GVS®

Stock code: 870976

Smart Home & Building Automation Control System

Product Catalogue

CONTENT

About GVS

GVS (Stock Code: 870976) was established in 1999. As one of China's earliest high-tech enterprises engaged in building intelligence, GVS is dedicated to providing smart home and building intercom system products and services for global high-end residential and commercial spaces.

Milestone

Start-up In 1999, GVS offcially entered the CRT/LCD busines.

Our story started from over 20 years ago, with a strong connection to Europe market...

Picture from 1999

Breakthrough In 2008, GVS become the first Chinese KNX Manufacturer.

A full and versatile line of KNX has come into shape after 16 years persistance...

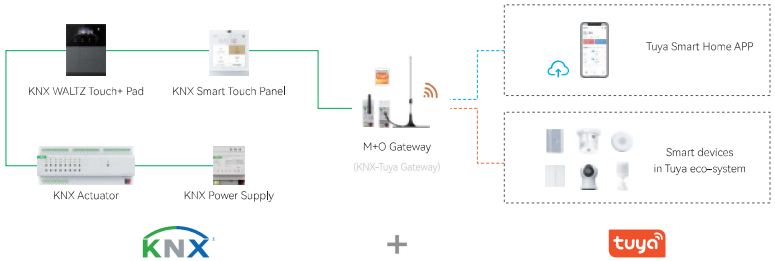
Family of Video Intercom

Innovation In 2018, we merge wiring & wireless !

Wiring + Wireless = Stability + Flexibility → The power of the KNX/Tuya Zigbee Gateway !

Main + Optional

How it works ?



Evolution In 2023, GVS' BSE IPO application was approved.

AIoT

Edge computing

COMPANY STRATEGY

1 Interaction Way + 2 Core Product Lines + N Extention Possibilities

Smart Touch Panel

Smart Building System

Video Intercom System

Eco System Integration (KNX-Tuya)
Technology Expansion (SIP protocol-video intercom)
Protocol Expansion (DALI/RS485/RS232, etc.)
Sensor Expansion (illumination/movement/presence...)

Professional Manufactory

At GVS, we understand that our customers demand high-quality products that meet their specific needs. That's why we've invested in a modern factory that covers over 6000 square meters and strictly adheres to the ISO 90001 quality management system during the production process. With 11 lean production lines, we have the capacity to efficiently handle both large-scale deliveries and small-scale customization, ensuring that our customers receive the products they need, when they need them.

Product Line

K-BUS Smart Home/Building Control System

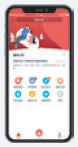
KNX Products

Airhome APP

Smart Building Management Platform

Video Intercom System

Video Intercom Products



Smart Community APP

Smart Community Management Platform

Realized Features

Smart Lighting | Shading Control | HVAC Control | Scene Control | Surveillance Control | Environmental Sensing | Audio-video Integration | Voice Control

Timing Function | Motion Sensing | Remote Software Control | Building Intercom | Security Alarm | Smart Access Control | Smart Elevator Call | Pay Utility Bills

Business Scope

For over 20 years, GVS has provided stable and innovative smart home and building systems for high-end residential and commercial spaces, as well as integrated smart lighting solutions for large public buildings.


High-end Residences


Real Estate

Commercial Spaces


Commercial Complex


Rail Transit


Smart Campus


Smart Hotel


Smart Office


Smart Hospital

Featured Project ▸▸

Daxing International Airport

- Location: Beijing, China
- Project Type: Airport
- Size: Departure Lounge & Landing Field

Beijing Daxing International Airport, as one of the TOP 3 airports globally, has finished its last phase of installation in mid 2019. The airport is famous for its unique and elegant design as well as it's huge capacity for passengers, it's praised as one of "The New Seven Wonders Worldwide" by British Guardian. GVS, as the leader of the smart building in China, has participated in the airport automation in its decoration phase and successfully installed thousands of KNX components in the brand new airport to enable smart lighting control, HVAC control etc. Till today, Daxing International Airport has become the biggest and most successful KNX airport project.

Guangzhou Metro System

- Location: Guangzhou, China
- Project Type: Metro Station
- Size: 42 stations lighting control

GVS has won the KNX automation part in the latest THREE Guangzhou new lines: line #13, #14, #21 with 42 stations. The whole project has successfully been installed in 2018 and handedover to the civic operation office. With a huge number and extreme length, the Guangzhou Metro system now becomes the largest KNX automation system in the category of metro system worldwide. Besides, GVS is also working closely with metro/train station systems in other major cities like Shenzhen, Ji'nan, Zhangjiajie, Foshan etc.

Hangzhou International Airport
Hangzhou, China

Alibaba Headquarter
Hangzhou, China

Guangzhou Metro
Guangzhou, China

Smart Istanbul Residential Community

- Location: Istanbul, Turkey
- Project Type: Residential
- Size: 3000 Residence

As the biggest residential community in the capital city, the best smart community solution is required for a better living and management. By using GVS IP video intercom system, it offers a stable & reliable solution for the video intercom among visitors, residence and security guard. What's more, it also makes this huge community closly connected & smarter with features of alarm, surveillance, face recognition, remote APPs, lift control, QR code unock etc.

Scandinavia Luxury Apartment

- Location: Jakarta, Indonesia
- Project Type: Commercial-Residential Complex
- Size: 1000+ apartments

With the help of GVS smart community technology, Scandinavia Apartment becomes one of the most significant building in Jakarta city. The Commercial-Residential complex solves the living problem, while GVS smart community solution improves the living quality. Over 2,000 GVS video intercom & KNX smart home devices contributed a lot in the automation & security of the building in 2018.

Wuxi Spring Garden
Wuxi, China

Qianjing Garden
Shanghai, China

Haoyuan Apartment
Xinjiang, China

Haoyuan Community
Jinan, China

Featured Project ▸▸

KL Eco City

- Location: Kuala Lumpur, Malaysia
- Project Type: Commercial-Residential Complex
- Size: 500+ apartments

As special commercial & residential complex, the KL Eco City in Malaysia has planned quite environmentally friendly systems, among which KNX is one of the most important system. Over a thousand and half pcs of KNX devices from GVS have contributed to the automation of the building, helping the project win the first GBI Gold Medal in Malaysia.

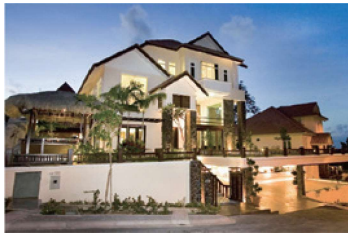
JIN MAO
Palace Condominium

- Location: Guangzhou, China
- Project Type: high-end condominium
- Size: 2400+ condo apartments

CHINA JIN MAO GROUP, as a Fortune 500 Company, is one of the biggest real estate and hotel investment group company in China. As s strategic partner of JIN MAO group, GVS has successfully helped the real estate giant in its condominium projects in Shenzhen, Guangzhou, Fuzhou, Xianmen and other big cities in China. With a combination of GVS tailored switches and solutions based on KNX home and building automation system, the high-end condos nowadays produced by JIN MAO are leading the real estate industry with smart home conception.

Résidence Marcel Marlier
Tournai, Belgium

Yun Shan Shi Yi Community
Guangzhou, China



Seri Pilmoor 110 Villas
Kuala Lumpur, Malaysia

HuaYuan · Dayi Resort
Guangzhou, China

Fairmont Marina Residences

- Location: Abu Dhabi, UAE
- Project Type: hotel residences
- Size: 249 serviced apartments

Fairmont Marina Residences, a 39-storey Arabian themed skyscraper which resembles the hotel located at the top of Dubai's Palm Jumeirah, is the first Fairmont-branded hotel residences in the UAE, it's part of the 563-room Fairmont Marina Resort in Abu Dhabi. GVS, by actively participating in the hotel decoration process of the project, has worked with a few other KNX brands and successfully equipped the hotel residences with the latest smart hotel technology.

Grand Hyatt Athens

- Location: Athens, Greece
- Project Type: 5-Star Hotel
- Size: 300 guest rooms

Grand Hyatt Greece, as a 5-star luxurious hotel under Hyatt Hotel Group, reopened in 2018 after a systematic renovation with GVS KNX hotel system. The hotel, as a landmark of Athens, started to accept its customers since 1983 and stopped in 2010 because of the crisis. Based on the latest KNX technology, GVS helped the hotel in its automation part and finally turned the hotel to smarter and more comfortable one with its advanced KNX technology.

InterContinental Hotel
Wuxi, China

Falkensteiner Schlosshotel
Austria

Herbarium Hotel & SpA
Gmina Gąsawa, Poland

W Hotel
Guangzhou,China

GVS Smart Home System

Build A Safe, Stable, And Future-oriented Smart Home System

K-BUS Smart Home System (Built on KNX Technology)

K-BUS®

K-BUS is a smart control system with independent intellectual property rights developed by GVS based on KNX.

KNX®

The only open international standard in the field of residential and building controls.

1. Global standard

KNX is an international standard recognized globally. It is also compliant with European, American, Australian, and New Zealand technical specifications.

2. Ensuring product performance and quality

KNX strictly control the quality of the product throughout its entire life cycle. Standard products must pass KNX and CE certification to ensure interoperability and safety.

3. Interoperability

KNX is jointly developed by over 500 top manufacturers worldwide, with over 8,000 products that can be interconnected.

4. Powerful functions with open compatibility

KNX covers a wide range of functions including lighting, shading, HVAC, security, and background music, and is compatible with other systems and products.

5. Energy-saving

KNX offers multiple smart control measures, including timing control, human body sensing, constant illuminance management, and energy monitoring, which can save more than 30% of energy compared to traditional buildings.

6. Multiple networking methods

KNX supports multiple networking methods, including linear, star, and tree topologies, which can be flexibly selected according to project needs, effectively reducing construction costs. Each KNX system can connect to more than 61,000 devices.

7. Stability and reliability

KNX uses dedicated cables for communication, ensuring strong signal stability and anti-interference performance. Each device operates independently, avoiding system failure caused by a single device malfunction.

8. High security

KNX is equipped with KNX Secure technology, which provides strong defense against malicious attacks and illegal control by hackers and network viruses.

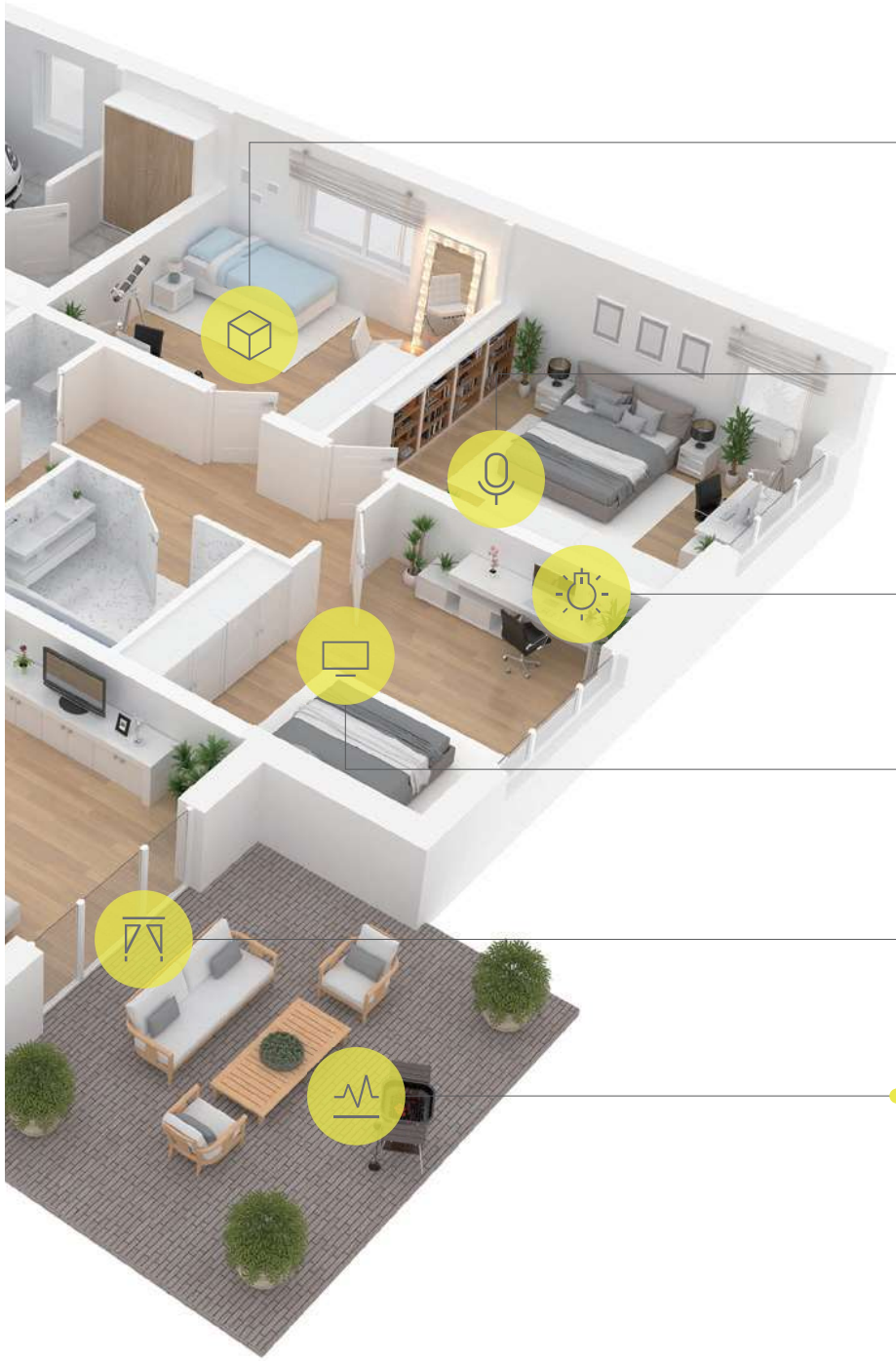
9. Long history and extensive applications

KNX has been used globally for more than 30 years and has mature technology, widely applied in residential, commercial, and public buildings.

10. Uniform configuration software and wiring, with internationally certified technical engineers

KNX has a unified configuration software (ETS) and wiring, which is highly efficient for debugging. Professional KNX technical engineers ensure the quality of project implementation.

Smart Home System



Diversified smart control

Voice control
Sensor control
Smart central control screen

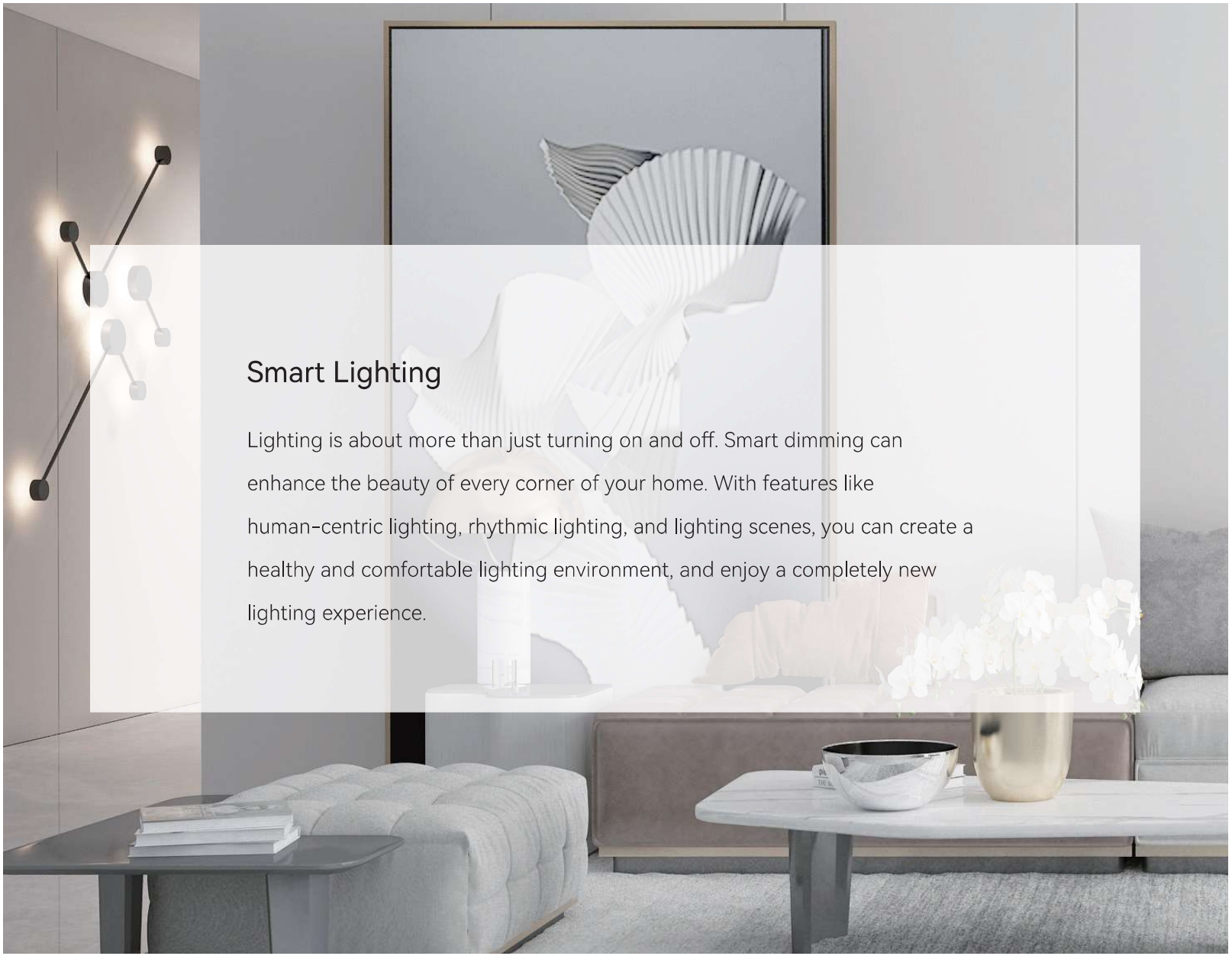
Smart voice system

Smart lighting system

Smart home appliance system

Smart shading system

Energy management system



Smart Lighting

Lighting is about more than just turning on and off. Smart dimming can enhance the beauty of every corner of your home. With features like human-centric lighting, rhythmic lighting, and lighting scenes, you can create a healthy and comfortable lighting environment, and enjoy a completely new lighting experience.

Smart Switching

Control single/multiple lighting circuits through smart screens, intelligent panels, mobile apps, and turn them on/off with just one touch.

Please turn on the living room lights.

The living room lights have been turned on.

Smart Dimming

Adjust the brightness of the lighting from 0% to 100%, and switch between warm and cool color temperatures from 2700K to 6500K. Experience a vivid display of colors, with the ability to switch between red, orange, yellow, green, cyan, blue, and purple hues.

2700k 3200k 4000k 5000k 6000k 6500k

Motion Sensing

When a person approaches, the lights turn on, and when a person leaves, the lights turn off. The lights automatically turn off during the day and turn on at night. Intelligent detection of time, changes in human movement patterns, and behavior status automatically match suitable lighting effects.

Lighting Scenes

Room lighting at 50% All lights off Hallway lighting at 30%

Reading scene Leaving home scene Getting up at night scene

Smart Sunshade

You no longer need to walk up to the window to open or close the curtains. With smart touch panels, mobile apps, or voice commands, you can easily control the curtains at your will. Adjust the opening ratio from 0% to 100% to control the lighting and privacy according to your needs.

- Curtain control
- Adjust the opening ratio
- Set schedules for opening and closing
- Customize smart scenes

Smart Temperature Control

Say goodbye to the cumbersome traditional thermostats. With just one smart panel, you can control the air conditioning, ventilation, floor heating, and more.
When the sensor detects that the room temperature is too high, the system will automatically adjust it to a breezing level, providing a cool and caring environment for your family.

Video Surveillance

Safety is the cornerstone of all smart solutions. It is essential to ensure the safety of your home and your loved ones.

- Intelligent access
- Control real-time monitoring
- Security alarm
- Security scenes

Environment Control

- The system monitors environmental data such as illumination, temperature, humidity, carbon dioxide concentration, and air quality.
- When any environmental data is abnormal, the system will automatically adjust the linked devices or home appliances.

Audio-video Entertainment

Comfortable living is enhanced with the accompaniment of Audio-video content. The GVS smart home system can seamlessly connect with your home Audio-video devices, providing you with superb Audio-video experiences that are easy to operate.

Smart Scenes

Morning Scene

By setting up the morning mode in advance, at a specific time in the morning, the system will slowly open the curtains, allowing sunlight to enter the room. Meanwhile, the soothing background music will start to fade in, allowing you to wake up without any startling noise, and enjoy a refreshed mind and body.

Leisure Scene

With precise single-lamp control or group-lamp control, you can create a cozy corner for reading or relaxing, enjoying a peaceful quality time.

Away Scene

Simply say "away mode" when you leave home and all your electrical devices will turn off automatically. This is not only a time-saver but also helps you avoid wasting energy and eliminates safety hazards caused by forgetting to turn off appliances. With this feature, you can have peace of mind knowing that your home is safe and secure while you're away.

Security Scene

When you activate the security system, all protection zones are automatically armed, keeping your home safe and secure. The system also includes human body sensors that detect any changes in activity within the detection area.

Back-home Scene

As soon as you arrive home and push open the door, the door magnetic sensor is triggered and warm lights gradually illuminate your path from the foyer to the living room. The curtains quietly slide open, letting in the beautiful colors of the sunset. Soothing background music gradually fills the room, relaxing your body and mind. Unwind from a long day and enjoy the comforts of your smart home.

Dining Scene

As you sit down for a meal with your family, the recessed lights automatically adjust to the perfect brightness and color temperature, making the food look even more delicious and enhancing your appetite. Surrounded by your favorite music, you can enjoy a warm and cozy mealtime with your loved ones, creating cherished memories and moments together in your smart home.

Movie Scene

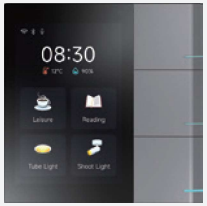
Transform your living room into a cinema with just one click. The projector and motorized screen automatically open, and the lighting adjusts to the perfect state with only the wall lights and TV's background light strips on. Enjoy your favorite movies and shows in immersive quality, all from the comfort of your home.

Sleeping Scene

Soft lighting and a comfortable temperature promote sleepiness, while the security system ensures a peaceful and restful night's sleep. Wake up feeling refreshed and rejuvenated, knowing your home is safe and secure.

Nighttime Scene

Our motion sensor detects your movement and automatically turns on a gentle night light, so you don't have to search for the light switch. And when you return to bed, the light turns off. With our smart home features, say goodbye to stumbling around in the dark and hello to a more convenient nighttime routine.



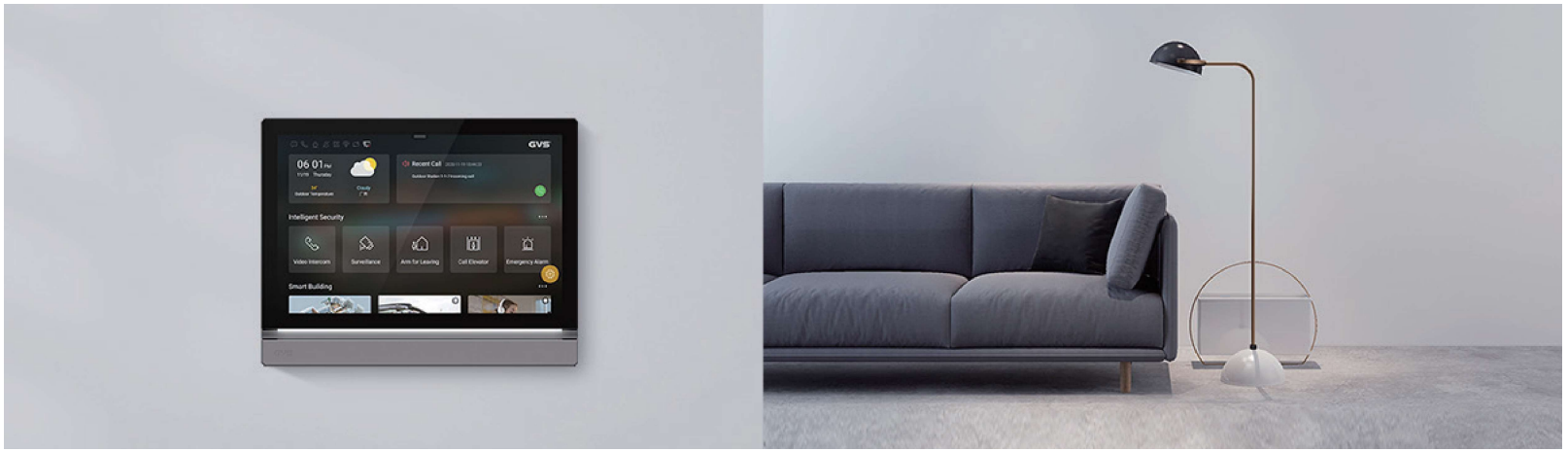
KNX Products

KNX Smart Touch Panels

KNX Sensors & Input Devices

KNX Actuators

KNX System Devices & Gateways



KNX Smart Touch Z10

A-IS03

Starry Gray

Key Features:

- Smart touch panel for both KNX and video intercom.
- Aesthetic design with aluminum faceplate.
- 10.1 inch colored IPS touch screen, 1280*800 resolution.
- Support both map-view and list-view of all KNX functions.
- Colored breathing light adjustable for color temp and brightness.
- 8 time functions, 4 event group functions and 8 logic functions.
- Switching, dimming, curtain control, HVAC and other KNX functions.
- Support German standard twin-60mm wallbox installation.

Specifications

- Dimension: 240*186.8*8mm (Screen)
- Installation: Wall-mounted (fits 86mm and twin 60mm wallbox)
- Available Color: Starry Gray

KNX Smart Touch S7

CHTF-7.0/120.1.23 (Standard Version)
CHTFB-7.0/120.1.23 (Button Version)
CHTFR-7.0/120.1.21 (Knob Version)

Starry Gray

Key Features:

- 7-inch screen, 1440*720 resolution.
- 1+N modular design based on a touch screen, supporting N-part extensions (decorative metal strips, physical buttons, rotary knobs).
- Support KNX device control (lighting, shading, HVAC, etc.).
- Support three control modes: separate device control, area group control, and control via floor plan view.
- Support SIP video intercom function.
- Support voice message function.
- Support security monitoring, arming and disarming function.
- Support customizable home page and key functions.

Specifications

- Dimension:
  172*86*11.8mm (Standard version)
  217*86*11.8mm (Button version)
  233*86*11.8mm (Knob version)
- RAM: 2GB
  ROM: 8GB (expandable to 16GB)
- Microphone: 4 array with pick-up range up to 10m
- Speakers: dual 2*1W output

KNX Smart Touch V50s

CHTF-5.0/15.5.21 (Black)
CHTF-5.0/15.5.22 (Silver)

Key Features:

- Standard KNX Touch Panel with database & certificate.
- 5" colored capacitive IPS touch screen, resolution 480*854.
- Up to 2 home pages and 15 function pages can be configured16 time functions, 8 event group functions, 8 logic functions.
- Password protection and customized screensaver.
- Support switching, dimming, shutter control, HVAC control etc.
- Built-in temperature sensor.
- Available with two colors silver & black , two types vertical & horizontal.
- Supporting ring included for installation, perfectly fits 60mm/86mm wallbox.

Classic Black

Celestial Silver

Specifications

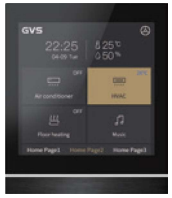
- Dimension: 86*148.8*32.5mm (panel thickness 11.5mm)
- Installation : Wall-mounted (60mm or 86mm wall-box, fit UK standard, some US and Australian standard junction box)
- Bus Voltage: 21-30V DC, obtained through KNX bus
- Bus Current: 6mA/24V DC, 5mA/30V DC
- Auxiliary Voltage: 24-30VDC
- Auxiliary Current: <99mA/24V DC, <82.5mA/30V DC
- Available Color: Classic Black, Celestial Silver

KNX Smart Touch V40s

CHTF-4.0/9.5.21 (Black)
CHTF-4.0/9.5.22 (Silver)

Key Features:

- Standard KNX Touch Panel with database & certificate.
- 4" colored capacitive IPS touch screen, resolution 480*480.
- Up to 9 funciotn pages.
- 16 time functions, 8 event group functions, 8 logic functions.
- Password protection and customized screensaver.
- Support switching, dimming, shutter control, HVAC control etc.
- Built-in temperature sensor.
- Available color: Classic Black, Celestial Silver.
- Supporting ring included for installation which fits 60mm/86mm wallbox.



Classic Black

Celestial Silver

Specifications

- Dimension: 86*101.3*32.2mm (panel thickness 10.5mm)
- Installation: Wall-mounted (60mm or 86mm wall-box)
- Bus Voltage: 21-30V DC, obtained through KNX bus
- Bus Current: <4.5mA/24V DC, <4mA/30V DC
- Auxiliary Current: <86mA/24V DC, <71mA/30V DC
- Auxiliary Voltage: 24-30VDC

KNX Smart Touch S3

CHTF-3.3/3.1.01

Starry Gray

Key Features:

- Integrates smart home and SIP video intercom.
- Screen key design, 3.3-inch touchscreen + 3 physical keys.
- 480*320 resolution.
- The touchscreen supports multi-touch, and the keys can be used as shortcuts.
- The button indicator lights up when the button is pressed and returns to its normal brightness when the button is released.
- Support for wired KNX smart home, including lighting, curtains, air conditioning, scenes, etc.
- Support remote control and management through an app.

Specifications

- Dimension: 86*86*10.5mm
- Installation : Wall mounted (fits 60mm and 86mm wall box)
- CPU: Dual-core ARM Cortex-A7

KNX Smart Touch Panels ▸▸

Smart Touch C40 (Zigbee 3.0)

CHTF-ZB40

Key Features:

- Synchronized control of 64 devices (smart sockets, smart switches, air conditioning, floor heating, fresh air, etc.)
- 12 customizable scene linkages.
- Control of 3 relay switches.
- Support for proximity sensing.
- Integration of M+O gateway (Tuya), allowing control of KNX devices.

Specifications

- Working voltage 100–240V
- Display: 4" IPS screen, 480*480
- Touch panel: G+G structure, fully laminated
- Communication protocol docking: Zigbee and WiFi protocols
- Total load: Relay control output Max 2200W (three in total)
- Load type: Resistive load

KNX 2/4/6 Button Touch Switch

CHTB-02/01.2.2x, CHTB-04/01.2.2x, CHTB-06/01.2.2x (x=0,2,4)

Key Features:

- Comprise of glass touch panel and aluminum alloy frame.
- Each button is has a built-in LED indicator.
- Support switch and dimming control, shutter control.
- Recall and storage scene.
- Sending values e.g. water line, brightness.

Specifications

- Dimension: 86*86*8.9mm
- Installation: Wall mounted (fits 60mm and 86mm wall boxes)
- Available Color: Black/Silver/Gold

KNX WALTZ Touch+ Pad

Plastic: CHTFB-3.0/6.1.00(White)
CHTFB-3.0/6.1.01(Black)
CHTFB-3.0/6.1.02(Silver)
CHTFB-3.0/6.1.03(Gray)
CHTFB-3.0/6.1.04(Gold)

Metal: CHTFB-3.0/6.1.20(White)
CHTFB-3.0/6.1.21(Black)
CHTFB-3.0/6.1.22(Silver)
CHTFB-3.0/6.1.23(Gray)
CHTFB-3.0/6.1.24(Gold)

Key Features:

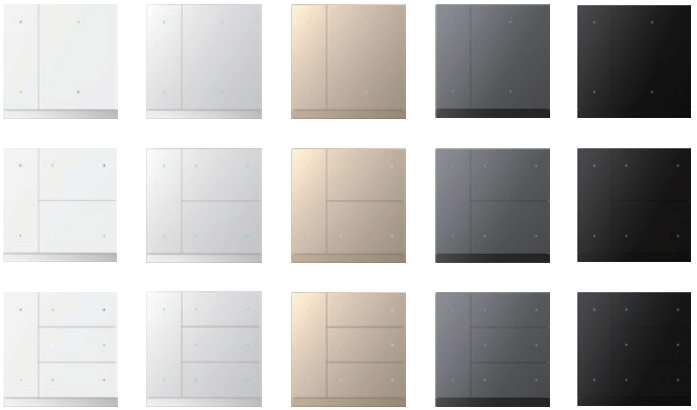
- IPS capacitive touch panel & mechanical button.
- Aluminum frame and replaceable buttons (plastic/aluminum).
- Synchronized animation effects on display when buttons pressed.
- Push Buttons adjustable for I or 2 button operation.
- Built-in temperature sensor, RGB status LED indication.
- Adjustable for button push length, NO or NC contact operation.
- Short/long operation for KNX functions of lighting, scene control, shutter etc.
- Supporting ring included for installation, integrated bus coupling unit.
- 3 years' warranty, 5 classic colors available.

Specifications

- Dimension: 115*86*347mm (panel thickness 9.5mm)
- Installation: Wall mounted (fits 60mm and 86mm wall box)
- Bus voltage: 21-30VDC, obtained through KNX bus cable
- Bus current: <3.5mA/30VDC
- Bus power consumption: <105mW
- Auxiliary voltage: 12-30VDC
- Auxiliary current: <85mA/30VDC
- Auxiliary power consumption: <2.6W

KNX WALTZ Push Button Pro

Metal: CHPB-04/02.1.2x(2-Gang)
CHPB-06/02.1.2x(3-Gang)
CHPB-08/02.1.2x(4-Gang)
x=0,White; x=1, Black; x=2 Silver; x=3 Gray; x=4 Gold



Key Features:

- Latest elegant KNX push buttons for WALTZ Series.
- Push Buttons adjustable for I or 2 button operation.
- Aluminum frame and replacable aluminum button.
- Built-in voice control and temperature sensor, with LED indication.
- Adjustable for button push length, NO or NC contact operation.
- Short/long operation for KNX functions of lighting, scene control, shutter etc.
- Supporting ring included for installation, integrated bus coupling unit.
- 3 years' warranty, 5 classic colors available.

Specifications

- Dimension: 86*86*33mm (panel thickness 8mm)
- Installation: Wall mounted (fits 60mm and 86mm wall box)
- Bus current: <21mA/24V, <18.5mA/30V
- Bus power consumption: <555mW
- Bus voltage: 21-30VDC, obtained through KNX bus cable

Waltz Electrical Socket & Accessories (For 86*86mm wall-box ONLY)

Socket
CHSU-04/10.1.01

Network Socket
CHTN-02/00.1.01

Emergency Button
CHEK-01/00.1.01

KNX Button Smart 3-Gang with Display, 55mm

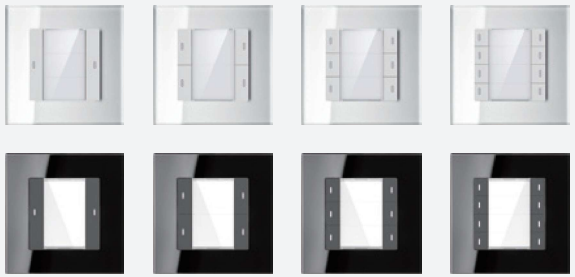
CHPBL-03/00.1.00, CHPBL-03/00.2.00, CHPBL-03/00.2.01

Key Features:

- 100% fits 55mm systems:
  -GIRA Standard 55, E2, E22, Esprit
  -MERTEN 1MM-Pure, M-Smart
  -JungAplus, Acreation, A500, AS50
  -BERKER B3, B7, S1
- Support KNX Secure.
- LCD Display, resolution 240*240.
- Built-in temperature & humidity sensor, 2-fold input interfaces.
- Option I: Push Button (3 pages,4 icons/page) for all KNX functions.
- Option 2: Thermostatic pages, AC(FCU, VRF), floor heating and ventilation.
- Option 3: Background music pages: author/album/song display.

Specifications

- Dimension: 55.3*55.3*19.3mm
- Installation: Wall Mounted (fits 60mm and 86mm wall box)
- Bus voltage: 21-30VDC, obtained through KNX bus
- Bus current: <18mA/24V, <15mA/30V



KNX Push Button Sensor Plus, 55mm

CHPLE-0x/02.y.0z
(x=1,2,3,4 means 1,2,3,4-Gang;
y=1,2 means Shiny/Matt finish;
z=1.3 means White/Black)

Key Features:

- Perfectly fits 55mm systems:
  -GIRA Standard 55, E2, E22, Esprit
  -JUNG Aplus, Acreation, A500, AS500
  -BERKER B3, B7, S1
  -MERTEN 1M, M-Pure, M
- SmartPush Buttons adjustable for 1 or 2 button operation.
- Built-in temperature sensor, RGB status LED indication.
- Adjustable for button push length, NO or NC contact operation.
- Short/long operation for KNX functions of lighting, scene control, shutter etc.
- Centered title block with cover film for customized marking.
- Supporting ring included for installation, integrated bus coupling unit.
- 3 years' warranty.
- Matt/shiny finish available, white/black available.

Specifications

- Dimension: 55.4*55.4*18.7mm
- Installation: Wall Mounted (fits 60mm and 86mm wall box)
- Bus voltage: 21-30VDC, obtained through KNX bus
- Bus current: <18mA/24V, <15mA/30V

KNX Thermostat Lite, 55mm

CHTL-02/00.2.00

Key Features:

- Built-in temperature and humidity sensor.
- Control modes: heating/cooling, with 2/4-pipe system.
- HVAC operation modes: comfort, standby, economy, protection.
- Temperature logic algorithm supports 2-point and PI control.
- Support 2 external inputs of dry contact or NTC temperature detection.
- Support the KNX Secure protocol.

Specifications

- Dimension: 55.3*55.3*19.3mm
- Installation: Wall mounted (fits 60mm and 86mm wall box)
- Bus voltage: 21-30VDC, obtained through KNX bus cable
- Bus current: ≤6mA/24V, <5.5mA/30V

CSBPM-04/00.1.00

KNX Presence Sensor, microwave type

Key Features:

- Detections of normal movement, tiny movement and static presence, with 24GHz millimeter wave technology.
- Sensitivity is configurable and can be adjusted by day/nightInternal temperature and humidity sensors.
- Constant lighting control.
- RTC controllerfunctions.
- Logic functions and scene group functions.
- Support the KNX Secure protocol.

Dimension: ϕ65*38mm
Installation: Ceiling-mounted
Bus current: <4mA/24V, <3.5mA/30V
Auxiliary voltage: 12-30VDC
Auxiliary current: <45mA/12VDC, <22.5mA/24VDC, <18mA/30VDC
Bus voltage: 21-30VDC, obtained through KNX bus cable

CSBP-04/00.1.00

KNX PIR Motion Sensor

Key Features:

- Detection of movement, with ordinary pyroelectric infrared technology.
- Internal brightness sensor, and control the light via brightness threshold and also control logically with motion signal.
- Internal temperature and humidity sensors.
- Constant lighting control.
- RTC controller functions.
- Logic functions and scene group functions.
- Support the KNX Secure protocol.
- Support both ceiling and wall-box mounting.

Dimension: ϕ89*41.3mm (Round), 86*86*51.5mm (Square)
Installation: Ceiling-mounted or wall-mounted
Bus current: <5.5mA/24V, <4.5mA/30V
Bus power consumption: <135mW
Bus voltage: 21-30VDC, obtained through KNX bus cable

CSBP-02/00.2

KNX Motion and Brightness Sensor-8m

Key Features:

- Can be integrated to control with ambient brightness.
- Sequence operation for the motion.
- Motion or Presence detector can be integrated.
- Brightness and motion detection.
- Master-slave detector function.

Dimension: ϕ91*76mm
Installation: Ceiling mounted
Bus voltage: 21-30V DC, obtained through KNX bus cable
Bus current: <12mA
Bus power consumption: <360mW
Installation height: 2.5m-4m
Detection range: Maximum twice the installation height

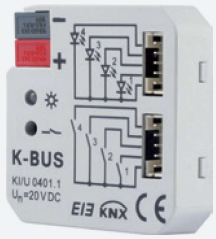
CSAQ1-06/00.1.00(white)
CSAQ1-06/00.1.01(black)

KNX Air Quality Sensor V2

Key Features:

- PM2.5, PM10, VOCAQI, CO2 detection and display.
- Temp, humidity detection and display.
- Warning for value detection.
- Heating or cooling control output.
- Built-in ventilation controller.
- Logic control functions.
- VOC, CO2, alarm output.
- AOI, Humidity level alarm output.

Dimension: 86*86*48.3mm (front panel thickness: 29mm, coupling unit thickness: 19.3mm)
Bus current: <3.0mA/24V DC, <2.6mA/30V DC
Auxiliary voltage: 12-30V DC
Installation: Wall-mounted (fits 80mm and 86mm wall box)
Auxiliary current: <73mA/12V DC, <34mA/24V DC, <26mA/30VDC
Bus voltage: 21-30V DC, obtained through KNX bus cable



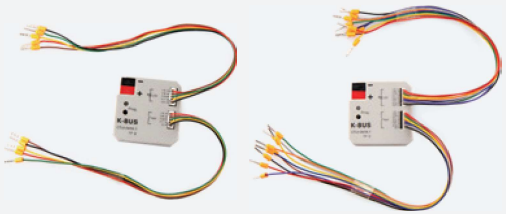
KI/U0401.1

KNX Universal Interface, 4-fold

Key Features:

- Switching and dimming.
- Control of blinds and shutters.
- Sending ofvalues, e.g water line, brightness.
- Recall and storage scene.
- Switching sequence.
- Counter.
- Multiple operation.
- 5V LED indication output.

Dimension: 46*46*11.7mm
Installation: Wall mounted (fits 60mm or 86mm wall box)
Bus voltage: 21-30VDC, obtained through KNX bus cable
Bus current: <12mA
Bus power consumption: <360mW
Input scanning voltage: 20VDC
Input scanning current: 0.5mA
LED output voltage: 5V DC
LED output current: <2.5mA, limited by a 2KΩ resistor in series
Input cable length: <10m



CTU1-04/04.1, CTU1-08/08.1

KNX Universal Interface, 4/8-fold

Key Features:

- Switching and dimming.
- Control of blinds and shutters.
  Sending ofvalues, e.g. water line brightness.
- Recall and storage scene.
- 12V LED indication.
- Switching sequence.
- Counter.
- Multiple operation.
- LED indication output.

Dimension: 46*46*11.7mm
Installation: Wall mounted (fits 60mm or 86mm wall box)
Operating voltage: 21-30V DC, provided by the bus cable
Bus power consumption: <360mW
LED driver voltage: internally supplied with 12V DC, externally supplied with 12V or 24V DC
LED driver current: 0.9mA

CTBI-04/00.1

KNX Binary Input, 4-Fold

Key Features:

- Switching and dimming.
- Control of blinds and shutters.
- Sending of values, e.g. water line, brightness.
- Recall and storage scene.
- Switching sequence.
- Multiple operation.
- LED indication.
- Manual operation.

Dimension: 36*90*64mm
Installation: DIN rail
Bus voltage: 21-30V DC, obtained through KNX bus cable
Bus power consumption: <360mW
Input voltage: 0-265VAC/DC
Input current: max. 2mA
Bus current: <12mA

CTBIF-04/00.1, CTBIF-08/00.1, CTBIF-16/00.1

KNX Binary Input for floating contact, 4/8/16-Fold

Key Features:

- Switching and dimming.
- Shutter function.
- Value sending.
- Recall and storage scene.
- Shift register function.
- RGB and RGBW dimming.
- Multiple operation.
- Delay modelogic functions.
  Event Group function.

Dimension: 36*90*64mm (4-fold)/72*90*64mm (8/16-fold)
Installation: DIN rail
Bus voltage: 21-30V DC, obtained through KNX bus
Bus current: <12mA
Bus power consumption: <360mW
Input scanning voltage: >12V DC
Input scanning current: 0.7mA
Input cable length: ≤100m

Normal / Current Mnt

KA/R 0416.2 ARCD-04/16.2

KA/R 0816.2 ARCD-08/16.2

KA/R 1216.2 ARCD-12/16.2

KNX Switch Actuator, 4/8/12-Fold, 16A/20A

Key Features:

- Manual switch operation, switch status response.
- Reaction after bus voltage failure and recovery.
- Scene and preset controlLogic operation with AND, OR, XOR gate function.
- Forced operation and safety function, threshold and time function.
- NORMAL version and CURRENT MEASUREMENT version for option.

Dimension: 72*90*64mm/144*90*64mm/216*90*64mm
Installation: DIN rail
Bus voltage: 21-30V DC, obtained through KNX bus
Bus current: <12mA
Rated voltage: 250V/440V AC (50/60Hz)
Rated current: 16A
Maximun switching current: 40A/250V AC

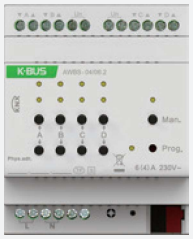
KA/R 0420.1, KA/R 0820.1, KA/R 1220.1

KNX Switch Actuator, 4/8/12-Fold, 20A

Key Features:

- Manual switch operation, switch status response.
- Reaction after bus voltage failure and recovery.
- Scene and preset controlLogic operation with AND, OR, XOR gate function.
- Forced operation and safety function, threshold and time function.

Dimension: 72*90*64mm/144*90*64mm/216*90*64mm
Installation: DIN rail
Bus voltage: 21-30V DC, obtained through KNX bus cable
Bus current: <12mA
Rated voltage: 250V/440V AC (50/60Hz)
Rated current: 20A
Load capacity: 20A/200uF
Maximum switching current: 40A/250VAC



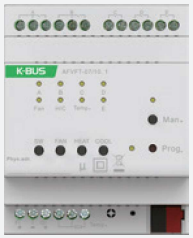
AWBS-04/06.2

KNX Shutter Actuator V2, 4-Fold

Key Features:

- Set preset position (modification of the preset position during operation).
- Move into preset position (up to 2 preset positions).
- Adjustment louver to position 0...100% (only Blind working mode).
- Monitoring of wind, rain and frost protect (cyclical).
- Status reply of the current position, status reply of the current operating mode.
- Two operation mode: Venetian Blind and Shutter.

Dimension: 72*90*64mm
Installation: DIN rail
Bus voltage: 21-30V DC, obtained through KNX bus cable
Bus current: <9mA, 24V; <7.5mA, 30V
Auxiliary voltage: 100~240VAC, 50/60Hz
Auxiliary current: <17mA, 220VAC
Rated voltage: 230VAC (50/60Hz)
Load capacity: 300W



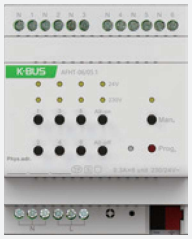
CSBPM-04/00.1.00

KNX Fan Coil Controller, 0-10V

Key Features:

- Support 2/4 pipes HVAC system.
- Support 2 wire or 0-10V valve type.
- Support 2-point control or PI controlmethods for local.
- Support relay/0-10V drive fan, 3-level fan speed.
- Standby/comfort/night/protect mode.
- Channels can be reused as switch output.
- Manual operation and LED indication.
- Support 3-wire PT1000 sensor.

Dimension: 72*90*64mm
Installation: DIN rail
Bus voltage: 21-30V DC, obtained through KNX bus
Bus current: <15mA
Bus power consumption: <450mW
Relay output rated voltage: 230V AC (50/60Hz)
Relay output rated current: 10A/105uF 0-10V
Output voltage: 0-10V DC



AFHT-06/05.1

KNX Heating Actuator with Triac, 6 Fold

Key Features:

- Support 2/4 pipes HVAC system.
- Support 2 wire or 0-10V valve type.
- Support 2-point control or PI controlmethods for local.
- Support relay/0-10V drive fan, 3-level fan speed.
- Standby/comfort/night/protect mode.
- Channels can be reused as switch output.
- Manual operation and LED indication.
- Support 3-wire PT1000 sensor.

Dimension: 72*90*64mm
Installation: DIN rail
Bus voltage: 21-30V DC, obtained through KNX bus cable
Bus current: <15mA
Bus power consumption: <450mW
Relay output rated voltage: 230V AC (50/60Hz)
Relay output rated current: 10A/105uF 0-10V
Output voltage: 0-10V DC

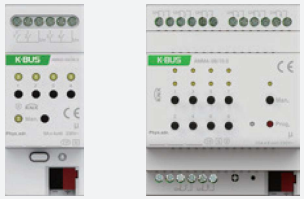
AMMAF-03/06.1

KNX Multifunctional Actuator 3-Fold, 6A

Key Features:

- Switch output
- Curtain output
- Valve control
- Fan control
- Heating control
- Drive LED indicator
- 6 folds dry contact in/output

Dimension: ϕ53*23.5mm
Installation: flush-mounted (fits 80m or 86mm wall box)
Bus voltage: 21-30V DC, obtained through KNX bus cable
Bus current: <12mA
Charging current: <20mA
Rated voltage: 230VAC (50/60Hz), 30V DC
Rated current: 6A/70uF
Maximum switching current: 16A 240V AC



AMMA-04/06.1, AMMA-08/10.1

AMMA-16/10.1, AMMA-24/10.1

KNX Multi-functional Actuator, 4/8/16/24-Fold Switch/Shutter/Fancoil

Key Features:

- Multifunctional actuator with flexibility, one actuator for all functions.
- Max. 24 folds of switching output for lighting, socket etc.
- Max. 12 folds of AC/dry contact shutter/blinds control.
- Max. 6 folds of DC shutter/blinds control.
- Max. 6 folds 3-level fan speed control.
- 2/4-pipe valve system of both 3-point type and ON/OFF type.

4-fold

Dimension: 36*90*64mm
Installation: DIN rail
Bus voltage: 21-30V DC, obtained through KNX bus cable
Bus current: <12mA
Charging current: <20mA
Rated voltage: 230VAC (50/60Hz), 30V DC
Rated current: 6A
Maximum switching current: 16A/240VAC

8-fold

Dimension: 72*90*64mm
Installation: DIN rail
Bus voltage: 21-30V DC, obtained through KNX bus cable
Bus current: <12mA
Charging current: <20mA
Rated voltage: 230VAC (50/60Hz), 30V DC
Rated current: 10A
Maximum switching current: 16A/240VAC

16-fold

Dimension: 216*90*64mm
Installation: DIN rail
Bus voltage: 21-30V DC, obtained through KNX bus cable
Bus current: <12mA
Charging current: <20mA
Rated voltage: 230VAC (50/60Hz), 30V DC
Rated current: 10A
Maximum switching current: 20A/250VAC

24-fold

Dimension: 216*90*64mm
Installation: DIN rail
Bus voltage: 21-30VDC, obtained through KNX bus cable
Bus current: <12mA
Charging current: <20mA
Rated voltage: 230VAC (50/60Hz), 30V DC
Rated current: 10A
Maximum switching current: 20A/250VAC

BTDG-01/64.1，BTDG-02/64.1

KNX/DALI Gateway, 1/2-Fold

Key Features:

- Two-channel gateway with broadcast function.
- 64 DALI devices per channel for single device, 16 DALI group control per channel.
- Various status feedback, e.g. switch, brightness, operation hours etc.
- Fault detection of lamps and ballasts for DALI devices.
- Monitoring DALI bus voltage, DALI bus current and DALI bus short circuit status.

Dimension: 72*90*64mm
Installation: DIN rail
Bus voltage: 21-30V DC, obtained through KNX bus cable
Bus current: <15mA
Bus power consumption: <450mW
Relay output rated voltage: 230V AC (50/60Hz)
Relay output rated current: 10A/105uF 0-10V
Output voltage: 0-10V DC

ADTV 04/16.1

KNX 1-10V Dimming Actuator

Key Features:

- Switching.
- Relative and absolute dimming.
- Status report, error report.
- Scene and preset function.
- Staircase lighting function.
- Preset a brightness value after bus voltage recovery.
- Passive DC 0/1-10V drive mode.
- Manual operation and status indication.

Dimension: 144*90*64mm
Installation: DIN rail
Bus voltage: 21-30V DC, obtained through KNX bus cable
Contact current: 16A/250V AC
Bus current: <12mA
Bus power consumption: <360mW
Output voltage: 1-10V DC, maximum output current of each channel is 100mA

ADUD-01/02.3, ADUD-02/02.3, ADUD-04/02.3

KNX Universal Dimming Actuator, 1/2/4-Fold

Key Features:

- Switch, Relative dimming/Brightness dimming.
- Leading edge/trailing edge phase cut dimming.
- Manual operation and Output indication function.
- Status feedback of switch and brightness, as well as abnormal status (short-circuit, over-voltage, over- temperature and operating voltage failure).
- Reset behaviour after download/voltage failure/voltage recovery.

Dimension: 36*90*64mm/72*90*64 mm/144*90*64 mm
Bus voltage: 21-30V DC, Via KNX bus
Bus current: <7mA, 30V; <8mA, 24V
Bus consumption: <210mW
Input voltage: 230V AC (50/60Hz)
Max.output capacity: 300W per channel
Output protection: short-circuit, over-voltage and over temperature protection

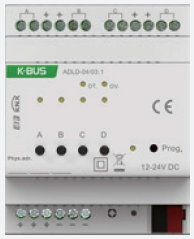
KA/D 0215.S.1, KA/D 0415.S.1

KNX SCR Dimming Actuator, 2/4-Fold, 300w/ch

Key Features:

- Switching.
- Relative dimming.
- Absolute dimming.
- Status report, error report.
- Up to 15 scenes setting.
- Preset and set preset function.
- Staircase lighting function.
- Support preset brightness value after bus voltage recovery.
- Leading edge phase cut dimming.
- Adjust dimming curve via manual buttons.
- Manual operation and status indication.

Dimension: 144*90*64mm/216*90*64mm
Installation: DIN rail
Bus voltage: 21-30V DC, obtained through KNX bus cable
Input voltage: 230VAC (50Hz)
Output power: 300W/1CH
Output protection: Short-circuit and over-temperature protection
Bus current: <12mA



ADLD-04/03.1

KNX LED Dimming Actuator, 4-Fold, 4A

Key Features:

- Switching.
- Relative and absolute dimming.
- Status report, error report.
- Scene and preset function.
- Staircase lighting function.
- Preset a Brightness value after bus voltage recovery.
- Constant voltage drive mode.
- Manual operation and status indication.

Dimension: 72*90*64mm
Installation: DIN rail
Bus voltage: 21-30V DC, obtained through KNX bus cable
Bus current: <12mA
Input voltage: 12-24VDC
Rated current: 4A
Load voltage: 12-24V DC
Output protection: Short-circuit, over-voltage, and over-heat protection

AMRP-41/00.2

KNX Room Controller V2.0

Key Features:

- 20 folds dry contact in/output.
- 4 folds 16A, 6 folds 10A swtich relay output.
- 1 fold curtain control output.
- 2 folds 0/1-10V dimming output.
- 1 fold fan coil actuator.
- 1 fold RS485 Protocol Conversion.
- 1 fold KNX/IP Protocol Conversion.
- Manual operation control.
- Output status indications.

Dimension: 216*90*64mm
Installation: DIN rail
Bus voltage: 21-30V DC, obtained through KNX bus cable
Bus power consumption: <360mW
Auxiliary voltage: 20-30V DC
Auxiliary current: <250mA
Bus current: <12mA

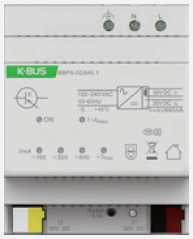
AMRS-41/05.3

KNX Room Controller V3.0

Key Features:

- 5 folds dry contact in/output.
- 4 folds 16A, 21 folds 6A swtich relay output.
- 1 fold AC/Dry contact shutter.
- 2 folds TRIAC dimming.
- 1 fold fan coil actuator with 0-10V output valve.
- 3 folds 0-10V dimming output.
- Logic, Time and Scene group functions.
- Support KNXnet/IP tunneling and routing.

Dimension: 216*90*64mm
Installation: DIN rail
Bus voltage: 21-30VDC, obtained through KNX bus cable
Bus power consumption: <360mW
Auxiliary voltage: 24-30VDC
Auxiliary current: <200mA
Bus current: <12mA



BBPS-02/640.1

KNX Power Supply, 640mA

Key Features:

- Input voltage: 95V-255V AC, 50/60Hz.
- Output 1: 30V DC +1/-2V, SELV with choke .
- Output 2: 30V DC +1/-2V,SELV without choke.
- Total output current: 640mA with short-circuit-protection.
- Current level indicator.
- The minimum distance between 2 power supply in a line is 300meter.

Dimension: 108*90*64mm
Installation method: TH/35 DIN rail
Input voltage: 95V-255V AC, 47-63Hz
KNX output: 30V DC+/2V, SELV, with reactor
Auxiliary power output: 30V DC +1/-2V, SELV, without reactor
Rated current without reactor: 640mA, short-circuit protection
Backup power duration: >200ms

BNUS-00/00.1

KNX USB Interface

Key Features:

- USB Standard 2.0.
- The USB port can be connected to a PC using a cable with a maximum length of 5 meters.

Dimension: 77*20*18mm
Powered by PC USB interface
USB extension cable: max. 5m

BNLC-00/00.1

KNX Line Coupler

Key Features:

- As a KNX line coupler, it connects main line to backbone line, or line to main line.
- As a KNX line repeater, it extends the length of bus line and the number of KNX devices.

Dimension: 36*90*64mm
Installation: DIN rail

BNIPR-00/00.1

KNX IP Router

Key Features:

- Support 4 client connections.
- Support KNXnet/IP,ARP,ICMP,IGMP,HTTP, UPnP,UDP/IP,TCP/IP,DHCP and Auto IP.
- Can be used as line/backbone coupler to couple ethernet and KNX-TP lines.
- Support filter table routing functionCan be used as the programming interface.

Dimension: 36*90*64mm
Installation: DIN rail
Bus current: <19.5mA, 24V; <15.5mA, 30V
Bus power consumption: <470mW
Bus voltage: 21-30V DC, obtained through KNX bus cable

BNIP-00/00.S

KNX/IP Interface

Key Features:

- Support KNX Secure.
- Support KNX/IP Tunneling.
- Can be used as the programming interface for other KNX devices.
- Support UDP telegram and port number 3671.
- Support up to 5 KNX IP client connections.

Dimension: 36*90*64mm
Installation: DIN rail
Bus voltage: 21-30V DC, obtained through KNX bus cable
Bus power consumption: <360mW
Auxiliary voltage: 20-30V DC
Auxiliary power consumption: <2.5W
Bus current: <12mA

BNIPC-00/00.S

KNX/IP Interface 3.0

Key Features:

- Support KNX Secure.
- Support KNX/IP Tunneling.
- Can be used as the programming interface for other KNX devices.
- Support UDP telegram and port number 3671.
- Support up to 5 KNX IP client connections.

Dimension: 36*90*64mm
Installation: DIN rail
Bus voltage: 21-30V DC, obtained through KNX bus cable
Bus power consumption: <360mW
Auxiliary voltage: 20-30V DC
Auxiliary power consumption: <2.5W
Bus current: <12mA

BTIRF-02/00.2

KNX IR Transmitter, 2-Fold V2 (flush-mounted)

Key Features:

- 2 channels, flush mounted.
- Support multi-emitting and delayed-emitting.
- The transmitting distance is max.2m.
- Support Universal IR control, up to 30 IR code.
- Support Air-condition control , up to 266 IR codes.
- Support current detection, up to 10A.

Dimension: ϕ53*23.5mm
Installation: Flush Mounted (fits 80mm or 86mm wall box)
Bus voltage: 21-30V DC, obtained through KNX bus cable
Bus current: <12mA
Bus power consumption: <360mW
Transmission distance: <2m
Infrared wavelength: 940nm
Infrared emission and reception angle: <45°
Infrared probe extension cable: <10m

BTIL-01/00.2

KNX IR Learner

Key Features:

- USB port to PC.
- help the transmitter to learn, test and verify IR codes.

Dimension: 77*20*18mm
Powered by PC USB interface
USB extension cable: max. 5m

BTIRC-01/00.2

KNX IR Transmitter V2 (ceiling type)

Key Features:

- 360 degree full direction transmitting.
- Support multi-emitting and delayed-emitting.
- Installation height is max.4m, the transmitting distance is max.3m (radius).
- Support Universal IR control, up to 30 IR code.
- Support Air-condition control, up to 266 IR codes.

Dimension: 91*82*76mm
Installation: Ceiling-mounted
Bus voltage: 21-30V DC, obtained through KNX bus cable
Bus current: <12mA
Bus power consumption: <360mW
Auxiliary voltage: 12-30V DC
Auxiliary current: <10mA
Auxiliary power consumption: <300mW
Transmission radius: <3m
Infrared wavelength: 940nm
Installation height: <4m

BTPG-04/03.1

KNX Gateway for RS485/RS232

Key Features:

- Support the integration of Modbus and KNX system, with master and slave mode,and up to 500 datapoints.
- Support data communication between RS232 and KNX system, and up to 100 datapoints.
- Support data communication between RS485 and KNX system, and up to 100 datapoints.
- Support the control of VRV/VRF air conditioners with Modbus RTU control protocol, such as DAIKIN,HITACHI, Mitsubishi, Fujitsu, Gree, Toshiba, etc.
- Support the control of DOOYA 485 curtain motor.
- Support the control of some audio hosts unit in china manufacturers, such as backaudio.Yo-daar, MiYue,cnWise, etc.

Dimension: 72*90*64mm
Installation: DIN rail
Bus voltage: 21-30V DC, obtained through KNX bus cable
Bus current: <6mA, 30V DC
Auxiliary voltage: 12-30V DC
Auxiliary current: <60mA, 30V DC

KNX System Devices & Gateways ▸▸

BTAS-KNX/485.2

Airhome APP

Air1 Server Gateway

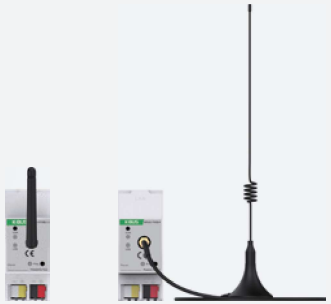
Key Features:

- Standard KNX gateway for phone/tablet APP connection.
- Support standard Tuya wireless protocol devices.
- Support customized scenarios for end users.
- Support cloud service with remote control of WIFI/3G/4G/5G.

APP Features:

- Support conversion and communication between different protocols (KNX, RS485, Modbus and so on).
- Easy configuration with PC software.

Dimension: 108*90*64mm
Installation: DIN rail
Bus voltage: 21-30V DC, obtained through KNX bus cable.
Bus current: <12mA
Bus power consumption: <360mW
Auxiliary voltage: 9-36V DC
Auxiliary current: <123mA, 24V DC; <113mA, 30V DC
Auxiliary power consumption: <3.4W



BTMO-TY/00.3, BTMO-TY/00.4

KNX/Tuya-Zigbee3.0 Gateway

Key Features:

- Work as a Tuya/Zigbee Gateway to connect to Tuya Cloud and add Tuya device.
- Upload KNX devices to Tuya platform to control and display status.
- Support KNX functions: switching, dimming, curtain, scene, AC control, background music, air quality and energy metering display etc.
- Logic functions.
- Support bidirectional communication between Zigbee and KNX device(V2.0).

Dimension: 36*90*64mm
Installation: DIN rail
Bus voltage: 21-30V DC, obtained through KNX bus cable
Bus current: <4.5mA, 24V; <4mA, 30V
Bus power consumption: <120mW
Auxiliary voltage: 12-30V DC
Auxiliary current: <60mA, 24V; <50mA, 30V
Auxiliary power consumption: <1.5W

M+O Smart Home Solution

- Stable and Flexible Smart Home System
- Cost-effecitve with Easy APP Management

KNX

M

MAIN

STABLE | OPEN | COMPATIBLE

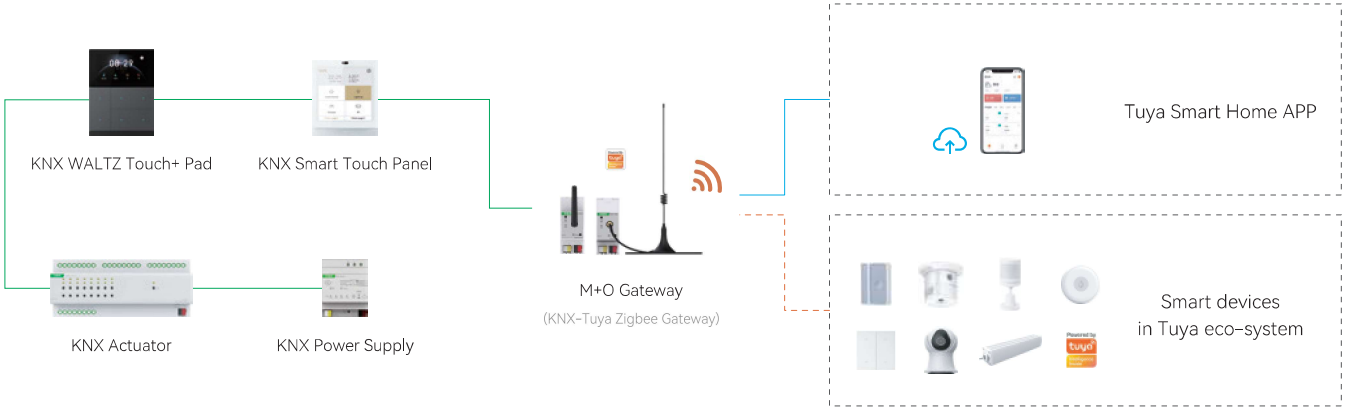
+

ZigBee 3.0

O

OPTIONAL

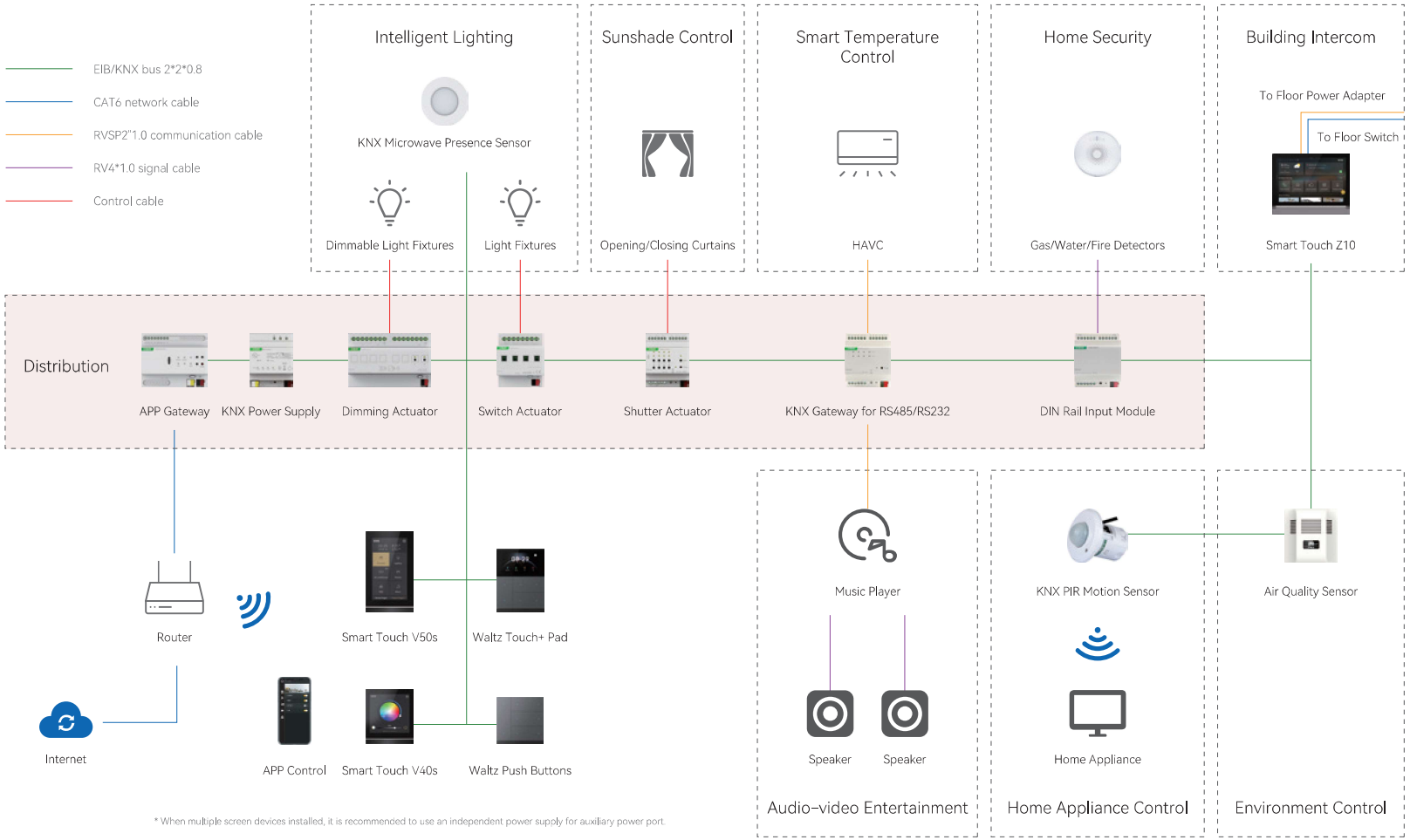
EXTENDABLE | FLEXIBLE | DIY-FRIENDLY



KNX System Topology

KNX Centralized Cabling Topology

▶▶ Highly Stable ▶▶ Rich Functionality ▶▶ Flexible and Customizable

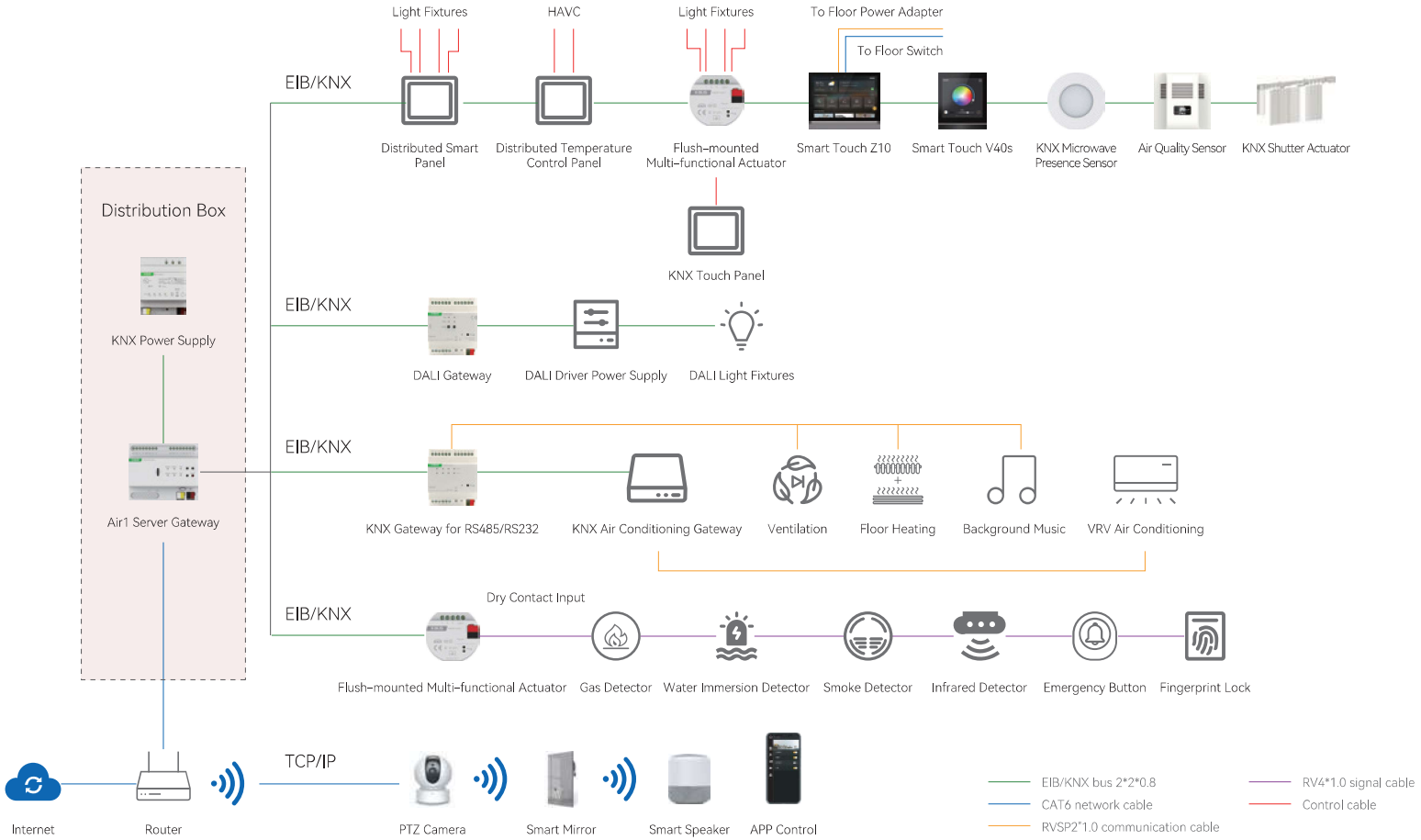


* When multiple screen devices installed, it is recommended to use an independent power supply for auxiliary power port.

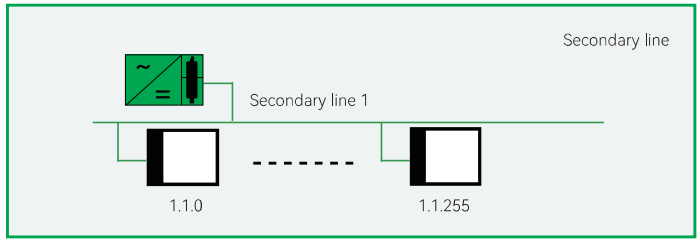
KNX Distributed Cabling Topology

▶▶ Easy to Retofit

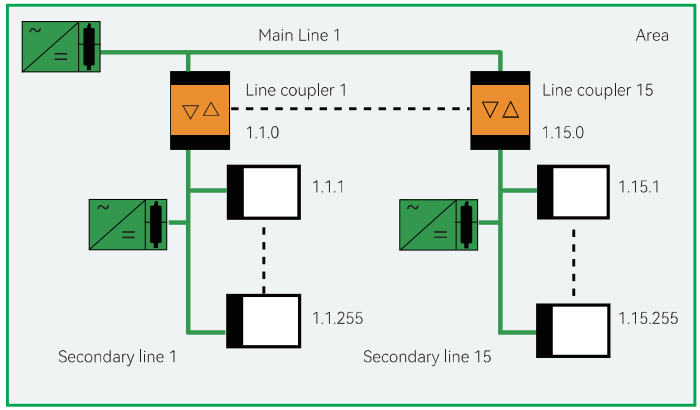
▶▶ Create Your Personalized Style



K-BUS System Topology

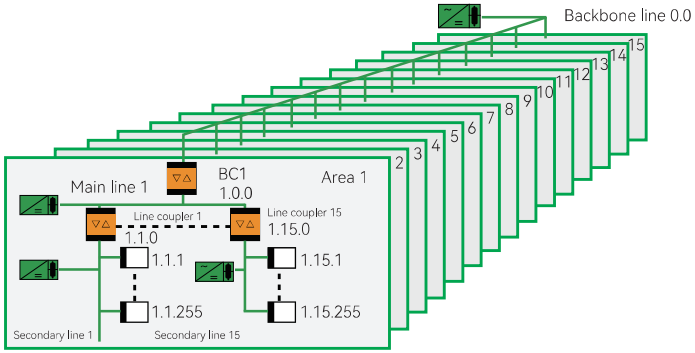


The smallest unit in the TP topology is the line segment. Maximum 256 bus devices can be mounted in one line segment.



If more devices have to be mounted than one can fit (256 devices) into one line, then up to 15 lines can be connected to a main line via line couplers (LC). This line structure is called an area. In this topology, more than 4,000 devices can be installed.

If even more devices have to be mounted in a KNX installation, then the TP installation can be extended by mounting backbone couplers (BC) to the backbone line. Maximum 15 areas can be connected. In this topology, more than 61,000 devices can be installed in a complete TP-Network.



Three main categories: system devices, sensors, actuators:

System Components

The system components are responsible for the operation of the entire system. The devices are KNX power supply, USB interface, IP interface etc.

Sensors

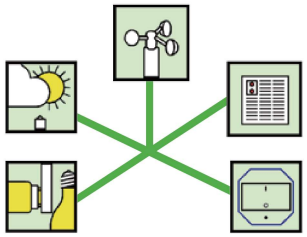
Sensors are responsible for detecting the operation of switches in buildings, or signal changes such as light, temperature, humidity, and air quality. The devices are smart control panel, thermostat panel, PIR sensor, brightness sensor, air quality sensor, etc.

Actuators

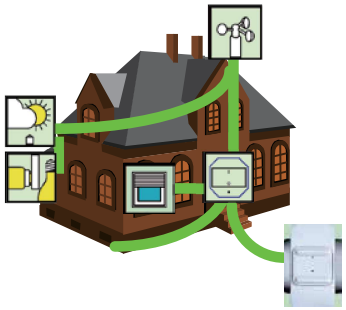
The actuators are responsible for receiving the signal transmitted by the sensor and performing the corresponding operations such as switching, adjusting the brightness of lights, controlling the opening and closing of curtains, and switching on and off the air conditioner. The devices are switch actuator, dimming actuator, shutter actuator, fac coil actuator etc.

The following structural types are allowed: star, line and tree structures (also in combination). A ring structure is however not allowed. A tree structure allows saving wiring material.

LINE



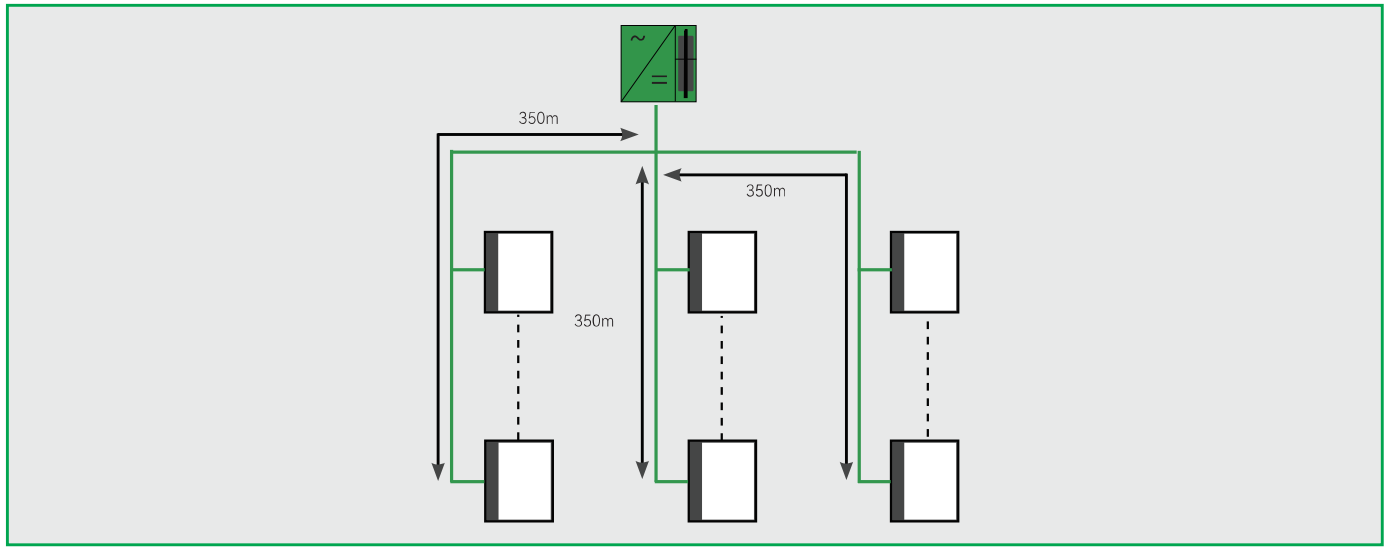
STAR



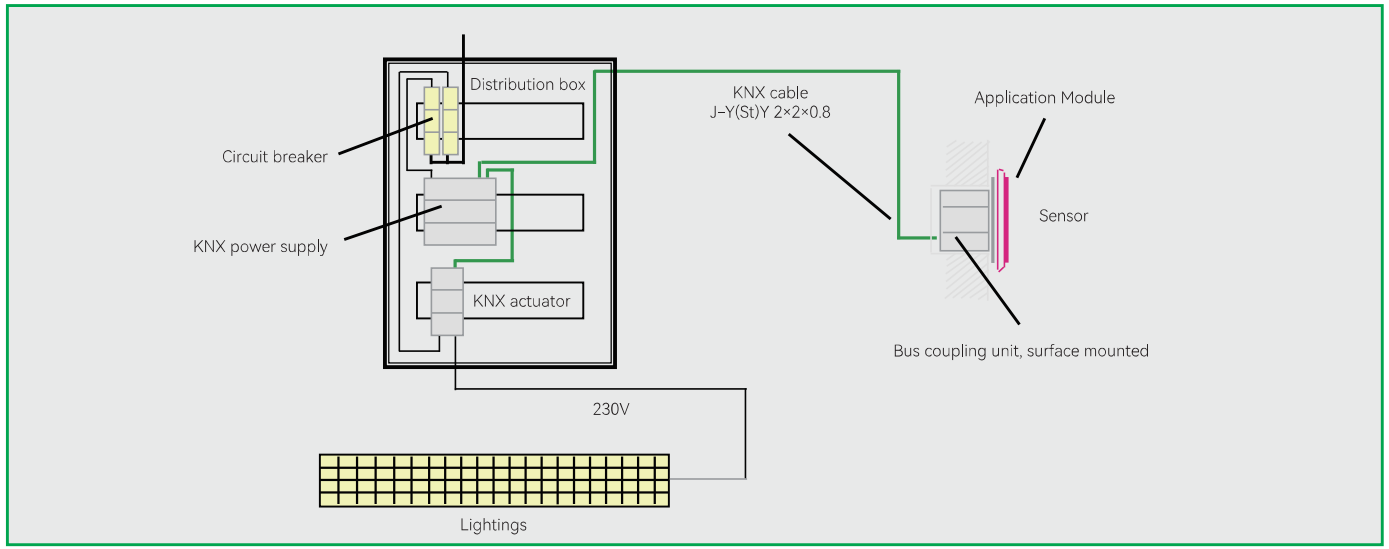
TREE

KNX System Topology ▸▸

Length of a line segment: Max. 1000m, Distance between power supply unit – bus device: Max. 350m, Distance between two bus devices: Max. 700m, Distance between two power supply units, including chokes: As specified by the manufacturer.

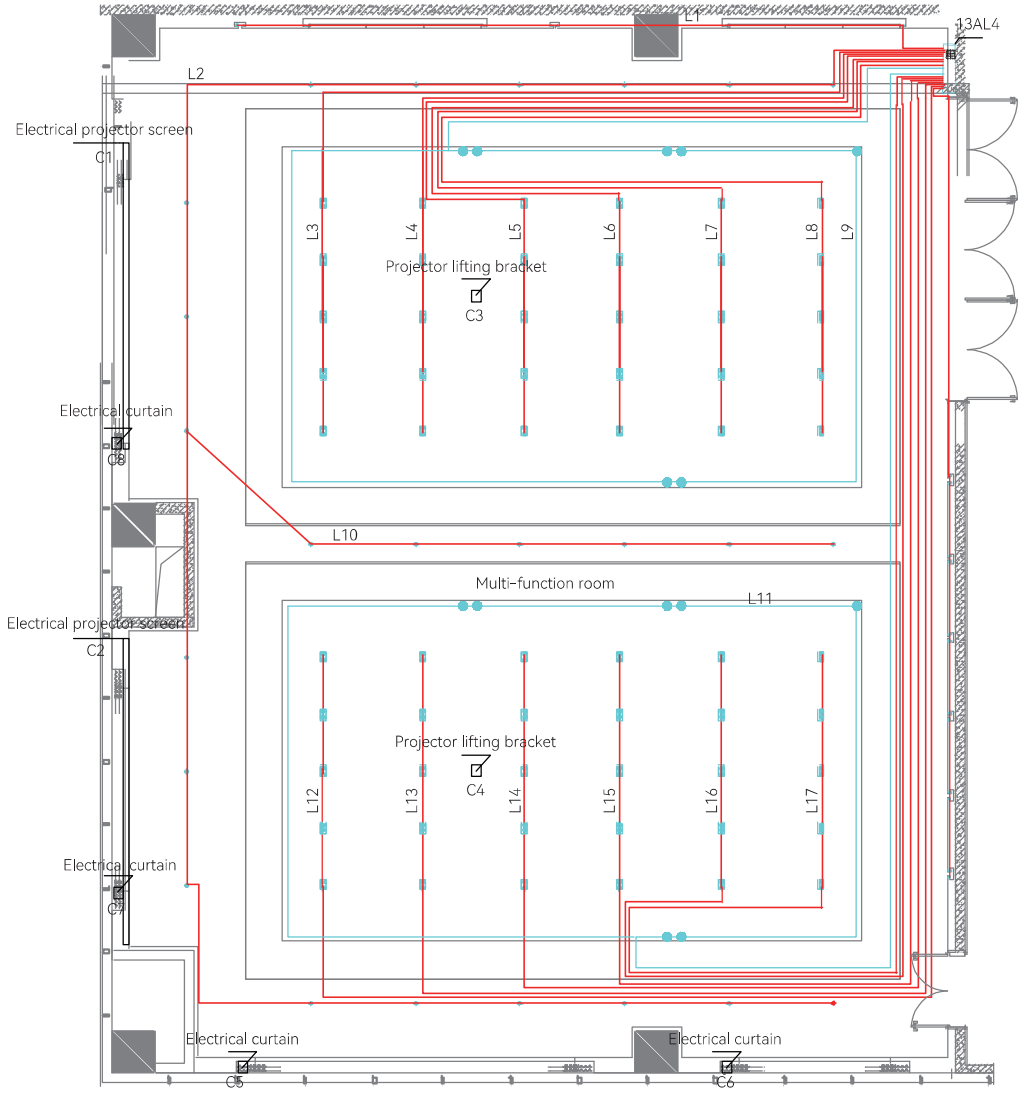


Schematic diagram of KNX devices installation:



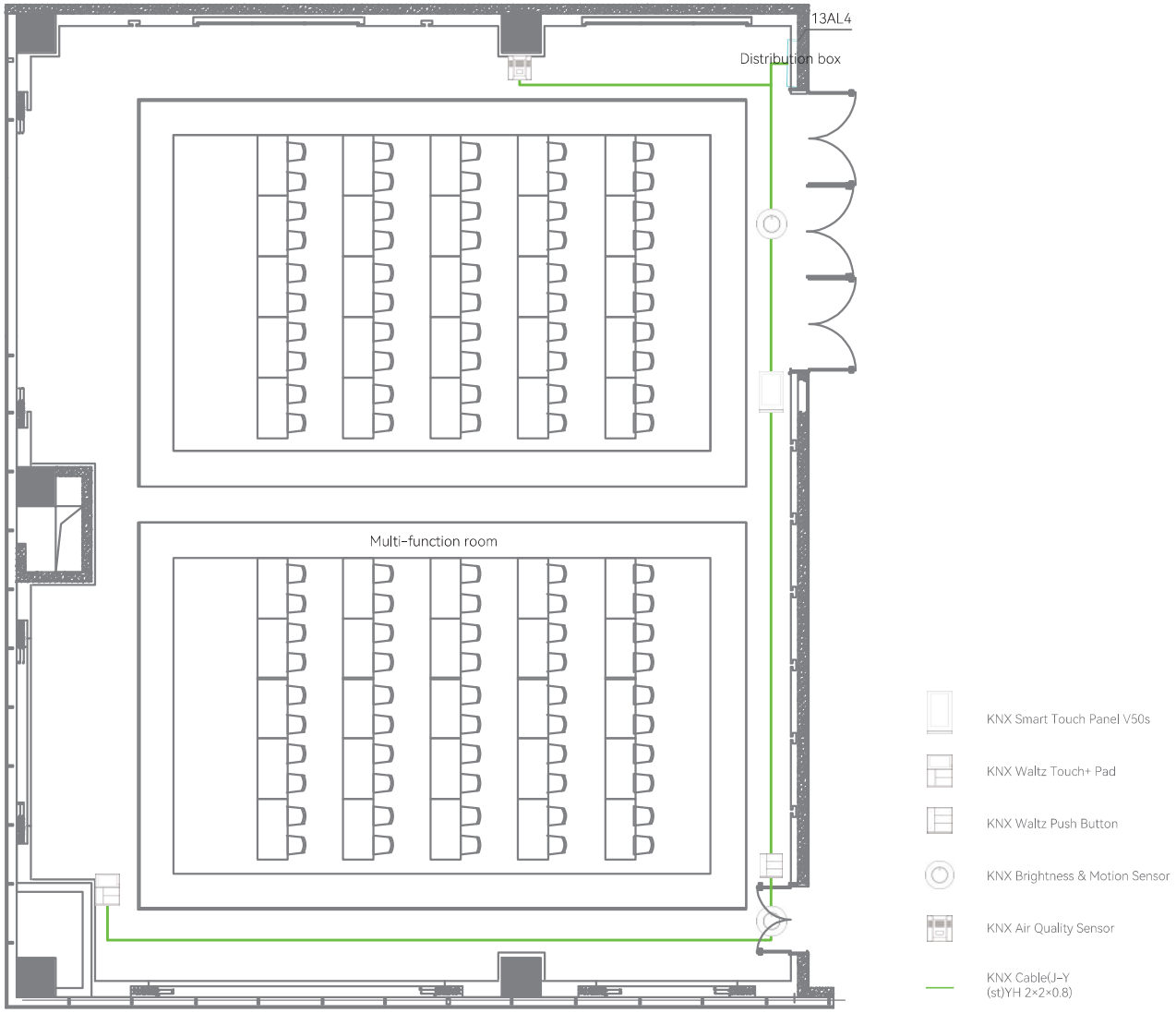
Electrical Design Reference

High Voltage Circuit Design

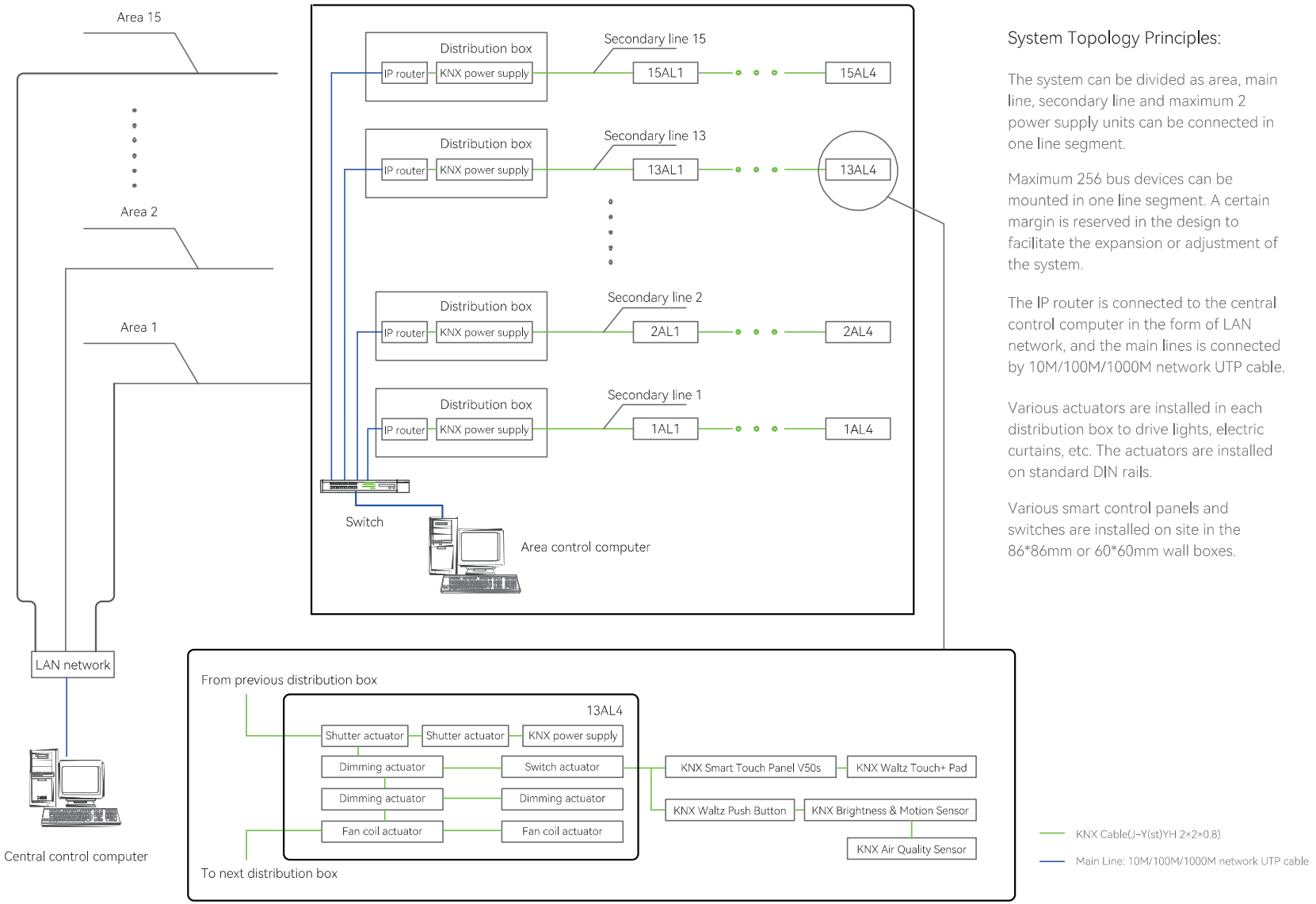


KNX System Topology ▸▸

Low Voltage Circuit Design



System topology (The TP network is mostly used. But if in IP network for faster telegram rates, line couplers are replaced by KNXnet/IP routers)



System Topology Principles:

The system can be divided as area, main line, secondary line and maximum 2 power supply units can be connected in one line segment.

Maximum 256 bus devices can be mounted in one line segment. A certain margin is reserved in the design to facilitate the expansion or adjustment of the system.

The IP router is connected to the central control computer in the form of LAN network, and the main lines is connected by 10M/100M/1000M network UTP cable.

Various actuators are installed in each distribution box to drive lights, electric curtains, etc. The actuators are installed on standard DIN rails.

Various smart control panels and switches are installed on site in the 86*86mm or 60*60mm wall boxes.

V 1.0

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