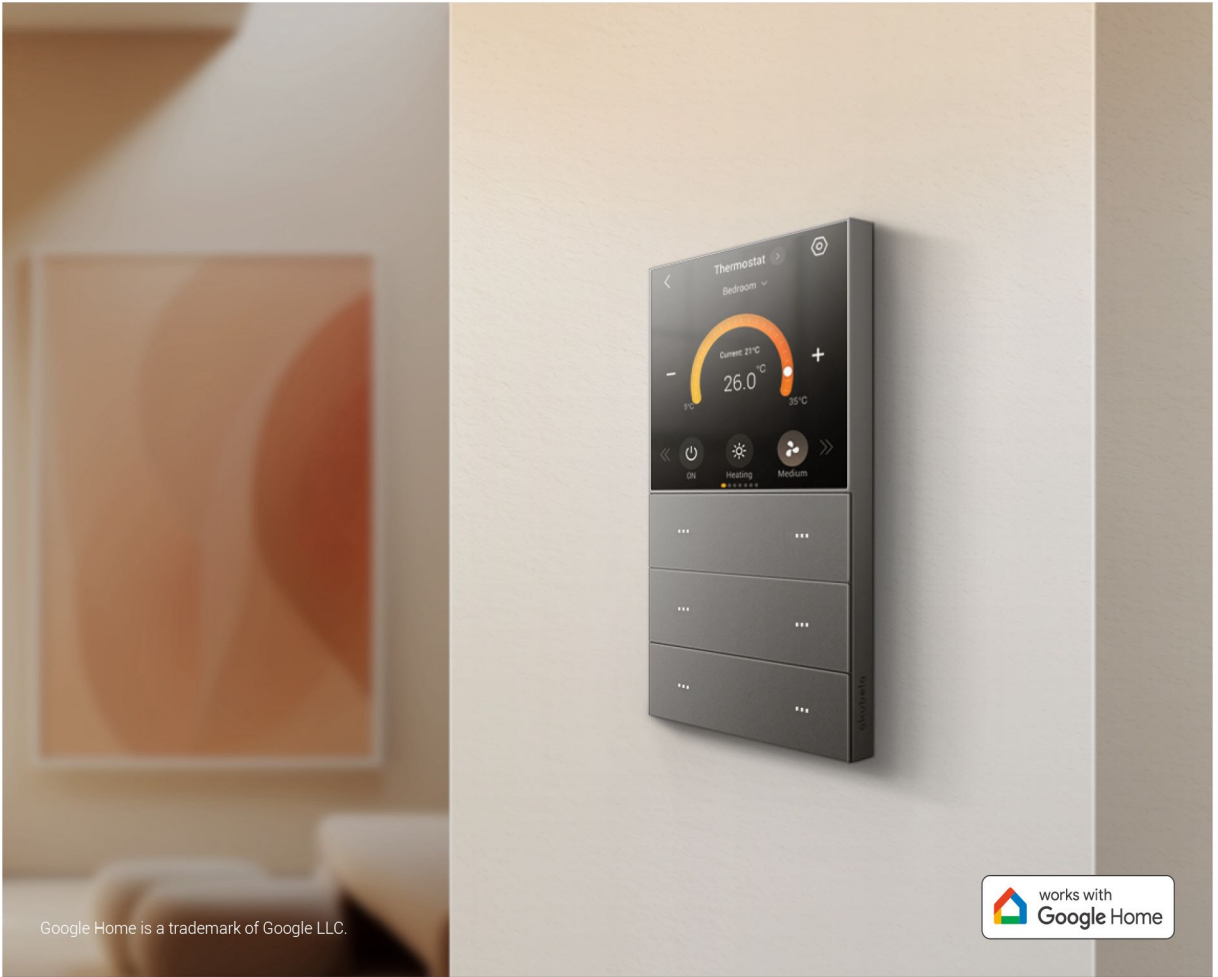


- 2.1-inch touch screen
- Metal knob supporting press control
- 16-million-color RGB light ring
- Built-in sensors
- Android 12 OS with a high-power Rockchip chip
- Smart intercom and home automation in one

# HyPanel Lux (CT61)

Model	CT61-PoE
Power Supply	IEEE802.3af PoE
Network	Ethernet
Material	Metal
Screen Size	2.1"
Screen Resolution	480x480 pixels
Sensors Built In	Proximity and light sensors
Camera	-
RS485	-
Input	-
Output	-
Infrared Remote Control	-
NTC	-
Installation	Special standard
Working Humidity	10 ~ 90%RH, without condensation
Working Temperature	-10°C ~ 55°C
Storage Temperature	-30°C ~ 70°C





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## HyPanel KeyPlus

Voice, Touch, or Press – Your Choice



- Excellent performance with Android 13 OS
- 4-inch touch screen with energy saving mode
- 6 touch buttons, suitable for the whole family
- 2-gang relay for connecting to lights directly
- Smart intercom, ZigBee gateway, and home automation in one

# HyPanel KeyPlus

Model	KS53-R2-EU	KS53-R2-US
Power Supply	180-260VAC, 50HZ	100-250VAC, 50/60HZ
Network	WiFi 6 & Bluetooth 5.3 & ZigBee 3.0 & Ethernet	WiFi 6 & Bluetooth 5.3 & ZigBee 3.0
Material	V0 fireproof PC	
Screen Size	4"	
Screen Resolution	480x480 pixels	
Sensors Built In	Proximity and light sensors	
Camera	-	
RS485	-	
Input	-	
Output	2-gang relay	
Infrared Remote Control	-	
NTC	-	
Installation	EU/UK backbox	US backbox
Working Humidity	10 ~ 90%RH, without condensation	
Working Temperature	-10°C ~ 55°C	
Storage Temperature	-30°C ~ 70°C	





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## HyPanel Plus

Smart Living Made Effortless, Elegant, and Exciting



- Android 12 OS
- 4-inch multi-touch screen
- 480 x 480 resolution
- Two touch buttons
- Built-in sensors
- Built-in voice assistant
- ZigBee 3.0 / Wi-Fi 6 / Bluetooth 5.4 / Ethernet connections

# HyPanel Plus

Model	PS52V2-R2-EU	PS52V2-D1-US	PS52V2-PoE-US
Power Supply	180 ~ 260VAC, 50Hz	100 ~ 260VAC, 50/60Hz	IEEE802.3af PoE & 12 ~ 24VDC
Network	Wi-Fi 6 & Bluetooth 5.4 & ZigBee 3.0 & ETH		
Material	Metal		
Screen Size	4"		
Screen Resolution	480 x 480 pixels		
Sensors Built In	Proximity, light, temperature, and humidity sensors		
Camera	-	-	-
RS485	-	-	Support
Input	-	-	-
Output	2-gang relay	1-gang dimmer	-
Infrared Remote Control	-	-	-
NTC	-	-	-
Installation	EU/UK backbox	US backbox	US backbox
Working Humidity	10% ~ 90%RH, without condensation		
Working Temperature	-10°C ~ 55°C		
Storage Temperature	-20°C ~ 65°C		

Model	PS52N-R2-EU	PS52N-R1-US	PS52N-PoE-US
Power Supply	180 ~ 260VAC, 50Hz	100 ~ 260VAC, 50/60Hz	IEEE802.3af PoE & 12 ~ 24VDC
Network	Wi-Fi 6 & Bluetooth 5.4 & ZigBee 3.0 & ETH		
Material	V0 fireproof PC		
Screen Size	4"		
Screen Resolution	480 x 480 pixels		
Sensors Built In	Proximity, light, temperature, and humidity sensors		
Camera	-	-	-
RS485	-	-	Support
Input	-	-	-
Output	2-gang relay	1-gang relay	-
Infrared Remote Control	-	-	-
NTC	-	-	-
Installation	EU/UK backbox	US backbox	US backbox
Working Humidity	10% ~ 90%RH, without condensation		
Working Temperature	-10°C ~ 55°C		
Storage Temperature	-20°C ~ 65°C		



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# HyPanel

The Simplicity of Design Powered by the Smartest Technology



- Android 10 OS
- 4-inch multi-touch screen
- 480 x 480 resolution
- Built-in sensors
- Built-in voice assistant
- ZigBee 3.0 / Wi-Fi / Bluetooth 4.2 / Ethernet connections



# HyPanel

Model	PS51-KNX-EU	PS51-PoE-EU	PS51-R2-EU	PS51-D1-EU
Power Supply	KNX 21 ~ 30VDC AUX 21 ~ 30VDC	IEEE802.3af PoE & 12 ~ 24VDC	180 ~ 260VAC, 50Hz	180 ~ 260VAC, 50Hz
Network	Wi-Fi 2.4G/5G & Bluetooth 4.2 & ZigBee 3.0 & ETH			
Material	V0 fireproof PC			
Screen Size	4"			
Screen Resolution	480 x 480 pixels			
Sensors Built In	Proximity, light, temperature, and humidity sensors			
Camera	-	-	-	-
RS485	-	Support	-	-
Input	0 ~ 5VDC digital input x1	-	-	-
Output	100 ~ 240VAC dry contact x2	-	2-gang relay	1-gang dimmer
Infrared Remote Control	-	-	-	-
NTC	-	-	-	-
Installation	EU/UK backbox	EU/UK backbox	EU/UK backbox	EU/UK backbox
Working Humidity	10% ~ 90%RH, without condensation			
Working Temperature	-10°C ~ 55°C			
Storage Temperature	-20°C ~ 65°C			

Model	PS51-FANCOIL-EU	PS51-24VFANCOIL-EU	PS51-10VFANCOIL-EU	PS51-HEATING-EU
Power Supply	90 ~ 250VAC, 50/60Hz	24VAC/DC	24VAC/DC	90 ~ 250VAC, 50/60Hz
Network	Wi-Fi 2.4G/5G & Bluetooth 4.2 & ZigBee 3.0			
Material	V0 fireproof PC			
Screen Size	4"			
Screen Resolution	480 x 480 pixels			
Sensors Built In	Proximity, light, temperature, and humidity sensors			
Camera	-	-	-	-
RS485	Support			-
Input	-	-	-	0 ~ 5VDC digital input
Output	2 relays for cooling and heating valves; 3 relays for fan speed	2 relays for cooling and heating valves; 3 relays for fan speed	2 way for 0-10V cooling and heating valves; 3 relays for fan speed	Maximum Resistive Load: 16A
Infrared Remote Control	-	-	-	-
NTC	Support			
Installation	EU/UK backbox	EU/UK backbox	EU/UK backbox	EU/UK backbox
Working Humidity	10% ~ 90%RH, without condensation			
Working Temperature	-10°C ~ 55°C			
Storage Temperature	-20°C ~ 65°C			



## HyPanel Lite

The Classic Meets the Modern



- 
- Linux OS
  - 3.27-inch multi-touch screen
  - 320 x 480 resolution
  - Built-in sensors
  - ZigBee 3.0 / Wi-Fi / Bluetooth 4.2 / Ethernet connections

# HyPanel Lite

Model	KS41-KNX-EU	KS41-PoE-EU	KS41-R2-EU	KS41-FANCOIL-EU
Power Supply	KNX 21 ~ 30VDC AUX 21 ~ 30VDC	IEEE802.3af PoE & 12 ~ 24VDC	180 ~ 260VAC, 50Hz	90 ~ 250VAC, 50/60Hz
Network	Wi-Fi 2.4G & Bluetooth 4.2 & ZigBee 3.0 & ETH			Wi-Fi 2.4G & Bluetooth 4.2 & ZigBee 3.0
Material	Metal buttons, V0 fireproof PC			
Screen Size	3.27"			
Screen Resolution	320 x 480 pixels			
Sensors Built In	Proximity, light, temperature, and humidity sensors			
Camera	-	-	-	-
RS485	-	Support	-	Support
Input	0 ~ 5VDC digital input x1	-	-	-
Output	100 ~ 240VAC dry contact x2	-	2-gang relay	2 relays for cooling and heating valves; 3 relays for fan speed
Infrared Remote Control	-	-	-	-
NTC	-	-	-	Support
Installation	EU/UK backbox	EU/UK backbox	EU/UK backbox	EU/UK backbox
Working Humidity	10% ~ 90%RH, without condensation			
Working Temperature	-10°C ~ 55°C			
Storage Temperature	-20°C ~ 65°C			



# Smart Lock

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## SL50 Smart Lock

AI-Powered Keyless Entry for High-End Properties

Model	SL50 Smart Lock
Material	Aluminum alloy
Mechanism	Fully automatic door lock
Network	Wi-Fi 2.4GHz
Display	4 inches, 480x800
Camera	2MP with infrared supplementary light
Lock Body	6068 standard lock body
Lock Cylinder	Grade C
Product Dimensions	Front panel: 418.6×75×56mm; Back panel: 421.6×81.2×72.9mm
Battery Capacity	5000mAh (usable for 6 months/10 unlocks per day)
Emergency Power	5V 1A USB Type-C
Working Voltage	7.0V~8.4V, low voltage alarm at 6.8±0.2V
Operating Environment	-25°C ~ +70°C
Operating Humidity	20% ~ 93% RH
IP Rating	IP52
Unlocking Methods	Fingerprint, password, IC cards, mechanical keys, mobile apps, HyPanels, and total 250 sets



# F2 Smart Lock

Advanced smart lock with encryption, multiple access methods, and ergonomic design

Model	F2 Smart Lock
Connections	ZigBee 3.0
Operation	Semi-automatic lock
Input Voltage	6V DC
Lock Body	4585 standard lock body
Battery	4 AAA alkaline batteries
Battery Life	6 months (based on 10 uses per day in a stable laboratory environment at 25°C )
Unlocking Methods	Fingerprint, passwords, M1 cards (frequency: 13.56 MHz), mobile apps, and mechanical keys
Credential Capacity	300 sets (maximum fingerprint capacity: 100)
Emergency Power	5V 1A USB Type-C
Protection Rating	IP65
Operating Temperature	-25°C ~ 60°C
Operating Humidity	20% ~ 95% RH (non-condensing)





# C6 Smart Lock

A ZigBee high-security smart lock with multiple unlocking methods

Model	C6 Smart Lock
Connections	ZigBee 3.0
Operation	Semi-automatic door lock
Input Voltage	4.6 ~ 6.5 VDC
Battery	4 AA alkaline batteries
Battery Life	10 months (under stable laboratory conditions at 25°C , with 10 door operations per day)
Unlocking Methods	Fingerprint, passwords, M1 cards (frequency: 13.56 MHz), and mobile apps
Credential Capacity	250 sets (Fingerprint capacity: up to 100)
Lock Body	6068 standard lock body
Emergency Interface	Micro USB (5V)
Operating Temperature	-20°C ~ 60°C
Operating Humidity	20% ~ 95% RH (non-condensing)

# ZigBee Add-ons

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### Smart Key Switch (EU standard)

Fingerprint-resistant AG glass switch



- Soft-touch, fingerprint-resistant AG glass
- Available in 3 colors with 1 to 4 relay options
- Wide voltage design
- Standard European specification
- Supports control via the BelaHome app and HyPanels

Specification	
Power Supply	100 ~ 250V, 50 ~ 60Hz
Load limit	Max 300W per channel (LED load) Max 600W per channel (Resistive load)
Control Unit	10A Relay
Connections	ZigBee 3.0
Surface Color	Gold/Black/White
Working Temperature	-20°C ~ 70°C
Working Humidity	0 ~ 95%RH(non-condensing)
Protection Level	IP20
Product Size	86×86×35mm
Cable Cross-sectional Range	1-4mm <sup>2</sup> (recommended)
Certification	CE

### Smart Socket With USB

Scratch-proof quality sockets with USB ports



- Soft-touch, fingerprint-resistant AG glass
- Available in 3 colors to match existing switch styles
- Wide voltage design
- Supports control via the BelaHome app and HyPanels

Specification	
Power Supply	100 ~ 250VAC, 50/60Hz
Rated Current	10A
USB Output Voltage	5V
USB Output Current	2.1A
Connections	ZigBee 3.0
Surface Color	White/Black/Gold
Working Temperature	-20°C ~ 70°C
Working Humidity	0% ~ 95%RH(non-condensing)
Product Size	86×86×35mm

### Smart Plug (EU)

Makes your home appliances smarter



- Timer function
- Wide voltage design
- Standard European specification
- Low power consumption design with safety protection features
- Supports control via the BelaHome app and HyPanels

Specification	
Power Supply	110 ~ 240VAC, 50/60HZ
Connections	ZigBee 3.0
Max. Load	2200W
Max. Current	16A
Standby Power Consumption	<0.5W
Material	PC + ABS (fireproof)
Working Temperature	-30°C ~ 70°C
Working Humidity	0% ~ 95%RH (non-condensing)
Product Size	50×50×83.5mm

### Smart Plug (UK)

Makes your home appliances smarter



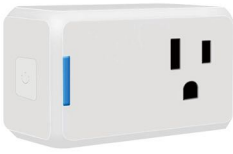
- Timer function
- Wide voltage design
- Standard European specification
- Low power consumption design with safety protection features
- Supports control via the BelaHome app and HyPanels

Specification	
Power Supply	110 ~ 240VAC, 50/60HZ
Connections	ZigBee 3.0
Max. Load	2800W
Max. Current	13A
Standby Power Consumption	<0.5W
Material	PC + ABS (fireproof)
Working Temperature	-30°C ~ 70°C
Working Humidity	0% ~ 95%RH (non-condensing)
Product Size	φ58×55.3mm



### Smart Plug (US)

Makes your home appliances smarter



- Timer function
- Wide voltage design
- Standard European specification
- Low power consumption design with safety protection features
- Supports control via the BelaHome app and HyPanels

#### Specification

Power Supply	110 ~ 240VAC, 50/60HZ
Connections	ZigBee 3.0
Max. Load	1800W
Max. Current	10A
Standby Power Consumption	<0.3W
Material	PC + ABS (fireproof)
Working Temperature	-30°C ~ 70°C
Working Humidity	0% ~ 95%RH (non-condensing)
Product Size	69.9×39.8×31.4mm

### Switch Actuator (RS485)

Multifunctional controller integrating a multi-way switch and signal input



- High-power relays with zero-crossing detection
- DIN rail mounting
- Integrated signal reception and control

#### Specification

Operating Voltage	12VDC/2A
IO Input	8 channels
Relay Control	8 channels, Max 16A/channel (resistive load), Max 500W/channel (capacitive load)
12V Output	8 channels, MAX 250mA/channel
Operating Environment	0°C ~ 45°C
Environmental Temperature	0% ~ 95%RH (non-condensing)
Material	PVC
Installation Method	Standard DIN rail mounting
Protection Grade	IP20
Product Dimensions	160mm×95.7mm×67mm (L×W×D)

### 1/2/3/4 Gang Touch Switch (US version)

US-standard touch switch featuring a minimalist design and convenient touch control



- Advanced touch sensing technology
- Available in black/white with 1 to 4 relay channel options
- Wide voltage design
- Standard US specification
- Supports control via the BelaHome app and HyPanels

#### Specification

Input Voltage	100 ~ 250V, 50/60Hz
Connections	ZigBee 3.0
Maximum Power (for AC110V)	200W/Gang (Capacitive load) 400W/Gang (Resistive load)
Maximum Power (for AC220V)	400W/Gang (Capacitive load) 800W/Gang (Resistive load)
Control Unit	10A Relay
Working Temperature	-20°C ~ 45°C
Working Humidity	0% ~ 90%RH (non-condensing)
Protection Level	IP20
Product Size	120×72×33.5mm
Cable Cross-sectional Range	1.5-4mm <sup>2</sup> (recommended)

### 1/2/3/4 Gang Touch Switch (EU version)

EU-standard touch switch featuring a minimalist design and convenient touch control



- Advanced touch sensing technology
- Available in black/white with 1 to 4 relay channel options
- Wide voltage design
- Standard European specification
- Powerful ZigBee transceiving capability, with repeater function
- Supports control via the BelaHome app and HyPanels

#### Specification

Input Voltage	100 ~ 250VAC, 50/60Hz
Connections	ZigBee 3.0
Load Limits (for 110VAC)	*Max 200W/Gang (Capacitive load) Max 400W/Gang (Resistive load)*
Load Limits (for 220VAC)	*Max 400W/Gang (Capacitive load) Max 800W/Gang (Resistive load)*
Control Unit	10A Relay
Working Temperature	-20°C ~ 45°C
Working Humidity	0 ~ 95% RH (non-condensing)
Protection Level	IP20
Product Dimensions	86.7×86.7×32 mm
Cable Cross-sectional Range	1.5-4mm <sup>2</sup> (recommended)
Certification	CE

### Central AC Controller – Indoor

High-end indoor VRV/VRF AC gateway with innovative smart home connectivity

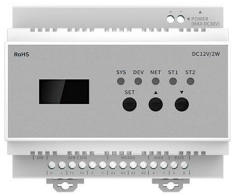


- Compatible with major air conditioning brands, including Daikin, Hitachi, Midea, Toshiba, and more
- Compatible with the original panel, featuring master-slave auto-switching
- Remote diagnostics for fast issue identification and resolution
- Bluetooth upgrades
- Supports remote control via the BelaHome app

Specification	
Connections	ZigBee
Power Supply Method	Powered by the indoor unit of the air conditioner
Output Power	Max 0.7W (7 ~ 15VDC)
Average Power Consumption	<0.5W
Working Temperature	-20°C ~ 60°C
Working Humidity	0 ~ 90%RH (non-condensing)
Product Dimensions	85×85×28mm

### Central AC Controller – Outdoor

High-end outdoor VRV/VRF AC gateway with innovative smart home connectivity



- Compatible with major AC brands, including Daikin, Hitachi, Midea, Toshiba, Haier, Panasonic, York, Mitsubishi Heavy Industries, LG, Aux, Chigo, and more
- Connects to outdoor unit and controls multiple indoor units
- Remote diagnostics for fast issue identification and resolution
- Bluetooth upgrades
- Supports remote control via the BelaHome app

Specification	
Power Supply	DC12V
Connections	ZigBee
Power Consumption	<2W
Working Temperature	-20°C ~ 80°C
Working Humidity	0 ~ 90% RH (non-condensing)
Product Size	106×96×58mm
Installation Method	Rail or placement

### Fan Coil Thermostat

Sleek design meets maximum comfort



- Ultra-thin embedded panel
- LED LCD display with touch control
- Accurate temperature regulation ( $\pm 0.5^{\circ}\text{C}$ )
- Power-loss protection that preserves all user settings

Specification	
Power Supply	95 ~ 240VAC, 50/60HZ
Connections	ZigBee 3.0
Power Consumption	$\leq 1.5\text{W}$
Buttons	Capacitive Touch Buttons
Fan Relay Amps	Resistive: 5A; Inductive: 3A
Valve Relay Amps	Resistive: 3A; Inductive: 1A
Controllable Equipment	Two pipes (Control Fan Coil Unit and Two Wired Motorized Valve; Control Fan Coil Unit and 0-10V Motorized Valve), Four pipes (Control Fan Coil Unit and Two Wired Heat Valve and Two Wired Cool Valve)
Set Temperature Range	5°C ~ 35°C
Temperature Control Accuracy	$\pm 0.5^{\circ}\text{C}$
Storage Temperature	-5°C ~ 45°C
Working Temperature	0°C ~ 45°C
Working Humidity	5% ~ 95%RH

## Heating Thermostat

Advanced, sleek thermostat for perfect, uniform home temperature control

- Electric heating device control
- LED LCD display
- Accurate temperature regulation ( $\pm 0.5^{\circ}\text{C}$ )
- Wide voltage range
- Supports control via the BelaHome app and HyPanels



## Shades Motor

Quiet, efficient, seamless control

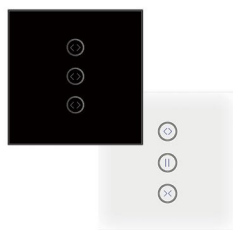
- Powerful 1.2N torque
- Low-noise DC motor
- Soft start and soft stop
- Manual pull start
- Mechanical clutch design for easy manual control during power outages



## Curtain Control Panel

Compact, efficient smart curtain switch with touch buttons and safety features

- Standard ZigBee protocol with strong compatibility
- Wide voltage range
- Super low power consumption
- Easy setup and use
- Supports remote control via mobile apps or smart panels
- Explosion-proof glass panel with safety protection function
- Touch key design featuring quick response



## Smart Air Quality Detector

Keeps an eye on your indoor climate

- Equipped with various sensors (optional) for accurate air quality analysis
- Proximity sensing feature
- Features a sleek and modern design
- Real-time display of environmental data



### Specification

Power Supply	95 ~ 240VAC, 50/60HZ
Connections	ZigBee 3.0
Current Load	16A (electric heating)
Power Consumption	<1.5W
Timing Error	<1%
Temperature Control Accuracy	$\pm 0.5^{\circ}\text{C}$
Set Temp. Range	$5^{\circ}\text{C} \sim 35^{\circ}\text{C}$
Room Temp. Range	$5^{\circ}\text{C} \sim 99^{\circ}\text{C}$
Display Temp. Range	$5^{\circ}\text{C} \sim 99^{\circ}\text{C}$
Buttons	Capacitive touch buttons
Protection Class	IP20
Material	PC + ABS (Fireproof)
Working Temperature	$0^{\circ}\text{C} \sim 45^{\circ}\text{C}$
Working Humidity	5% ~ 95%RH (non-condensing)
Installation	60mm mounting box
Wire Terminals	Wire 2x1.5mm <sup>2</sup> or 1x2.5mm <sup>2</sup>

### Specification

Power Supply	100 ~ 240VAC, 50/60HZ
Connections	ZigBee 3.0
Rated Current	0.3A
Rated Speed	75/90/110 rpm
Rated Torque	1.2 N.m
Support Curtain Weight	60kg (2m), 55kg (4m), 50kg (6m)
Protection Rating	IP41
Product Size	265x60x50.6 mm

### Specification

Power Supply	110 ~ 240VAC, 50/60HZ
Connections	ZigBee 3.0
Maximum Current	10A/gang
Maximum Power	300W
Standby Power Consumption	<0.5W
Glass Panel	3MM toughened glass
Working Temperature	$-30^{\circ}\text{C} \sim 70^{\circ}\text{C}$
Working Humidity	0% ~ 95%RH (non-condensing)
Product Size	86x86x36.5 mm

### Specification

Power Supply	100 ~ 240VAC
Connections	RS485/ZigBee and other wireless methods (subject to specific models)
Display	TFT screen
PM2.5 Range	0-999 $\mu\text{g}/\text{m}^3$
Formaldehyde Range	0-1 $\text{mg}/\text{m}^3$
Carbon Dioxide Range	400-5000 PPM
TVOC Range	0-6 $\text{mg}/\text{m}^3$
Temperature Range	$-10^{\circ}\text{C} \sim 55^{\circ}\text{C}$
Working Temperature	$-10^{\circ}\text{C} \sim 55^{\circ}\text{C}$
Working Humidity	0% ~ 95%RH
Product Size	86x86x59mm



## Climate



### Temperature & Humidity Sensor

Measures the temperature and humidity of your home with a single device

- Real-time temperature and humidity display on the screen
- Ultra-low power consumption with long battery life
- Easy installation with no wiring required
- Sleek, stylish design

#### Specification

Power Supply	3VDC
Connections	ZigBee 3.0
Low Voltage Alarm Threshold	2.5V ± 0.2V
Standby Current	≤30μA
Operating Current	≤30mA
Battery Type	2 AAA batteries
Battery Life	Over 1 year (with 20 uses per day)
Working Temperature	-10°C ~ 55°C
Working Humidity	0% ~ 99.9%RH
Product Size	φ61.2×23 mm

## Lighting



### Smart Spotlight (75mm/9W)

Low power consumption with reduced heat generation

- Energy-efficient, saving 60%-80% energy compared to traditional lighting
- Constant current source ensuring longer lifespan and reliability
- High-purity aluminum casing with advanced heat dissipation
- Environmentally-friendly radiation-free design
- Supports control via the BelaHome app and HyPanels

#### Specification

Power Supply	100 ~ 240VAC, 50/60Hz
Connections	ZigBee 3.0
Light Source	COB
Color Temperature (K)	2700 ~ 6500
CRI(Ra)	≥90
Beam Angle	24°
Lamp Power (W)	9
Adjustable Angle	355°+25°
Power Factor	≥0.5
Product Size	φ85×H74mm (75mm hole)



### Smart Spotlight (55mm/9W)

Low power consumption with reduced heat generation

- Energy-efficient, saving 60%-80% energy compared to traditional lighting
- Constant current source ensuring longer lifespan and reliability
- High-purity aluminum casing with advanced heat dissipation
- Environmentally-friendly radiation-free design
- Supports control via the BelaHome app and HyPanels

#### Specification

Power Supply	100 ~ 240VAC, 50/60Hz
Connections	ZigBee 3.0
Light Source	COB
Color Temperature (K)	2700 ~ 6500
CRI(Ra)	≥90
Beam Angle	24°
Lamp Power (W)	9
Adjustable Angle	355°+25°
Power Factor	≥0.5
Product Size	φ62×H77mm (55mm hole)



### Smart Spotlight (55mm/10W)

Low power consumption with reduced heat generation

- Energy-efficient, saving 60%-80% energy compared to traditional lighting
- Constant current source ensuring longer lifespan and reliability
- High-purity aluminum casing with advanced heat dissipation
- Environmentally-friendly radiation-free design
- Supports control via the BelaHome app and HyPanels

#### Specification

Power Supply	100 ~ 240VAC, 50/60Hz
Connections	ZigBee 3.0
Light Source	COB
Color Temperature (K)	2700 ~ 6500
CRI(Ra)	≥90
Beam Angle	24°
Lamp Power (W)	10
Adjustable Angle	355°+25°
Power Factor	≥0.5
Product Size	φ62×82mm (55mm hole)

### ZigBee AC Triac Dimmer

256 levels of smooth dimming from 0% to 100% without flicker



- Adjustable minimum brightness
- Built-in overheat and overload protection with automatic recovery
- Two dimming modes available for compatibility with silicon-controlled dimming power supplies or dimmable LEDs

#### Specification

Connections	ZigBee 3.0
Input Voltage	AC100 ~ 240V
Output Voltage	AC100 ~ 240V
Output Current	Max 1.5A
Output Power	150-360W
Protection	Overheat/Overload
Dimming Grayscale Level	256 levels
Dimming Range	0% ~ 100%
Working Temperature	Ta: -30°C ~ +55°C
Certifications	CE, EMC, LVD, RED

### ZigBee LED Dimmer

Stable single-color output with pure, flicker-free light



- Controls low-voltage single-color LED strips
- DC power socket input
- Relay capability for forwarding and routing signals
- 4KHz PWM frequency

#### Specification

Connections	ZigBee 3.0
Light Type	Monochrome
Number of Output Channels	2
Input Voltage	12 ~ 36VDC
Input Current	10.5A
Output Voltage	12 ~ 36VDC
Output Current	2CH, 5A/CH
Output Power	2x(60 ~ 180)W
PWM Frequency	4KHz
Dimming Level	65536 (2^16) levels
Dimming Range	0% ~ 100%
Working Temperature	-30°C ~ 55°C
Certifications	CE, EMC, RED

### ZigBee CCT LED Controller

Adjustable color temperature from warm to cool white



- Controls low-voltage CCT LED strips
- DC power socket input
- Relay capability for forwarding and routing signals
- 4KHz PWM frequency

#### Specification

Connections	ZigBee 3.0
Light Type	CCT
Number of Output Channels	2
Input Voltage	12 ~ 36VDC
Input Current	10.5A
Output Voltage	12 ~ 36VDC
Output Current	2CH, 5A/CH
Output Power	2x(60 ~ 180)W
PWM Frequency	4KHz
Dimming Level	65536 (2^16) levels
Dimming Range	0% ~ 100%
Working Temperature	-30°C ~ 55°C
Certifications	CE, EMC, RED

### ZigBee RGB LED Controller

Vibrant RGB lighting for dynamic and colorful effects



- Controls low-voltage RGB LED strips
- DC power socket input
- Relay capability for forwarding and routing signals

#### Specification

Connections	ZigBee 3.0
Light Type	RGB
Number of Output Channels	3
Input Voltage	12 ~ 24VDC
Input Current	12.5A
Output Voltage	12 ~ 24VDC
Output Current	3CH, 4A/CH
Output Power	3x(48 ~ 96)W
PWM Frequency	2KHz
Dimming Level	65536 (2^16) levels
Dimming Range	0% ~ 100%
Working Temperature	-30°C ~ 55°C
Certifications	CE, EMC, RED

### ZigBee RGBW LED Controller

Combination of RGB colors and pure white light for enhanced illumination



- Controls low-voltage RGBW LED strips
- DC power socket input
- Relay capability for forwarding and routing signals

Specification	
Connections	ZigBee 3.0
Light Type	RGBW
Number of Output Channels	4
Input Voltage	12 ~ 24VDC
Input Current	12.5A
Output Voltage	12 ~ 24VDC
Output Current	4CH, 3A/CH
Output Power	4x(36 ~ 72)W
PWM Frequency	2KHz
Dimming Level	65536 (2 <sup>16</sup> ) levels
Dimming Range	0% ~ 100%
Working Temperature	-30°C ~ 55°C
Certifications	CE, EMC, RED

### ZigBee RGB+CCT LED Controller

Blends RGB hues with adjustable color temperature to create versatile and dynamic lighting effects



- Controls low-voltage RGB+CCT LED strips
- DC power socket input
- Relay capability for forwarding and routing signals

Specification	
Connections	ZigBee 3.0
Light Type	RGB+CCT
Number of Output Channels	5
Input Voltage	12 ~ 24VDC
Input Current	12.5A
Output Voltage	12 ~ 24VDC
Output Current	5CH, 3A/CH
Output Power	5x(36 ~ 72)W
PWM Frequency	2KHz
Dimming Level	65536 (2 <sup>16</sup> ) levels
Dimming Range	0% ~ 100%
Working Temperature	-30°C ~ 55°C
Certifications	CE, EMC, RED

### ZigBee Constant Current LED Driver

Stable constant current and precise dual color temperature adjustment



- Color temperature and brightness adjustment
- Full AC input range, high power factor, and flicker-free performance
- Dual constant current outputs with current adjustable via DIP switch
- Overload and short-circuit protection with automatic recovery
- Ideal for indoor LED lighting applications

Specification	
Connections	ZigBee 3.0
Input Voltage	100 ~ 240VAC
Input Current	≤0.15A/115VAC (full load) ≤0.08A/230VAC (full load)
Power Factor	≥ 0.98/115VAC (full load) ≥ 0.9/230VAC (full load)
Efficiency	≥79% (full load)
THD	<12%/230VAC (full load)
Output Voltage	10 ~ 42VDC
Output Current	2x(150 ~ 450)mA
Output Power	Max. 12W
Dimming Range	0% ~ 100%
PWM Frequency	4KHz
Working Temperature	-20°C ~ 50°C
Working Humidity	20% ~ 90%RH (non-condensing)
Certifications	CE

### ZigBee Triac Dimmer Panel

High-quality glass material and efficient light control



- 256 levels of smooth dimming from 0% to 100% without flicker
- Adjustable brightness with a rotating knob, supporting both short and long presses
- Dip switch for selecting leading-edge or trailing-edge dimming
- 3-second on/off fade
- Built-in overheat and overload protection with automatic recovery

Specification	
Input Voltage	AC100 ~ 240V
Output Voltage	AC100 ~ 240V
Input Current	1.5A
Output Current	1.5A
Output Power	150 ~ 360W
Working Temperature	-10°C ~ 40°C
Working Humidity	0% ~ 95% RH (non-condensing)
Product Dimensions	43×39.2×22.3mm



### Door & Window Sensor

Door and window security, the first line of defense for your home



- Real-time monitoring of door and window status
- Tamper alarm
- Ultra-low power consumption with long battery life
- Easy installation without wiring required
- Sleek, modern design

### Human Presence Detector

24GHz radar with high-gain antenna for accurate indoor human movement detection



- Accurate presence detection (occupied/unoccupied)
- Precise ambient light sensing
- 24GHz ISM-band millimeter-wave radar, globally compatible
- Circular radiation pattern for full-space coverage with a single device
- Ultra-low RF power, safe for human health

### Motion Sensor

Safe protection with intelligent linkage



- Accurate human motion detection
- Ideal for automated lighting and scenes
- Ultra-low power consumption with long battery life
- Easy installation with no wiring required
- Sleek, stylish design

### Scene Button

One-touch automation scene trigger



- One-touch emergency alert
- One-touch automation scene trigger
- Ultra-low power consumption with long battery life
- Easy installation with no wiring required
- Sleek and stylish design

#### Specification

Connections	ZigBee 3.0
Alarm Trigger Distance	>20mm
Input Voltage	3V/DC
Low Voltage Alert Threshold	2.6V±0.2V
Standby Current	≤10μA
Operating Current	≤30mA
Battery Type	CR2032
Battery Life	Over 1 year (20 activations/day)
Operating Temperature	-10°C to 55°C
Dimensions	Main unit: 52.6×26.5×13.8mm Secondary unit: 25.5×12.5×13mm
Certification	CE

#### Specification

Connections	ZigBee 3.0
Radar Frequency	24GHz-24.25GHz ISM Band
Detection Range (Motion, 3m height)	4 ~ 5 meters
Detection Range (Micro-motion, 3m height)	4 ~ 5 meters
Detection Range (Presence, 3m height)	3 ~ 4 meters
Illuminance Detection Range	5-1200 Lux
Input Voltage	100V~240VAC
Operating Current	Max 50mA
Power Consumption	≤1W at 230V AC
Installation Height	2.5 to 4.0m (typical: 3m)
Operating Temperature	0°C ~ 50°C
Protection Rating	IP20
Certifications	CE, FCC

#### Specification

Connections	ZigBee 3.0
Detection Range	8 meters
Detection Angle	90°
Input Voltage	3V/DC
Low Voltage Alert Threshold	2.7V ± 0.1V
Standby Current	≤15μA
Operating Current	≤25mA
Battery Life	Over 1 year (with 20 detections per day)
Battery Type	CR123A
Operating Temperature	-10°C ~ 55°C
Installation Method	Wall-mounted
Dimensions	Φ48.4 x 53.4 mm
Certification	CE

#### Specification

Connections	ZigBee 3.0
Input Voltage	3V/DC
Low Voltage Alert Threshold	2.6V ± 0.2V
Standby Current	≤5μA
Operating Current	≤30mA
Battery Type	CR2032
Battery Life	Over one year (20 uses/day)
Operating Temperature	-10°C ~ 55°C
Installation Method	Ceiling or wall mount
Dimensions	Φ50×16mm
Certification	CE

### Gas Sensor

Accurate monitoring of combustible gases



- Resistant to smoke and grease
- ZigBee signal relay capability
- Sleek, modern design
- Local audible and visual alarms with notifications push

Specification	
Connections	ZigBee 3.0
Detectable Gas	Natural Gas
Alarm Concentration	8% LEL (Lower Explosive Limit for natural gas)
Alarm Concentration Accuracy	±3% LEL
Alarm Sound Pressure	≥70 dB (at 1 meter directly in front)
Input Voltage	12V/DC (with external AC110V-220V adapter)
Standby Current	<100mA (DC12V)
Alarm Current	<150mA (DC12V)
Operating Temperature	-10°C ~ +55°C
Operating Humidity	≤95% RH (non-condensing)
Product Dimensions	Φ85×30mm

### CO Sensor

Prevents poisoning to keep family safe



- Standard ZigBee protocol with strong compatibility
- Super low power consumption
- Easy installation by simply setting it on a table or adhering it to a wall
- Low power alert
- Support sound and light alarm, wireless network alarm
- Easy battery replacement

Specification	
Power Supply	3V DC
Connections	ZigBee 3.0
Battery Life	1 year
Battery Type	CR123A battery
Transmit Power	±8 dBm
Reception Sensitivity	-96 dBm
Alarm Voice Volume	70 dB at 2 meters
Alarm Concentration	200 ppm
Range Display	0 ~ 500 ppm; shows HHH beyond test range
Communication Distance	80 meters (empty)
Working Temperature	-10°C ~ 55°C
Working Humidity	0% ~ 95% RH
Product Size	φ80×30.5mm

### Smoke Sensor

Accurate monitoring with sound and light alarm



- Cutting-edge smoke detection technology
- Ultra-low power consumption with long-lasting battery
- Local audio and visual alarms with push notifications
- Easy installation with no wiring required
- Sleek, modern design

Specification	
Connections	ZigBee 3.0
Detector Type	Smoke (Standalone)
Alarm Sound Pressure	≥80 dB (at 3 meters in front)
Input Voltage	3V DC
Low Voltage Alarm Threshold	2.6V ± 0.2V
Standby Current	≤6 μA
Operating Current	≤30 mA
Battery Type	CR123A
Battery Life	Over 3 years (20 activations/day)
Operating Temperature	-10°C ~ 55°C
Installation Method	Ceiling or wall mount
Dimensions	Φ90×37mm
Certification	CE

## Flood Sensor

Timely detection and alerts for abnormal water levels



- Precise leak detection
- Ultra-low power consumption with long battery life
- Easy installation with no wiring required
- Sleek, modern design

### Specification

Connections	ZigBee 3.0
Detection Method	Water sensor probe
Input Voltage	3V DC
Low Voltage Alert	2.6V ± 0.2V
Standby Current	≤10 μA
Operating Current	≤30 mA
Battery Life	Over 1 year (20 detections/day)
Battery Type	CR2032
Operating Temperature	0°C to 55°C
Waterproof Rating	IP66
Installation	Place directly in the monitoring area
Dimensions	Φ50×18mm
Certification	CE

## Smart Valve

Effortless water system management



- High-torque motor
- Smart home integration
- Easy installation with good pipeline compatibility
- Rated to withstand valve pressures up to 1.6 MPa
- Supports control via the BelaHome app and HyPanels

### Specification

Connections	ZigBee 3.0
Input Voltage	12V DC (standard with American standard adapter/1.5A)
Motor Power Consumption	Max 5W
Torque	40 Kgf.cm
Valve Switching Time	5 ~ 10s
Valve Pressure	1.6 Mpa
Valve Specifications	4 points, 6 points, 1 inch
Housing Material	ABS (flame retardant)
Working Temperature	-20°C ~ 50°C
Working Humidity	0% ~ 95% RH (no condensation)
Product Size	93.5×70×78.5mm



**IR Controller (IR21)**

Makes legacy devices part of the smart home ecosystems



- Standard ZigBee protocol with strong compatibility
- Easy installation – just install and use
- Supports thousands of popular brands, enabling control of air conditioning, TV, and other devices
- Wide infrared signal coverage of 10-15 meters
- Extensive wireless range up to 70 meters in open environments
- Includes built-in temperature and humidity sensor
- Supports infrared learning

**Specification**

Power Supply	5VDC
Connections	ZigBee 3.0
Wireless Distance	≤70m (open environment)
Infrared Frequency	38KHz
Infrared Signal Coverage	Horizontal 360°, vertical 180° (hemisphere range), 10 ~ 15m
LED Indicator Light	Support
Buzzer	≤55dB
Infrared Learning	Support
Material	PC + Infrared transmission material
Working Temperature	-10°C ~ 55°C
Working Humidity	10% ~ 90%RH
Temperature Sensor	±1°C, range: -10°C ~ 55°C
Humidity Sensor	±5%, range: 10% ~ 90%RH, without condensation
Product Size	φ80×48mm

**IR Controller (IR22)**

Makes legacy devices part of the smart home ecosystems



- Standard ZigBee protocol with strong compatibility
- Easy installation – just install and use
- Supports thousands of popular brands, enabling control of air conditioning, TV, and other devices
- Wide infrared signal coverage of 10-15 meters
- Extensive wireless range up to 70 meters in open environments
- Includes built-in temperature and humidity sensor
- Supports infrared learning

**Specification**

Power Supply	Type-C, 5VDC
Connections	ZigBee 3.0
Wireless Distance	≤70m (open environment)
Infrared Frequency	38KHz
Infrared Signal Coverage	Horizontal 360°, vertical 180° (hemisphere range), 10 ~ 15m
LED Indicator Light	Support
Buzzer	≤55dB
Infrared Learning	Support
Material	PC + Infrared transmission material
Working Temperature	-10°C ~ 55°C
Working Humidity	10% ~ 90%RH
Temperature Sensor	±1°C, range: -10°C ~ 55°C
Humidity Sensor	±5%, range: 10% ~ 90%RH, without condensation
Product Size	φ80×48mm

**Gateway (G31)**

Gateway device with excellent performance



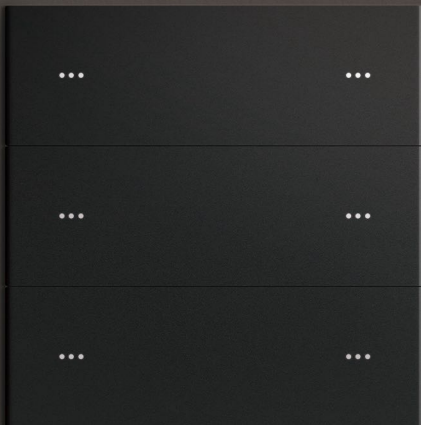
- Linux operating system
- Supports ZigBee 3.0, Wi-Fi and Ethernet
- Supports up to a maximum of 32 sub-devices
- Installation without tools, either on the desktop or adhered to a wall

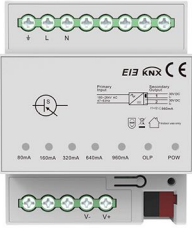
**Specification**

Power Supply	Type-C, 5VDC
Connections	Ethernet/WiFi/ZigBee 3.0
Operation System	Linux
Maximum Sub-Device Capacity	32
Buzzer	≤55dB
Material	V0 fireproof PC
Working Temperature	-10°C ~ 55°C
Working Humidity	10% ~ 90%RH
Product Size	φ80×48mm

# KNX Add-ons

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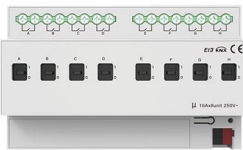


### Power Module (960mA)

Power supply stability and signal transmission reliability guaranteed

- Dual output: Supports two outputs with a total current of 960mA
- Overload protection: Automatically cuts power and alerts
- Short-circuit protection: Automatically cuts power and alerts
- Bus reset: Supports

Specification	
Product Model	KXPW-B1A960
Input Voltage	180 ~ 264VAC
Output Voltage	30V DC
Output Current	<960mA (total for both channels)
Number of Channels	2 channels
Working Temperature	-5°C ~ 45°C
Working Humidity	10% ~ 95% RH (non-condensing)
Product Dimensions	90×72×64mm
Installation	35mm DIN rail

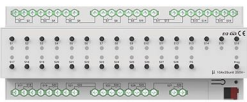


### Switch Module (8-Gang, 16A)

KNX-certified high-quality accessories

- Supports manual control directly on the device
- Staircase lighting function
- Delay setting options
- Power-off memory function

Specification	
Product Model	KXAC-B1R8A16
Bus Voltage	21 ~ 30VDC
Bus Current	<20mA
Bus Consumption	<0.6W
Control Units	8
Rated Voltage	250V/440VAC, 50/60Hz
Single Channel Load Limit	Max 3680W
Output Switching Current	16A/230V
Working Temperature	-5°C ~ 45°C
Working Humidity	0% ~ 93%RH (non-condensing)
Product Dimensions	144×90×64mm
Certification	CE, KNX

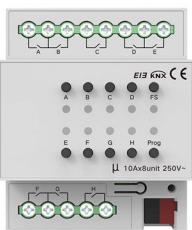


### Switch Module (28-Gang, 10A)

KNX-certified high-quality accessories

- Supports manual switch operation
- Time-setting function for delayed switch control
- Logical functions (AND, OR, XOR) and gate functions
- Provides feedback on device switch status
- Configurable scene functionality
- Simple wiring and operation

Specification	
Product Model	KXAC-B1R28A10
Bus Voltage	21 ~ 30VDC
Bus Current	<20mA
Bus Consumption	<0.6W
Control Units	28
Rated Voltage	250V/440VAC, 50/60Hz
Single Channel Load Limit	Max 2300W
Output Switching Current	10A/230V
Working Temperature	-5°C ~ 45°C
Working Humidity	0% ~ 93%RH (non-condensing)
Product Dimensions	216×90×64mm
Certification	CE, KNX



### Switch Module (8-Gang, 10A)

KNX-certified high-quality accessories

- Support manual control directly on the device
- Staircase lighting function
- Delay setting options
- Power-off memory function

Specification	
Product Model	KXAC-B1R8A10
Bus Voltage	21 ~ 30VDC
Bus Current	<20mA
Bus Consumption	<0.6W
Control Units	8
Rated Voltage	250V/440VAC, 50/60Hz
Single Channel Load Limit	Max 2300W
Output Switch Current	10A/230V
Working Temperature	-5°C ~ 45°C
Working Humidity	0% ~ 93%RH (non-condensing)
Product Dimensions	72×90×64mm
Certification	CE, KNX



### 2/4/6/8 -Button Scene Panel (KNX)

Seamlessly integrates with actuators for one-touch control of lighting and environments



- Works with actuators for switching, dimming, color adjustment, and blind control
- Supports scene calling and storage
- Enables delayed value transmission (e.g switch or dimming values)
- Allows multiple actions via a single button

#### Specification

Product Model	KXKS-B1B2-EU KXKS-B1B4-EU KXKS-B1B6-EU KXKS-B1B8-EU
Bus Voltage	21-30V DC
Bus Current	<12mA
Bus Consumption	<360mW
Auxiliary Voltage	21V-30V DC
Installation Method	Standard 60mm installation box
Working Temperature	-5°C ~ 45°C
Working Humidity	<93%RH (non-condensing)
Product Dimensions	86×86×38.2mm
Certification	CE, KNX

### Temperature Control Panel with 4 Buttons

Various control modes with display of real-time environmental data



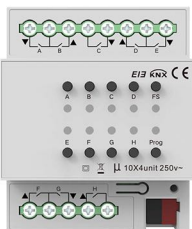
- Multi-mode control for AC, ventilation, and underfloor heating
- Customizable temperature control display
- Real-time environmental data display
- Supports switching, dimming, color tuning, and blinds control via actuator
- Scene recall and storage
- Delayed transmission of values
- Multi-functional button operation

#### Specification

Product Model	KXTC-B1B4-EU
Bus Voltage	21 ~ 30V DC
Bus Current	<12mA
Bus Consumption	<360mW
Auxiliary Voltage	21 ~ 30V DC
Auxiliary Power Consumption	<1W
Temperature Setting Range	16°C ~ 30°C
Temperature Display Accuracy	±0.1°C
Humidity Display Range	0% ~ 100%
Working Temperature	-5°C ~ 45°C
Working Humidity	0% ~ 93%RH (non-condensing)
Installation	Standard 60mm installation box
Dimensions	86×86×38.2mm
Certification	CE, KNX

### 4-Gang Curtain Module

KNX-certified high-quality accessories



- Manual switch control
- Delayed opening/closing
- Power-off memory
- Inverted output capability

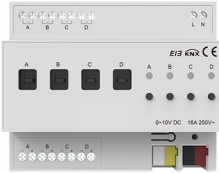
#### Specification

Product Model	KXAC-B1C4
Bus Voltage	21 ~ 30VDC
Bus Current	<20mA
Bus Consumption	<0.6W
Control Units	4
Rated Voltage	250V/440VAC, 50/60Hz
Single Channel Load Limit	Max 2300W
Output Switching Current	10A/230V
Working Temperature	-5°C ~ 45°C
Working Humidity	0% ~ 93% RH (non-condensing)
Product Dimensions	72×90×64 mm
Certification	CE, KNX

### 4 Gang 0-10V Dimmer Module

Stable and reliable 0-10V intelligent dimming

- 4 independent 0-10V dimming channels
- Smooth, flicker-free brightness adjustment
- Local manual control for on/off and dimming
- Switch, relative, and absolute dimming modes available
- Staircase lighting function

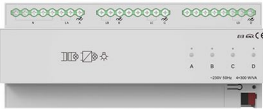


Specification	
Product Model	KXAC-B1DV4
Input Voltage	21 ~ 30VDC (Bus) 110 ~ 250VAC (L, N, for Dimming)
Bus Current	<12mA
Bus Consumption	<360mW
Dimming Channel	4
Output Voltage	0 ~ 10VDC (Max. 100mA/Gang)
Output Contact Switch Current	Max 16A (250VAC) Maximum allowable working current with fluorescent lamp load: 10A (250VAC)
Working Temperature	-5°C ~ 45°C
Working Humidity	0% ~ 93%RH (non-condensing)
Product Dimensions	108×90×64mm
Installation	35mm DIN rail
Certification	CE, KNX

### 4-Gang 300W Thyristor Dimmer Module

Comprehensive dimming capabilities for highly flexible and user-friendly lighting solutions

- Advanced SCR dimming technology
- Manual on/off control directly on the device
- Switch, relative, and absolute dimming modes available
- Staircase lighting function
- Leading-edge phase-cut dimming

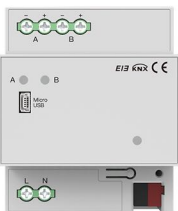


Specification	
Product Model	KXAC-B1D4P300
Bus Voltage	21 ~ 30VDC
Bus Current	<12mA
Bus Consumption	<360mW
Output Channels	4
Rated Voltage (Output)	100 ~ 230VAC (50/60Hz)
Per Channel Output Power	Max 300W
Operating Temperature	-5°C ~ 45°C
Operating Humidity	0% ~ 93%RH (non-condensing)
Product Dimensions	216×90×64mm
Installation	35mm DIN rail

### Dual-channel DALI Gateway

Seamless KNX and DALI integration for smart, effortless lighting control

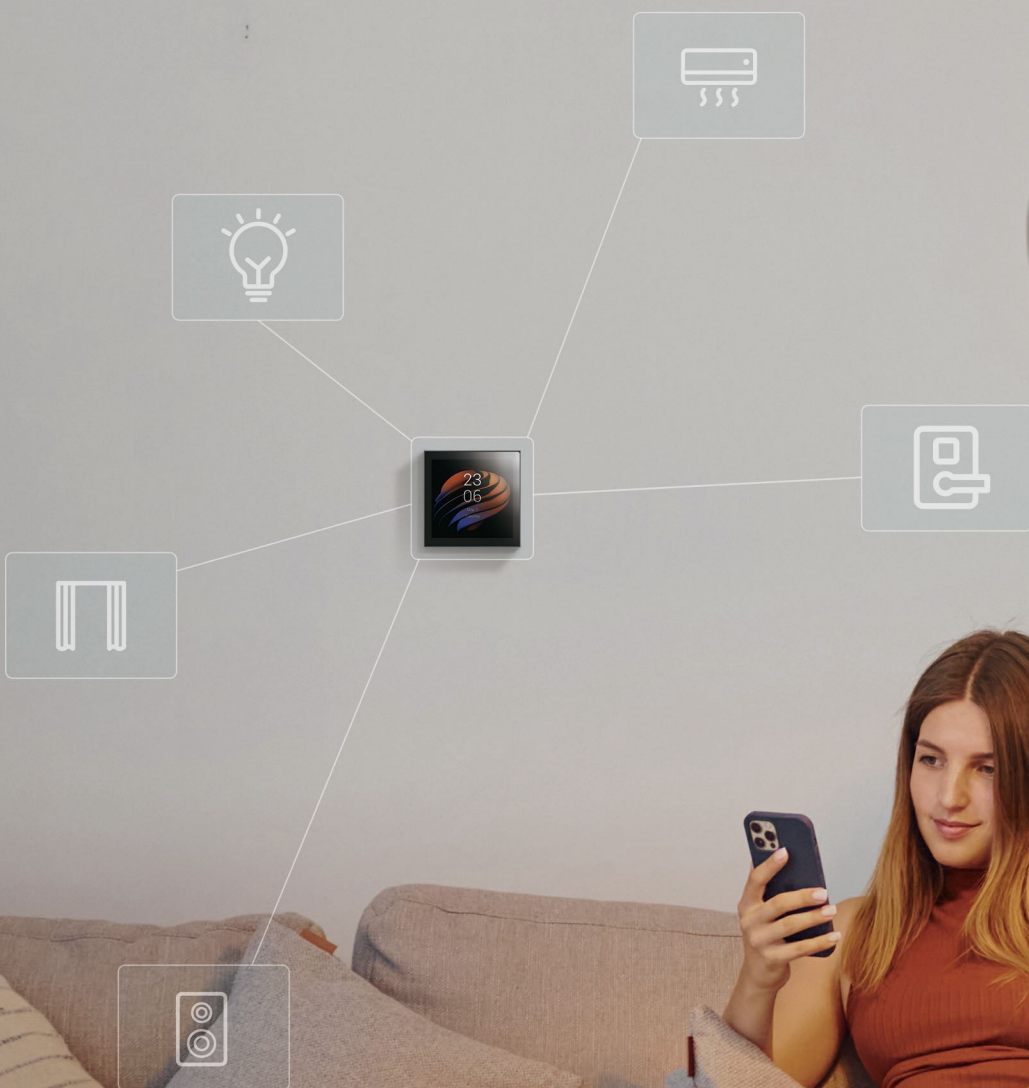
- Dual-channel DALI control, with up to 64 devices per channel
- Supports DT6, DT8 Tc, DT8 XY, DT8 RGB
- Wide voltage range design with integrated DALI bus power supply
- DIN rail mounting



Specification	
Product Model	KXAC-B1DD2
Input Voltage	21 ~ 30VDC (KNX Bus) 100 ~ 240VAC, 50/60Hz (for DALI control)
Consumption Current	<10mA (KNX Bus) <48mA (Mains)
Power Consumption	<210mW (KNX Bus) <11W (Mains)
Output Channels	2
Maximum Supply Current Output	2×250mA
DALI Device Quantity	64 per channel
Supported Device Types	DT6, DT8 Tc, DT8 XY, DT8 RGB
DALI Voltage Output	16VDC
Working Temperature	-5°C ~ 45°C
Working Humidity	0% ~ 93%RH (non-condensing)
Product Dimensions	90.1×72×66.4mm
Installation	35mm DIN rail

# Platforms

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# BelaHome App

Embrace the simplicity and convenience of device management, scene customization, smart intercom, and more — all at your fingertips.



## Smooth Whole-Home Control

Effortlessly oversee all your smart home devices, regardless of your location.



## Localized Service & Data

Data and services are localized for enhanced user information security and system reliability, ensuring worry-free operation.



## Personalized Scene Customization

Create and access customized scenes and schedules for your smart home.



## Efficient Device Group Control

Create device groups for streamlined control of multiple devices with a single tap.



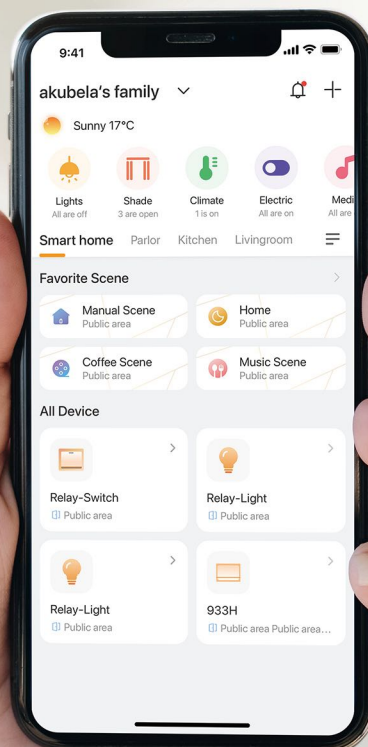
## Effortless Door Intercom

Enjoy crystal-clear audio and video calls with visitors and efficiently manage door access.



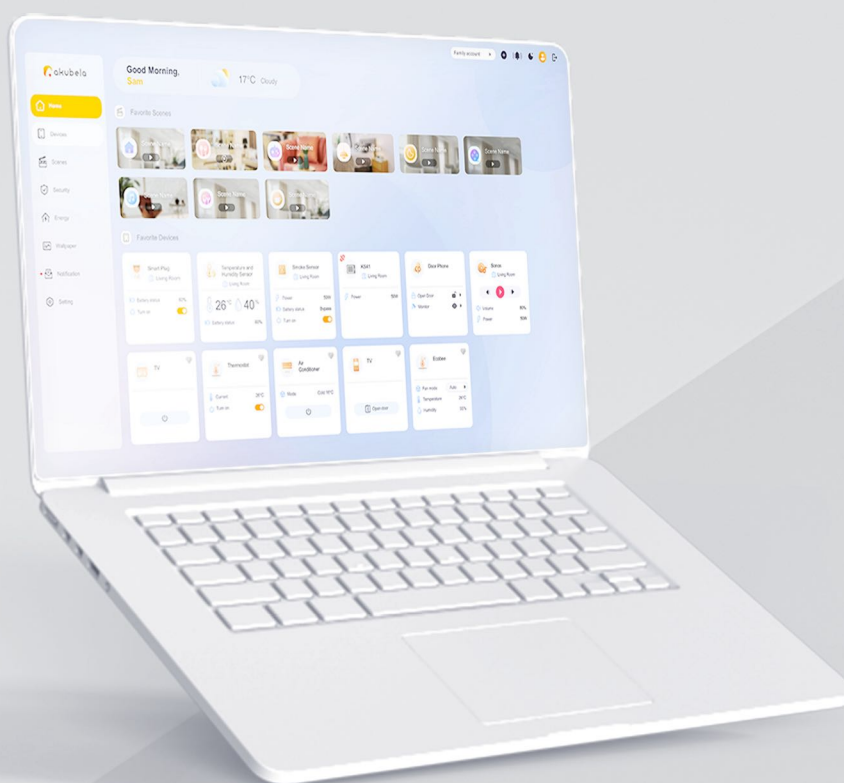
## Instant Alarm Alert Notifications

Stay informed with instant alarm alerts, enabling you to monitor your home in real-time.



# BelaHome Web

BelaHome Web, a powerful PC-based platform, puts you in control of your home. Effortlessly manage all your smart devices and experience efficient creation of customized scenes. No technical expertise needed – simply adapt your smart home to your lifestyle and preferences.



- **Brand-Agnostic Convenience**

No more juggling between apps. BelaHome Web supports a wide range of brands and device types, offering a unified control experience.

- **Energy Management Made Easy**

Stay updated on real-time energy consumption and soon manage energy usage to save on household expenses.

- **Personalized Automation**

Tailor automation scenes to align with your preferences and daily routines. Creating and managing scenes is now a breeze.

- **Enhanced Security Configuration**

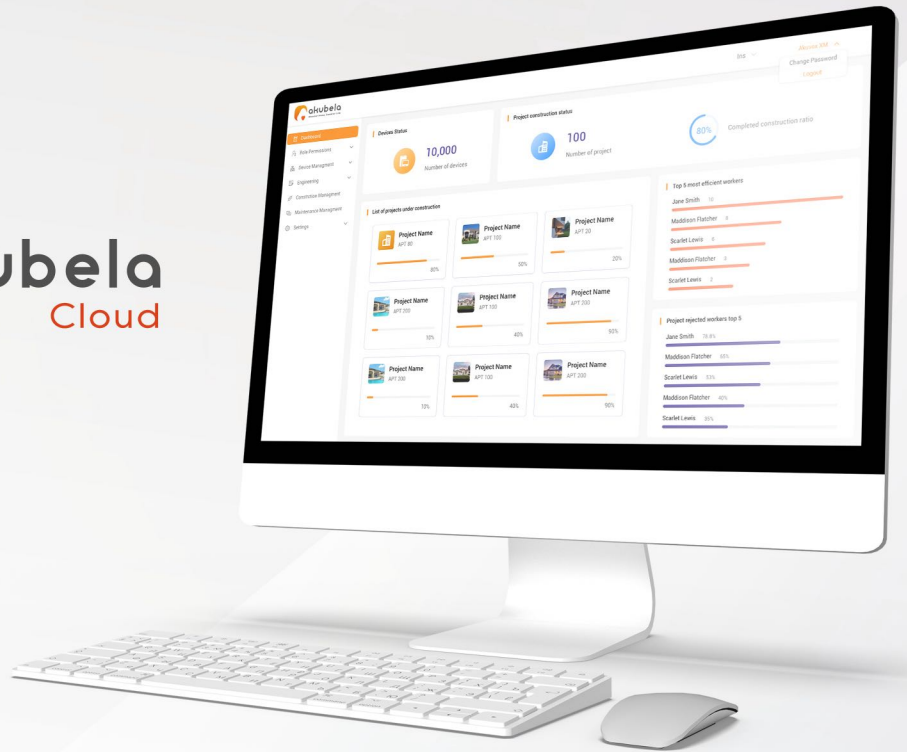
Remote control and monitoring, automatic arming and disarming - all through the Web, eliminating human errors.

- **User-Friendly Design**

With clear navigation and an intuitive layout, BelaHome Web ensures effortless adjustments and easy exploration.



**akubela**  
Cloud



## akubela Cloud

akubela Cloud is a management platform designed for smart home installers. With akubela Cloud, you gain the capability to effectively oversee and execute smart home projects while seamlessly integrating with third-party ecosystems.

### Efficient Project Management

From individual residences to apartment complexes and entire communities, akubela Cloud accommodates a variety of smart home projects. Simplify the management of projects, devices, and users through its intuitive controls.

### Swift Bulk Deployment

Leverage our home layout templates to apply the same device inventory, security settings, and scenes to numerous households, ensuring the rapid deployment of multi-residential projects.

### Streamlined Device Maintenance

The portal empowers installers to monitor real-time device performance, upgrade systems, and configure data for optimal functionality remotely from a PC – eliminating the need for on-site visits.

### Seamless Third-Party Integration

Open interface protocols for cloud-to-cloud integration are readily accessible, facilitating seamless incorporation with third-party systems such as Amazon Alexa, Google Home, and Apple HomeKit.





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