



Smart architecture

Catalogue V.24

Guangzhou Baolun Electronics Co., Ltd

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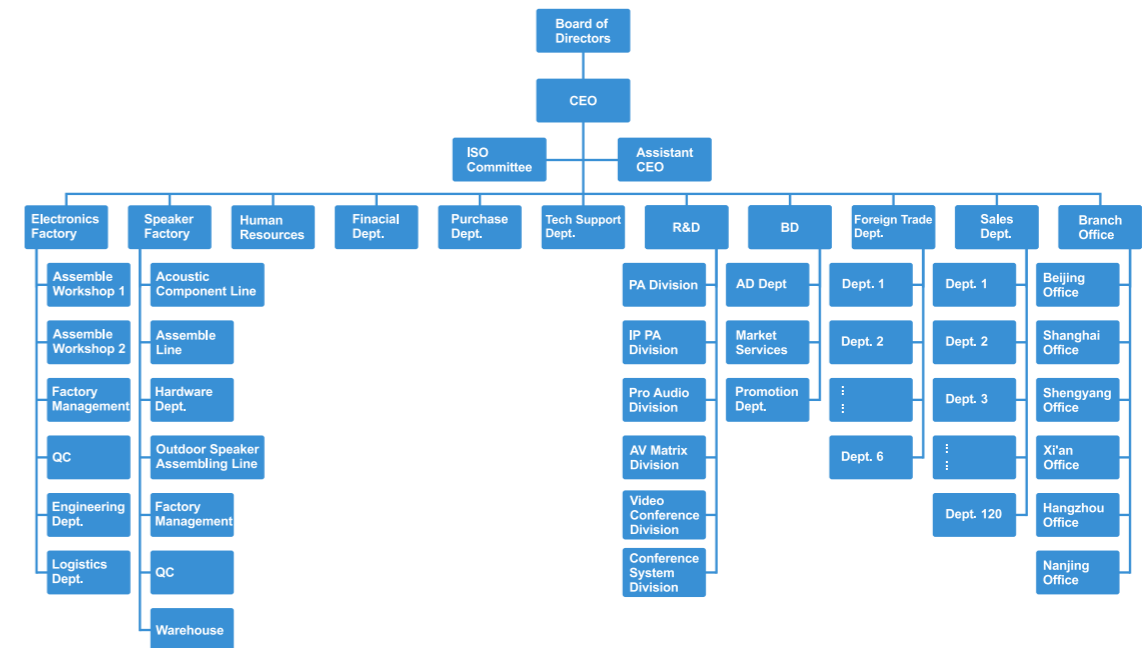
* Specifications are subject to change without notice.



All of our products are developed and manufactured by ourselves. Our products are compliant with CE, RoHS, EN54, UL, CCC, NOM certificate.

ITC possesses more than 3000 intellectual properties, including appearance patents, software copyrights, utility model patents and invention patents, and has won the honorary titles of "Quality Product", "Famous Brand" and "Most Competitive Brand" for many years. ITC is the "High-tech Enterprise" in China.

Company Organization



Company Introduction

Guangdong Baolun Electronics Co., LTD. (ITC) was established in 1993, located in Panyu district of Guangzhou. ITC is the No.1 and the largest integrated supplier of audiovisual & lighting systems, integrating R&D, production, sales and service together in China for more than 30 years. ITC owns 4 office buildings, 6 R&D centers and 5 factories. There is also an industry-leading intelligent manufacturing industrial park of over 300,000 square meters under construction, which is expected to be put into operation by the end of 2023. We have 1200 R&D engineers, 2000 pre-sales and after-sales technicians, 142 sales departments, all totally more than 6000 employees.

ITC can provide integrated solution from PA system, IP intercom system, Voice evacuation system, HD video conference system, 5G digital conference, Paperless conference, Interpretation system, Central control system, Professional sound system, LED screen, Stage light & Architectural light, etc. We are the official supplier for important events, including 2008 Beijing Olympic Games, 2010 Shanghai World Expo, 2010 Guangzhou Asian Games, 2016 Hangzhou G20 Summit, 2016 Turkey expo, 2022 Beijing Winter Olympics, India subway, USA chain shops, Guyana national conference, Uzbekistan national defense conference, Five Nigeria national airport, CBE Ethiopia bankOur worldwide successful projects are more than 1.5 million cases, and its products have been exported to more than 100 countries around the world.

Our Production Lines

A group of highest technology equipment are used to strengthen the reliability and output capacity: SMT machine, reflow oven & numerical control cutting machine. 95% PCB of the equipment s are made by SMT machine to ensure quality consistency and higher reliability. The numerical cutting machines enhance the equipment in elaborate & elegant level. A comprehensive process of tests are be involved: drop test, vibration test, aging, Hipot & RoHS test.

Certificates

CCC, ISO9001, CE & RoHS, IEC60914. Parts of our product are complied with certificates: CB, SASO, ETL, UL, FCC, EN54-16 and EN54-24. Parts of loudspeakers are certified by waterproof, dustproof, fire-proof & explosion-proof.



COMPANY HISTORY



Year 1993

ITC was founded in Guangzhou, regarded as pioneer of Digital Public Address System in China.

Year 1995

ITC successfully registered trademark ITC in China.

Year 1998

The first full-intelligent PA system was successfully developed and launched to the market.

Year 2000

ITC set up 8 sales subsidiaries and technical assistance centers in Guangzhou, Beijing, Shanghai, Hangzhou, Nanjing, Xi'an, Shenyang and Chengdu. ITC also established proxy services agencies in 48 provinces all over China.

Year 2001

The first digital network PA system was successfully developed and launched to market.

Year 2002

Due to speed business expansion, ITC set up numerous large production plants in Guangzhou. The whole company broadened to six large plates: four production plants + marketing and logistics center + R & D center; totally more than 800 manufacturing workers.

Year 2003

ITC developed full-digital IP PA system; became the world's first IP PA R & D manufacturer. In the same year a full range of products passed quality inspection, 3C, CE, RoHS and other domestic and foreign certification.

Year 2004

For successive years, ITC was awarded as "The Most Competitive Brand" and "Top Ten PA Brand*" by domestic renowned media.

Year 2005

In order to meet the needs of global strategy, ITC had registered in 35 countries "ITC" trademark, and collaborated with 56 high-quality foreign strategic partners.

Year 2006

ITC was awarded as "Intelligent Building Quality Products," "Intelligent Building Leading Brands" as etc by China Intelligent Building Industry Association. There's no replacement in the professional field.

Year 2007

The first most advanced Fire Alarm Voice Evacuation System was successfully developed. Till the end of 2007, ITC had won totally 12 core technology and design patents.

Year 2008

ITC successfully marched into 2008 Beijing Olympic games: the Olympic Forest Park, Capital Stadium, Beijing Industry University Gymnasium, and the Olympic Media MCI sign Center and other key Olympic venues.

Year 2009

ITC successfully marched into the Shanghai World Expo venues including Oman, Ireland Museum, Museum of Turkmenistan, Pakistan, and Iran and so on. In the same year, she went into Asia's largest railway station (South Station in Guangzhou), Beijing Subway, Beijing-Tianjin inter-city Express and other famous projects.

Year 2010

ITC successfully marched into 2010 Guangzhou Asian Games Venues including Gymnasium, NBA Stadiums, Swimming Pool, Bicycle Roller Skating Center, the Athletes Village, Main Press Centre, Media Village, Technical Officials Village and other logistics service area. ITC cooperated with numerous well-known enterprises the following eminent projects: the Polish National Central Banks, the International Financial Building of Azerbaijan, the Romanian Five-star Hotel, the Dubai Seven Star Hotel, the Singapore Racecourse, the USA Florida Intercontinental Hotel, the University of Toronto, the National Museum of Istanbul, the Turkey Istanbul High School, the London Art Galleries and so on.

Year 2011

ITC successfully installed Network Audio System for Shenzhen 2011 World Universiade Olympic Games. Move into new 20,000 square meters manufacturing plant, SMT machine, digital PC controlled punching machine been imported. Cobranet network system and Linux Network Audio System have been launched. Launched new digital conference system.

Year 2012

ITC launched its Cloud-based HD Video Conference System to realize the conference meeting face to face by video without geographical limitation.

Year 2015

ITC installed IP PA & Intercom System in the Subway Center of Chanakyapuri New Delhi India.

Year 2016

ITC installed Evacuation Voice Alarm Public Address System and IP Network Intercom System to EXPO 2016 Antalya in Turkey.

Year 2017

ITC LED Screen, Stage lighting, architecture lighting factory established. ITC Turn-key solution applied to UNASUR Building, Bolivia.

Year 2018

ITC conference system used in the United Nations Convention. Large conference system applied to Ethiopia Afar National Regional State Finance & Economic Development Bureau, Africa.

Year 2019

ITC own independent R&D building which area is about 4,200 square meters. KTV One-stop Solution applied to Grand Park Hotel Myanmar.

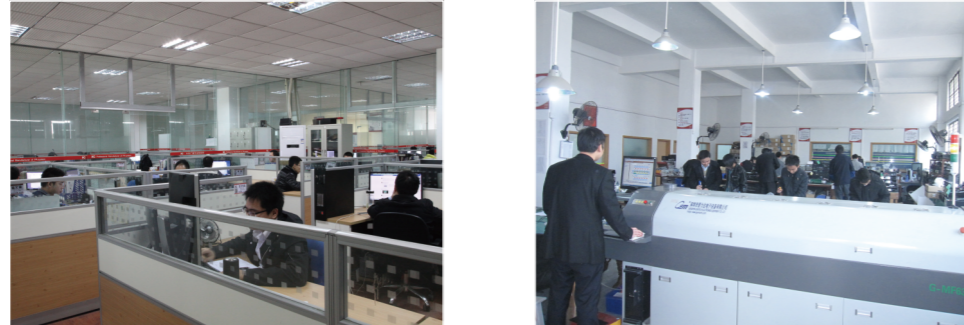
Year 2020

Foundation Laying Ceremony of ITC Industrial Park. ITC 243.3m² P10 Outdoor LED video Wall applied to Vincom Mega Mall Ocean Park City Vietnam.

Office



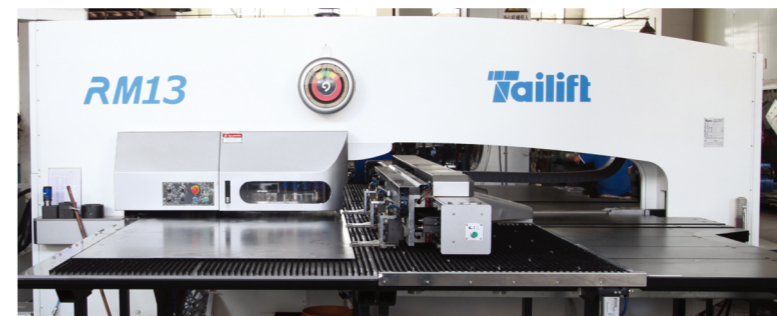
R&D



Factory



Factory



Cloud platform service fee TI-PH2500

1. It includes service fees for cloud storage, device concurrency, user access, mqtt cluster, nginx service, service monitoring, redis cache, time series database, relational database and other cloud platforms.
2. It supports cloud storage and cloud services with at least 2,500 hardware data points, and supports smooth extension on demand.

Cloud platform service fee TI-PH3000

1. It includes service fees for cloud storage, device concurrency, user access, mqtt cluster, nginx service, service monitoring, redis cache, time series database, relational database and other cloud platforms.
2. It supports cloud storage and cloud services with at least 3,000 hardware data points, and supports smooth extension on demand.

Cloud platform service fee TI-PH3500

1. It includes service fees for cloud storage, device concurrency, user access, mqtt cluster, nginx service, service monitoring, redis cache, time series database, relational database and other cloud platforms.
2. It supports cloud storage and cloud services with at least 3,500 hardware data points, and supports smooth extension on demand.

Cloud platform service fee TI-PH4000

1. It includes service fees for cloud storage, device concurrency, user access, mqtt cluster, nginx service, service monitoring, redis cache, time series database, relational database and other cloud platforms.
2. It supports cloud storage and cloud services with at least 4,000 hardware data points, and supports smooth extension on demand.

Cloud platform service fee TI-PH4500

1. It includes service fees for cloud storage, device concurrency, user access, mqtt cluster, nginx service, service monitoring, redis cache, time series database, relational database and other cloud platforms.
2. It supports cloud storage and cloud services with at least 4,500 hardware data points, and supports smooth extension on demand.

Cloud platform service fee TI-PH5000

1. It includes service fees for cloud storage, device concurrency, user access, mqtt cluster, nginx service, service monitoring, redis cache, time series database, relational database and other cloud platforms.
2. It supports cloud storage and cloud services with at least 5,000 hardware data points, and supports smooth extension on demand.

Cloud platform service fee TI-PH6000

1. It includes service fees for cloud storage, device concurrency, user access, mqtt cluster, nginx service, service monitoring, redis cache, time series database, relational database and other cloud platforms.
2. It supports cloud storage and cloud services with at least 6,000 hardware data points, and supports smooth extension on demand.

Cloud platform service fee TI-PH7000

1. It includes service fees for cloud storage, device concurrency, user access, mqtt cluster, nginx service, service monitoring, redis cache, time series database, relational database and other cloud platforms.
2. It supports cloud storage and cloud services with at least 7,000 hardware data points, and supports smooth extension on demand.

Cloud platform service fee TI-PH8000

1. It includes service fees for cloud storage, device concurrency, user access, mqtt cluster, nginx service, service monitoring, redis cache, time series database, relational database and other cloud platforms.
2. It supports cloud storage and cloud services with at least 8,000 hardware data points, and supports smooth extension on demand.

Cloud platform service fee TI-PH9000

1. It includes service fees for cloud storage, device concurrency, user access, mqtt cluster, nginx service, service monitoring, redis cache, time series database, relational database and other cloud platforms.
2. It supports cloud storage and cloud services with at least 9,000 hardware data points, and supports smooth extension on demand.

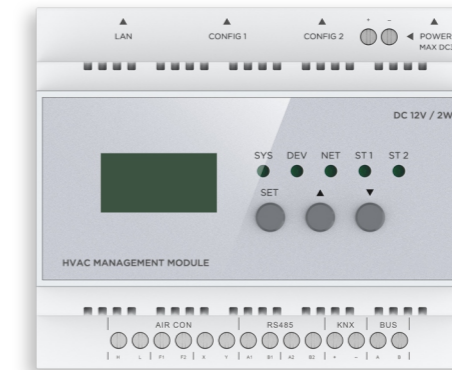
Cloud platform service fee TI-PH10000

1. It includes service fees for cloud storage, device concurrency, user access, mqtt cluster, nginx service, service monitoring, redis cache, time series database, relational database and other cloud platforms.
2. It supports cloud storage and cloud services with at least 10,000 hardware data points, and supports smooth extension on demand.

Cloud platform service fee TI-PHN

1. It includes service fees for cloud storage, device concurrency, user access, mqtt cluster, nginx service, service monitoring, redis cache, time series database, relational database and other cloud platforms.
2. It supports cloud storage and cloud services with tens of thousands of hardware data points, and supports smooth extension on demand.

Air Conditioner Controller TI-A1



Description:

The air conditioner controller is able to connect the central air conditioning/ventilation/floor heating system to the smart building system. It supports Ethernet, KNX, RS485, UART and other interfaces, and supports free access to various HVAC equipment.

Features:

- * Solve the problems of HVAC equipment, such as the non-open and inconsistent VRV protocols, and connect HVAC equipment to the smart building system.
- * Equipped with Ethernet, KNX, RS485, UART and other interfaces.
- * Support access to private communication protocols for customized development.
- * Support access to air-conditioning, floor heating, and ventilation systems.
- * Designed with an LCD screen, support the display of the brand of the air conditioner being controlled, the number of searched air conditioner indoor units, the device parameters of this product, and whether the controller communication is normal.
- * Use the DIP switch to connect to different air-conditioning equipment.
- * Support settings through the DIP switch to connect with Daikin, Hitachi, Toshiba, Mitsubishi Electric, Hisense, Haier, Panasonic, York, Mitsubishi Heavy Industries, Midea, LG, Oaks, Bosch, Gree and other air conditioners.
- * Support the connection of ventilation, floor heating and other equipment through the 485 protocol to achieve the effect of environmental control.
- * Support smart home of KNX system connecting with air conditioning system; support smart home system with 485 communication protocol connecting with air conditioning system.
- * Equipped with LED indicators, support prompting whether the gateway is normal through the flashing speed of the SYS light; support checking the connection status of the air conditioner, ventilation system, and panel through the flashing speed and color of the DEV light; support checking the device status of Zigbee smart terminal through the flashing speed and color of the NET light.

Specifications:

| | |
|-------------------------------|--|
| Model | TI-A1 |
| Network interface | 1 RJ45 interface, 100Mbps |
| RS485 interface | 1 |
| KNX interface | 1 |
| AIR CON terminal block | 1 |
| BUS interface | 1 |
| Communication protocol | MODBUS-RTU / VRV485, TCP/IP, KNX (stated in advance when purchasing), RS485 (for ventilation, floor heating, smart home systems) |
| Input power | DC 12V |
| Power consumption | <2.0W |
| Communication standard | IEEE802.3 standard (10BASE-T/100BASE-TX) |
| Working temperature | 0~40°C |
| Relative humidity | 20~85%, no condensation |
| Dimension | 106*91*58mm (W*D*H) |
| Weight | 400g |

Air Conditioner Controller TI-A2



Description:

The controller achieves air-conditioning control through the 485 protocol, with simple wiring, free of debugging and deployment. No additional power supply is required, the internal unit of the air conditioner can supply power and can supply power to other third-party equipment. Working with the smart building system, it can realize remote control of air conditioners. It supports connecting to air conditioners of various well-known brands such as Daikin, Hitachi, Toshiba, Mitsubishi, Midea, and Gree.

Features:

- * Support access to the temperature control panel or thermostat to control the air conditioner.
- * Provide MODBUS RTU format command to control the air conditioner.
- * Support connecting the AC internal unit to control the air conditioner.
- * Support query and control of switch, temperature, mode, and wind speed.
- * High compatibility, open interface protocol.

Specifications:

| | |
|-------------------------|-------------------------------|
| Model | TI-A2 |
| Power supply | Air conditioner internal unit |
| Communication interface | 485 |
| Power consumption | <0.5W |
| Working temperature | -20~60°C |
| Relative humidity | 20~85% (no condensation) |
| Weight | 64g |
| Dimension (W×D×H) | 89×54×26mm |

10.1-inch Digital Signage TI-C10



Features:

- * Support the display of real-time air quality and historical data, including real-time outdoor weather conditions, indoor air AQI, temperature and humidity, VOC, PM2.5, CO2, etc.
- * Support the display of important information released in real time in the building.

Specifications:

| | |
|-------------------------|---|
| Model | TI-C10 |
| Operating system | Android7.1.0; support local USB upgrade |
| Display screen | 10.1 inches |
| Resolution | 1280*800 |
| Touch screen | G+G capacitive screen, 10-point touch mode |
| Contrast | ≥1300: 1 |
| WiFi (2.4G) | Built-in high-performance SDIO interface WiFi module, support IEEE 802.11 |
| Brightness | 370min/450typ/530Max |
| CPU | RK3288 Quad-core 1.8GHz Cortex-A17 |
| RAM | 2GB DDR3 |
| Memory | 16G |
| Interface | Type-c (5V/4A) *1, Type-c (USB-OTG) *1, RJ45*1, 485 port*1 |
| Speaker | 8Ω 1W×2 |
| Bare metal size | 256.58×25.5×175.36mm (W×D×H) |
| Ethernet | 10M/100M/1000M adaptive Ethernet |
| TF card | Pop-up TF card socket, up to 128GB TF card |
| Video playback | Support wmv, avi, flv, rm, rmvb, mpeg, ts, mp4, etc. |
| Bluetooth | Support |
| Power supply | DC 5V Power supply Support Type C interface and RJ45 interface for power supply. Support IEEE802.3 af standard, support POE power |
| Rated power consumption | ≤10W |
| Standby power | ≤1W |
| Working temperature | -5°C~45°C |
| Storage temperature | -20°C~60°C |
| Storage humidity | 5%~90%RH |
| Working humidity | 30%~85%RH |
| Size(W×D×H) | 253.5×11.5×163.5mm |
| Frame color | Gray or silver |
| Net weight | 1kg |
| Gross weight | 2kg |

Edge Gateway TI-E500



Description:

The edge gateway is a smart device for smart building system. It features reinforced design, small size, powerful function, etc. With various input and output connections and complete protocol support, it can be embedded in countless types of endpoints and use multiple sensors for accurate analysis to achieve efficient local collection and processing of data. Even during the disconnection, it can still perform fast and accurate edge analysis.

Features:

- * Support Wi-Fi, Bluetooth, and LPWAN wireless connection methods.
- * Support embedded edge device management and edge smart analysis software, add remote device management easily, integrate the edge computing and fog computing with the computing in the cloud or data center.
- * Support working alone or in a layered architecture with other gateways, support distributed computing.
- * Fanless design, after rigorous durability test, can operate reliably under extreme temperature and high shock and vibration conditions.
- * Designed with a programmable serial port, support extension IOBOX, make full use of the old system and extend connection options.
- * Built-in TPM 2.0 hardware encryption chip uses RSA encryption to protect user information.

Specifications:

| | |
|------------------------------|--|
| Model | TI-E500 |
| CPU | Intel® Celeron® 4205U (1.80GHz, 2MB Cache) |
| RAM+ROM | 4GB DDR4 2666MHz Onboard, 128GB SSD, M.2 |
| Connection | 802.11AC (2x2) & Bluetooth® 5.0 |
| Cloud authentication | PACOM Cloud, Alibaba Cloud, Microsoft Azure IoT Edge, Amazon Web Services IoT Greengrass |
| Security | TPM 2.0 hardware encryption |
| Front panel interface | 2*USB 3.2(Gen 2), 1*USB-C(USB 3.2 Gen 2), 2*serial interface (RS-232), 1*mic combo |
| Rear panel interface | 1*DisplayPort, 1*USB3.2(Gen 2), 1*USB-C(USB 3.2 Gen 2), 1*RJ45, 1*Wi-Fi antenna slot |
| Working environment | Working temperature 0°C~50°C, relative humidity 20~90% (no condensation) |
| Power supply | Adapter 20V/3.25A |
| Power consumption | 65W |
| Dimension | 178*88*35.4mm (W*D*H) |
| Weight | About 800g |

Interactive Smart Sensor Software V9.04 TI-SL



Description:

Interactive Smart Sensor Software License, used with interactive sensors.

Bracket TI-EG1



Description:

The edge gateway supports DIN rail installation and can be connected with industrial DIN rail racks. This is a rail installation kit.

Specifications:

| | |
|----------------------------|--|
| Model | TI-EG1 |
| Material | Metal |
| Working environment | Working temperature 0°C~50°C, relative humidity 20~90% (no condensation) |
| Max product size | 128*21*65mm (L*W*H) |
| Slot size | 128*35mm (L*W) |
| Weight | 65g |
| Max support weight | 5kg |

USB Bluetooth Dongle TI-EBA



Description:

It is a USB Bluetooth wireless module, featuring Bluetooth low energy consumption. With a high-performance antenna, it can receive mesh networks.

Specifications:

| | |
|-------------------------------|---|
| Model | TI-EBA |
| Communication protocol | BLE4.2/5.0 |
| Communication distance | Under ideal conditions, it is up to 250m |
| Transmit power | Max transmit power 6mW, adjustable multi-level power via software |
| USB interface | ESD protection treatment |
| Security mechanism | app key, device key, network key |
| Frequency | ISM 2.4G, min 2360MHz, typical 2402MHz, max 2500MHz |
| Power supply | USB power supply |
| Working temperature | Support long-term use at -40°C~85°C |
| Dimension | 59*18mm (L*W) |

Edge Device Management Software V9.01 TI-EPA

| 序号 | 名称 | 别名 | Mac | 连接状态 | 设备类型 | 注册时间 | 固件 | 操作 |
|----|-----------------|-----------------|-------------------|------|------|---------------------|-------|----|
| 2 | PA51-EM4F602002 | PA51-EM4F602002 | 08-0F-68-08-00-02 | 已连接 | PA51 | 2021-01-08 15:36:30 | 1.0.0 | 删除 |
| 3 | PA51-DM4D6A2021 | PA51-DM4D6A2021 | 08-04-0A-0A-02-01 | 已连接 | PA51 | 2021-01-08 15:36:32 | 1.0.0 | 删除 |
| 4 | PA51-DF6F6E2024 | PA51-DF6F6E2024 | 0F-6F-6E-20-20-24 | 已连接 | PA51 | 2021-01-08 15:36:34 | 1.0.0 | 删除 |
| 5 | PA51-FD4D6B67FC | PA51-FD4D6B67FC | FD-4D-2B-94-67-FC | 已连接 | PA51 | 2021-01-08 15:36:36 | 1.0.0 | 删除 |
| 6 | PA51-DM6E6020FC | PA51-DM6E6020FC | 08-0E-60-20-20-FC | 已连接 | PA51 | 2021-01-08 15:36:38 | 1.0.0 | 删除 |

Description:

The edge device management software effectively handles the massive and complex device access of the smart building system by providing software and hardware support with different drivers and protocols. At the same time, it works with the cloud to perform grouped and local full life-cycle management of access devices, and uses the device authentication mechanism of edge-cloud collaboration to ensure the security of access devices.

Feature:

- * Device authentication: support cloud device credential authentication and offline device serial number verification to ensure the end-to-end security of the overall smart building solution.
- * Device access: according to the connection mode and function, it is mainly divided into smart devices and gateways. Regardless of the device type or connection mode, complete device access includes three steps: online registration, offline connection, and cloud authentication.
- * Device attributes: device attributes are divided into read-only attributes and writable attributes; read-only attributes include device software version information, device type and MAC address, etc. Writable attributes are usually used to configure the data sampling and upload frequency of the device.
- * Device labeling: support the use of deployment tools to associate the device ID of each terminal device and edge device with the physical space coordinates, and the device can be classified into different functional areas for management at the edge gateway.
- * Device grouping: support grouping by type based on different functions of the device for unified group management; support group management of devices by scene or area to create the device linkage.
- * Command service: support unified management of the request command issued by the device to the edge and remote, and at the same time, the corresponding execution command is sent to the specific device through the edge side to perform the corresponding operation.
- * Equipment OTA: OTA (Over-the-Air Technology), i.e. over-the-air download technology; support device technical parameter upgrade via OTA.

Edge Device Analysis Software V9.02 TI-EPI

分配消息路由

* 路由名称
设备到流数据分析

* 消息来源
设备

* 产品
温度传感器

设备
temperatureSensor01

* 消息主题过滤
全部

* 消息目标
流数据分析 高温报警

确认 取消

Description:

Edge smart analysis software runs on a dedicated edge computing hardware platform, and provides services such as advanced data analysis, scene awareness, real-time decision-making, self-organization and collaboration; it also places data analysis function near the application scene (terminals or gateways) for implementation. This nearby smart service can meet the critical needs of the digital industry in terms of agile connection, real-time business, data optimization, application intelligence, security and privacy protection. At the same time, the software is organically linked with the cloud platform to complement each other, forming a more complete big data analysis platform and further optimizing the intelligence of business scenarios.

Feature:

- * Data collection, filtering, analysis, and synchronization: make full use of the data characteristics of the Internet of Things, and adopt a specially optimized storage and computing design to process time series data to significantly improve the system's processing capabilities and greatly reduce the complexity of system operation and maintenance.
- * Rule engine: as an engine for processing complex logic, the rule engine is an important module of edge smart analysis. It is mainly used to filter, modify (analysis), forward, and operate the data collected by the perception layer to realize the decoupling of data logic and upper layer business, including data forwarding and device linkage functions.
- * Data forwarding: support filtering data in the perception layer and forwarding it to other devices or databases, big data analysis and other cloud services, reducing the amount of data processing of upper-layer applications, thereby improving the efficiency of upper-layer data processing.
- * Device linkage: support mutual linkage between multiple devices; when the sensor detects a person moving, it will turn on the lighting device and automatically link the air conditioner. Device linkage supports the process in which the rule engine sends action instructions to the device, and implements them via SQL statements and forwarding attributive "topic".

Smart Switch

- TI-LS1
- TI-LS2
- TI-LS3



TI-LS1



TI-LS2



TI-LS3

Description:

The smart switch is a self-generating switch that requires no wiring and no batteries. It has a built-in Mesh wireless communication module, which can perform wireless data transmission. It can work with interactive smart sensors, edge gateways and other devices in the smart building system, and supports lighting control and linkage.

Features:

- * No wiring required, easy to install.
- * Press to generate electricity without batteries, environment friendly.
- * Reliable quality, the button can withstand 100,000 repeated presses.

Specifications:

| Model | TI-LS1 | TI-LS2 | TI-LS3 |
|------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Control button | 1 | 2 | 3 |
| Output power | +0dBm | +0dBm | +0dBm |
| Transmission distance | 15 meters | 15 meters | 15 meters |
| Communication protocol | BLE | BLE | BLE |
| BLE channel | 37/38/39(2402MHz/2426MHz/2480MHz) | 37/38/39(2402MHz/2426MHz/2480MHz) | 37/38/39(2402MHz/2426MHz/2480MHz) |
| Button strength | About 500g | About 500g | About 500g |
| Button stroke | About 4mm key end stroke | About 4mm key end stroke | About 4mm key end stroke |
| Service lifespan | > 100,000 times | > 100,000 times | > 100,000 times |
| Housing material | PC material | PC material | PC material |
| Weight | 0.1kg | 0.1kg | 0.1kg |
| Dimension | 86*86*15mm | 86*86*15mm | 86*86*15mm |

LED Panel Light

- TI-PL401
- TI-PL402
- TI-PL403



TI-PL401



TI-PL402



TI-PL403

Description:

It is suitable for lighting solutions in the front desk, open office area, passage, general conference room, video conference room, independent office room, leisure area, toilet, public business hall, lobby, parking lot, etc.

Features:

- * High-quality PC light-transmitting cover, good light transmittance, professional light guide plate dotted design, uniform light guide without yellow light/bright line, soft light color;
- * High-quality aluminum alloy frame, high mechanical strength, anodized aluminum process, comfortable texture;
- * Stable and reliable LED lamp beads, the lamp lifespan is up to 20000H;
- * High-brightness LED chips and reflective sheeting with a reflectivity of 97% ensure higher light efficiency and more power-saving;
- * Adopt SELV (safety extra low voltage), safe and reliable;
- * Super energy-saving, the max total light efficiency reaches 90lm/W, Ra≥80 ultra-high energy-saving rate.
- * External high conversion efficiency isolated 0-10V dimming drive power supply, with dimming range up to 15-100%, smooth dimming without flicker, good compatibility, high precision, high adaptability of dimming switch, and power factor up to 0.9;
- * No visual flicker, anti-blue light, healthier for the eyes.

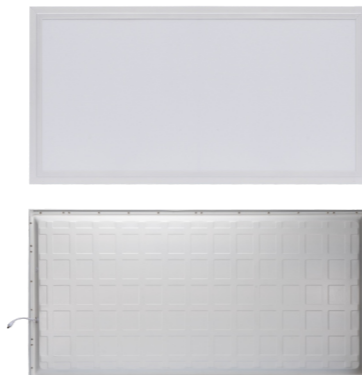
Specifications:

| Model | TI-PL401 | TI-PL402 | TI-PL403 |
|---------------------|-------------------------------|-------------------------------|-------------------------------|
| Input voltage/power | AC220V~50Hz/18W | AC220V~50Hz/30W | AC220V~50Hz/36W |
| Light source | Philips 3030 | Philips 3030 | Philips 3030 |
| Beam angle | 120° | 120° | 120° |
| Color temperature | 4500K (3200K, 6000K optional) | 4500K (3200K, 6000K optional) | 4500K (3200K, 6000K optional) |
| Control mode | 0-10V dimming | 0-10V dimming | 0-10V dimming |
| Installation method | Fixed installation | Fixed installation | Fixed installation |
| Protection class | IP20 | IP20 | IP20 |
| Product size | 300*300*30mm | 600*300*30mm | 600*600*30mm |
| Package size | 310*310*45mm | 645*310*45mm | 610*610*45mm |
| Net weight | 0.45kg | 0.75kg | 1.45kg |
| Gross weight | 0.55kg (1PCS/box) | 0.95kg (1PCS/box) | 1.75kg (1PCS/box) |

LED Panel Light
TI-PL404
TI-PL405



TI-PL404



TI-PL405

Description:

It is suitable for lighting solutions in the front desk, open office area, passage, general conference room, video conference room, independent office room, leisure area, toilet, public business hall, lobby, parking lot, etc.

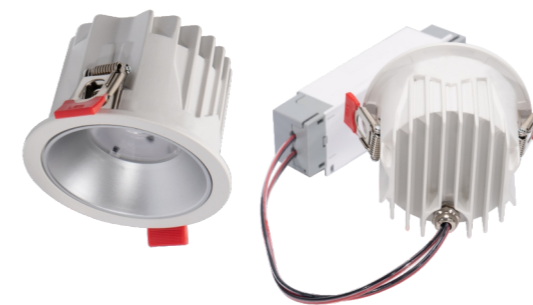
Features:

- * High-quality PC light-transmitting cover, good light transmittance, professional light guide plate dotted design, uniform light guide without yellow light/bright line, soft light color;
- * High-quality aluminum alloy frame, high mechanical strength, anodized aluminum process, comfortable texture;
- * Stable and reliable LED lamp beads, the lamp lifespan is up to 20000H;
- * High-brightness LED chips and reflective sheeting with a reflectivity of 97% ensure higher light efficiency and more power-saving;
- * Adopt SELV (safety extra low voltage), safe and reliable;
- * Super energy-saving, the max total light efficiency reaches 90lm/W, Ra \geq 80 ultra-high energy-saving rate.
- * External high conversion efficiency isolated 0-10V dimming drive power supply, with dimming range up to 15-100%, smooth dimming without flicker, good compatibility, high precision, high adaptability of dimming switch, and power factor up to 0.9;
- * No visual flicker, anti-blue light, healthier for the eyes.

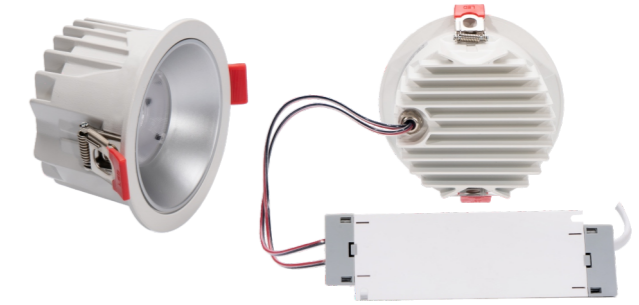
Specifications:

| Model | TI-PL404 | TI-PL405 |
|---------------------|-------------------------------|-------------------------------|
| Input voltage/power | AC220V~50Hz/36W | AC220V~50Hz/72W |
| Light source | Philips 3030 | Philips 3030 |
| Beam angle | 120° | 120° |
| Color temperature | 4500K (3200K, 6000K optional) | 4500K (3200K, 6000K optional) |
| Control mode | 0-10V dimming | 0-10V dimming |
| Installation method | Fixed installation | Fixed installation |
| Protection class | IP20 | IP20 |
| Product size | 1200*300*30mm | 1200*600*30mm |
| Package size | 1210*310*45mm | 1210*610*45mm |
| Net weight | 1.65kg | 3.5kg |
| Gross weight | 2kg (1PCS/box) | 4.1kg (1PCS/box) |

LED Down Light
TI-PL501
TI-PL502



TI-PL501



TI-PL502

Description:

It is suitable for lighting solutions in the front desk, open office area, passage, general conference room, video conference room, independent office room, leisure area, toilet, public business hall, lobby, parking lot, etc.

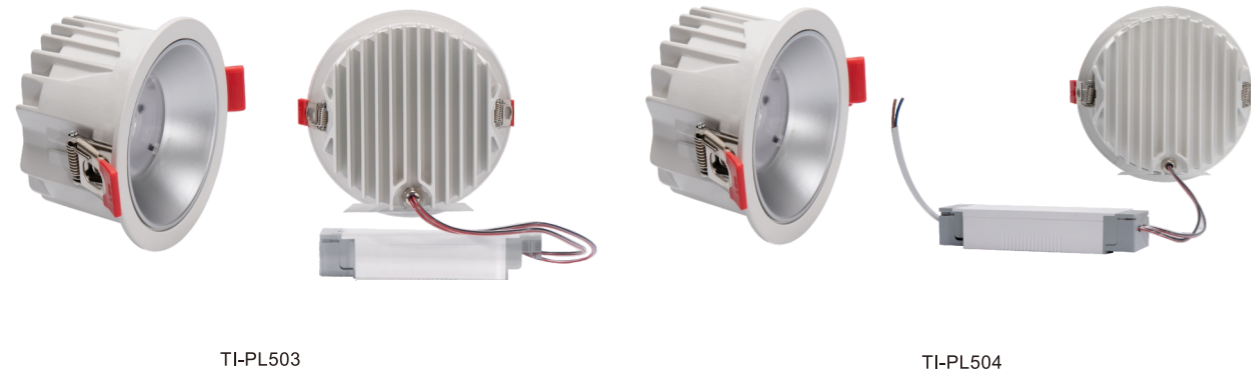
Features:

- * All-aluminum lamp, fin-shaped radiator, excellent heat dissipation, strengthen air convection, ensure stable performance and effectively prolong the lifespan of the light source;
- * Super energy-saving, the max total light efficiency reaches 120lm/W, Ra \geq 80 ultra-high energy-saving rate;
- * UGR<19, high comfort level; domestic COB chip, pure light color, good color temperature consistency; hidden light source, with frosted lens, sand silver inner ring, effectively reduce glare;
- * Adopt SELV (safety extra low voltage), safe and reliable;
- * External high conversion efficiency isolated 0-10V dimming drive power supply, with dimming range up to 15-100%, smooth dimming without flicker, good compatibility, high precision, high adaptability of dimming switch, and power factor up to 0.9;
- * No visual flicker, anti-blue light, healthier for the eyes;
- * Stable and reliable LED lamp beads, the lamp lifespan is up to 20000H.

Specifications:

| Model | TI-PL501 | TI-PL502 |
|---------------------|--|---|
| Input voltage/power | AC220V~50Hz/7W | AC220V~50Hz/12W |
| Light source | Philips 3030 | Philips 3030 |
| Beam angle | 15° (24, 36, 50° optional) | 15° (24, 36, 50° optional) |
| Color temperature | 4500K (3200K, 6000K optional) | 4500K (3200K, 6000K optional) |
| Color | White (black optional) | White (black optional) |
| Control mode | 0-10V dimming | 0-10V dimming |
| Installation method | Fixed installation, opening size 75-80mm | Fixed installation, opening size 95-100mm |
| Protection class | IP20 | IP20 |
| Product size | φ85*55mm | φ110*65mm |
| Package size | 150*80*150mm | 150*80*150mm |
| Net weight | 0.35kg | 0.45kg |
| Gross weight | 0.4kg (1PCS/box) | 0.5kg (1PCS/box) |

LED Down Light
TI-PL503
TI-PL504



Description:

It is suitable for lighting solutions in the front desk, open office area, passage, general conference room, video conference room, independent office room, leisure area, toilet, public business hall, lobby, parking lot, etc.

Features:

- * All-aluminum lamp, fin-shaped radiator, excellent heat dissipation, strengthen air convection, ensure stable performance and effectively prolong the lifespan of the light source;
- * Super energy-saving, the max total light efficiency reaches 120lm/W, Ra \geq 80 ultra-high energy-saving rate;
- * UGR<19, high comfort level; domestic COB chip, pure light color, good color temperature consistency; hidden light source, with frosted lens, sand silver inner ring, effectively reduce glare;
- * Adopt SELV (safety extra low voltage), safe and reliable;
- * External high conversion efficiency isolated 0-10V dimming drive power supply, with dimming range up to 15-100%, smooth dimming without flicker, good compatibility, high precision, high adaptability of dimming switch, and power factor up to 0.9;
- * No visual flicker, anti-blue light, healthier for the eyes;
- * Stable and reliable LED lamp beads, the lamp lifespan is up to 20000H.

Specifications:

| Model | TI-PL503 | TI-PL504 |
|---------------------|--|---|
| Input voltage/power | AC220V~50Hz/18W | AC220V~50Hz/25W |
| Light source | Philips 3030 | Philips 3030 |
| Beam angle | 15° (24, 36, 50° optional) | 15° (24, 36, 50° optional) |
| Color temperature | 4500K (3200K, 6000K optional) | 4500K (3200K, 6000K optional) |
| Color | White (black optional) | White (black optional) |
| Control mode | 0-10V dimming | 0-10V dimming |
| Installation method | Fixed installation, opening size 120-125mm | Fixed installation, opening size 160*85mm |
| Protection class | IP20 | IP20 |
| Product size | φ140*75mm | φ160*85mm |
| Package size | 170*85*170mm | 200*200*100mm |
| Net weight | 0.6kg | 0.85kg |
| Gross weight | 0.7kg (1PCS/box) | 0.95kg (1PCS/box) |

LED Linear Light
TI-PL601
TI-PL602
TI-PL603



Description:

It is suitable for lighting solutions in the front desk, open office area, passage, general conference room, video conference room, independent office room, leisure area, toilet, public business hall, lobby, parking lot, etc.

Features:

- * High-quality PC light-transmitting cover, good light transmittance, uniform light without yellow light/bright line, soft light color;
- * Through-type reinforcing ribs, high mechanical strength, not easily deformed;
- * Stable and reliable LED lamp beads, the lamp lifespan is up to 20000H;
- * Microcrystalline anti-glare design, UGR<16;
- * Adopt SELV (safety extra low voltage), safe and reliable;
- * Super energy-saving, the max total light efficiency reaches 100lm/W, Ra \geq 80 ultra-high energy-saving rate;
- * External high conversion efficiency isolated 0-10V dimming drive power supply, with dimming range up to 15-100%, smooth dimming without flicker, good compatibility, high precision, high adaptability of dimming switch, power factor up to 0.9;
- * No visual flicker, anti-blue light, healthier for the eyes.

Specifications:

| Model | TI-PL601 | TI-PL602 | TI-PL603 |
|---------------------|---|------------------|-----------------|
| Input voltage/power | AC220V~50Hz/36W | AC220V~50Hz/36W | AC220V~50Hz/36W |
| Light source | Philips 3030 | | |
| Beam angle | 120° | | |
| Color temperature | 3200K~6500K | | |
| Color | Color coated steel plate white/black/PC cover | | |
| Control mode | 0-10V dimming | | |
| Installation method | Line suspension / boom / square tube / bridge / ceiling | | |
| Protection class | IP20 | | |
| Product size | 150*1200*65mm | 200*1200*65mm | 250*1200*65mm |
| Package size | 1265*270*320mm | | |
| Net weight | 1.7kg | 2kg | 2.5kg |
| Gross weight | 5.3kg (2PCS/box) | 6.1kg (2PCS/box) | 7kg (2PCS/box) |

Smart Lighting Controller
TI-PL801



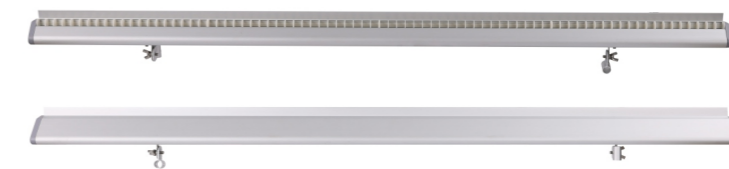
Features:

- * Built-in DALI bus power supply; DALI interface can be used for signal input, and also DC 16V external output.
- * Support DALI to analog 0-10V dimming.
- * Support dual color temperature dimming.
- * Support the control of 1 circuit breaker through DALI.
- * Support power consumption calculation.

Specifications:

| | |
|-------------------------------|-----------------------|
| Model | TI-PL801 |
| Input voltage | 100V-240V AC~ |
| Frequency | 50/60Hz |
| Power consumption | 0.3-2W (no load) |
| Output load | 650W@120V, 1050W@220V |
| Operating temperature | -20~+60°C |
| Installation method | Wall-mounted |
| IP rating | IP20 |
| Product size (L×W×H) | 151*64*30mm |
| Packaging size (L×W×H) | 290*180*195mm |
| Net weight | 0.15KG |
| Gross weight | 4KG(20PCS/box) |

LED Classroom Light
TL-PL901
TL-PL911



TL-PL901



TL-PL911

Description:

It is applicable to classrooms, office areas and other places.

Features:

- * Create a high-quality lighting environment, protect eyesight and improve teaching quality.
- * No stroboscopic hazard, comfortable for the eyes.
- * The light does not shine directly into the eyes and does not distract students.
- * Color rendering index up to 90, strong color reproduction ability, closest to natural light, proper protection for students' eyesight.
- * No blue light hazard, no noise pollution, no UV radiation.
- * High uniformity of light perception, soft and comfortable lighting, making it easy for students to concentrate and improve learning efficiency.
- * Through professional lighting design, the illuminance and uniformity are higher than the national standard.
- * Environment friendly: Saving more than 50% of electricity under the same illumination; no harmful substances such as mercury and lead.
- * The average service lifespan is over 50,000 hours, with low light decay and low maintenance costs.

Specifications:

| Model | TL-PL901 | TL-PL911 |
|-------------------------------------|-----------------------------|-----------------------------|
| Input voltage/power | AC220-240V 50/60Hz/36W | AC220-240V 50/60Hz/36W |
| Number of LEDs/light sources | 216PCS | 240PCS |
| Beam angle | C0/C180 27.8;C90/C270 103.1 | C0/C180 81.4; C90/C270 80.6 |
| Color temperature | 4000-5300K | 4000-5300K |
| Installation method | Hoisting installation | Hoisting installation |
| Protection class | IP20 | IP20 |
| Product size | 1221*90*57mm | 1200*300*100mm |
| Package size | 1260*345*140mm | 1240*365*336mm |
| Net weight/gross weight | 1.6KG/5.8KG (3PCS/box) | 3.1KG/11.1KG (3PCS/box) |

LED Classroom Light TL-PL914



Description:

It is applicable to classrooms, office areas and other places.

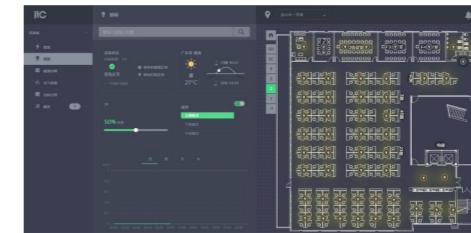
Features:

- * Create a high-quality lighting environment, protect eyesight and improve teaching quality.
- * No stroboscopic hazard, comfortable for the eyes.
- * The light does not shine directly into the eyes and does not distract students.
- * Color rendering index up to 90, strong color reproduction ability, closest to natural light, proper protection for students' eyesight.
- * No blue light hazard, no noise pollution, no UV radiation.
- * High uniformity of light perception, soft and comfortable lighting, making it easy for students to concentrate and improve learning efficiency.
- * Through professional lighting design, the illuminance and uniformity are higher than the national standard.
- * Environment friendly: Saving more than 50% of electricity under the same illumination; no harmful substances such as mercury and lead.
- * The average service lifespan is over 50,000 hours, with low light decay and low maintenance costs.

Specifications:

| | |
|-------------------------------------|-----------------------------|
| Model | TL-PL914 |
| Input voltage/power | AC220-240V 50/60Hz/36W |
| Number of LEDs/light sources | 240PCS |
| Beam angle | C0/C180 81.4; C90/C270 78.9 |
| Color temperature | 4000-5300K |
| Installation method | Hoisting installation |
| Protection class | IP20 |
| Product size | 1200*300*100mm |
| Package size | 1240*365*336mm |
| Net weight/gross weight | 2.8KG/10.2KG (3PCS/box) |

Smart Building Platform Software V9.03 TI-PN



Description :

The platform adopts a multi-modular design, and supports hardware access, software access modules, etc. It features powerful data analysis capabilities, and can perform smart analysis of collected data to optimize building operations, so as to improve energy efficiency and space utilization, as well as user efficiency, comfort and safety.

Feature:

- * Adopt a multi-modular design, support hardware access, software access module, alarm processing module, equipment/system management module, task scheduling module, cross-system linkage module, data management module, message service module, and integrated data display and visualized interactive modules for administrators and users; support the access of up to tens of thousands of hardware data points, and support the smooth extension of hardware data points on demand.
- * Equipped with equipment/system management module, perform device management status monitoring and status query for the terminal and system; equipped with task scheduling module, push feedback of terminal and application status monitoring and alarm, support interactive module definition tools; equipped with data management module, including high-extension database, real-time data processing analysis, structured and unstructured data processing and other multi-dimensional data management services; support development of message service application and management of platform tool modules, provide API interfaces, and decouple the hardware and software layers, etc.
- * Support the digitalization and informatization of the space geography, realize standardization of the original architectural drawings, and meet the specification requirements of operation and maintenance management. The building space can be divided and managed freely. Different types of spaces are marked in different colors, and quick search and positioning can be carried out according to projects, buildings, floors, and functional areas, including space positioning, equipment and other project queries. It supports online space division. When the function of the building space changes, the space name in the model can be redefined.
- * Support a web interface that can be safely accessed from anywhere to monitor and manage the operating status of multiple geographically distributed lighting systems; support the monitoring and management of the operating status of multiple geographically distributed HVAC systems. The lighting and air-conditioning coverage area can be reset through the web interface.
- * The platform can collect environmental data in real time, and support big data accumulation and application data.
- * Support the digital management of devices, assign device ID and unified device communication rules; support rich device and system access modes and access auxiliary tools; support visualized data management of key statistical data of space, environment, energy, personnel, system monitoring, and alarm information.
- * Support cloud computing and AI algorithm functions, support on-demand extension, and support professional maintenance computing and storage capabilities.
- * Support user permission management, realize the user login based on strict permission division, dynamically determine the operator and manager, and the display content will be dynamically loaded according to the user's identity to ensure the security of system applications.
- * Support alarm information display such as real-time alarm location, alarm classification, alarm level and so on.
- * Support API interface development to connect to other building-related systems.
- * Support the realization of illuminance and personnel occupancy data without human intervention, and automatically adjust the lighting brightness and automatically turn off the lights in unused rooms.
- * Support the control of lighting brightness based on personal preferences to make users more efficient and comfortable; support advanced lighting settings in the operation management interface: schedule, scene setting and personalized control.
- * Support real-time collection of data on occupancy, lighting, lamp status and energy measurement, and automatically generate lighting trend analysis; the system background can display the floor plan, lighting status, and sensor status; you can choose to display energy data charts by day, week, month, and year.
- * Support real-time detection of the lamp status. When a lamp fails, it will prompt on the platform for more effective maintenance.
- * Support smart control of HVAC systems to save energy by monitoring the ambient temperature, occupancy status, and air quality in the building.
- * Support smart control of air conditioners in various areas according to schedule and scene settings; support automatic generation of personalized modes by analyzing the user's active control data of air conditioners; support providing regional and differential temperature control via machine learning.
- * Support building analysis, conduct predictive modeling of HVAC systems to improve operational efficiency; support environmental monitoring, build data through visual sensing of environmental conditions and functions.
- * Support continuous monitoring of weather conditions to maintain the best environmental comfort and best energy efficiency.
- * Support the real-time refined temperature and occupancy data from sensors, provide visual display of heat and density, directly interact with building systems.
- * Support energy efficiency management driven by AI and data, including energy efficiency monitoring, energy efficiency analysis, and energy efficiency optimization.
- * Support continuous monitoring of energy-saving potential, virtual decomposition of energy consumption using AI models, real-time energy efficiency analysis and verification, rapid creation of energy efficiency benchmarks, and real-time verification of energy savings throughout the life cycle.
- * The 24/7 smart energy efficiency optimization driven by AI builds a default AI model based on local holidays, weather, building area, people flow and other data, and supports continuous traceable abnormal monitoring and warning.
- * Support standard functions: real-time and historical data, energy consumption trends and analysis of different categories in different regions at different times, KPI, energy balance, energy efficiency labeling and other refined energy management.
- * The smart building platform can easily summarize the energy data of various properties. The intuitive interface and interactive charts help users clearly understand the energy modes of various properties.
- * The system can be connected to building management systems, digital meters, central air-conditioning systems and lighting systems, featuring strong scalability and easy installation and deployment.
- * The system background can display the floor plan, HVAC status, and sensor status; it supports the viewing of temperature and humidity of the current area, and the control of temperature, mode, and scene of the air conditioning. You can choose to display energy data charts by day, week, month, and year.

Digital Signage Software V9.05 (Android) TI-R1



Description :

The digital signage software provides you with a comprehensive overview of the building's performance. The digital signage at different positions will display the environment, energy efficiency and space information of the area in real time, and provide first-hand digital information and trend analysis for on-site employees or logistics personnel. And it also supports the display of important information released by the company. In addition, the digital signage performs the adjustment of lighting and air-conditioning through a digital control interface, instead of traditional switch panels.

Feature:

- * Support the display of real-time air quality and historical data: including real-time outdoor weather conditions, indoor air AQI, temperature and humidity, VOC, PM2.5, CO2, etc.
- * Support energy efficiency visual information display: display the energy usage and trend graph of the functional area at different time periods, support identification and warn of abnormal energy consumption.
- * Support the display of space usage information: show the usage of different areas through statistics and analysis of personnel occupancy in each area.
- * Support lighting and air conditioning control: provide a control interface for lighting and air conditioning systems.
- * Support the display of important information released in real time in the building.

Mobile APP Software V9.06 (Android) TI-R2



Feature:

- * Network management: including functions such as network creation, equipment installation, equipment testing, equipment configuration, and equipment deletion.
- * Group management: the concept of a group is to assign multiple devices into a group, and access and control devices through the group. It can effectively improve the flexibility of management and reduce the number of control messages. It supports multiple group types, such as sensor-panel autonomous group, air conditioning group, lighting group, dimmer group, and central control group. Different group types define different behaviors.
- * Scene management: scenes are linkage rules for user-defined applications. Support multiple scene types, including scheduled trigger, sensor linkage trigger, local weather trigger and so on. Through the scene, users can define their own edge control.
- * Location selection: the main purpose is to locate the controllable lighting groups and the air-conditioning groups around the user. The location selection here includes selecting buildings and floors, which supports automatic or manual switching. It also locates the area where the user is. For large functional areas, users need to further mark their locations on the map.
- * Temperature control: including the setting of the temperature range of personal preference and adjustment of the temperature. The operation interface is user-friendly. The controlled device is a certain air conditioner internal unit.
- * Lighting control: including switch on/off and brightness adjustment, and the controlled device is a group of lights.
- * Self-learning module: regard temperature control and light control as a multi-target time-variable control system; use the user module for evaluation feedback of automatic control. The more the user adjusts, the lower the satisfaction level. Accordingly, the preset targets (mode, temperature and wind speed) of the area need to be adjusted, finally realizing that no human intervention is required.

Description :

The software supports the assignment of different permission modules through account permissions, which are divided into deployment module and user module. The deployment module is used for equipment installation and debugging. The installer can use the application to configure the BLE Mesh network to connect smart devices and deploy, debug, test, and manage the lighting system according to the rules. The main functions of the deployment module include network management, group management, scene management and network testing. The user module is provided to the end users in the office. Users can give real-time feedback of the brightness of the surrounding lights and the temperature of the air conditioners through the software.

Interactive Smart Sensor TI-S2



Description:

The interactive smart sensor is suitable for smart building systems. It has multiple built-in MEMS sensors and ready-to-use software packages, provides an open interface API, and supports quick deployment through BLE/BLE mesh flexible networking. It provides the best solutions for applications such as indoor environmental monitoring, intelligent lighting, HVAC automation, space management, energy management, and personnel and asset management of smart building systems.

Features:

- * Integrated multiple MEMS sensors for various data collection of environment, space and predictive maintenance.
- * Stable and reliable BLE/BLE Mesh wireless communication, with a typical communication distance of 50m.
- * The safety data protocol supports completeness management of sensor data and high-speed transmission data.
- * Support local algorithm and rule execution.
- * Support lithium battery power supply, no need for wiring, and provide 5V ~ 24V DALI power supply interface at the same time.
- * Support DALI/SR drive dimming.
- * Support RS485 data transmission.
- * Innovative adjustable PIR shield design, used to shield areas such as corridors and areas near sensor control.

Specifications:

| | |
|-----------------------------|--|
| Model | TI-S2 |
| Communication | Advanced Bluetooth 5.0 IEEE 802.15.1, BLE/BLE Mesh, integrated antenna |
| Kernel | ARM Cortex M4F, 1MB Flash, 256KB RAM |
| Interface | DALI/SR drive dimming (RJ11), RS485 data transmission (RJ11) |
| Motion sensing | PIR 5m, 106°*97° |
| Light sensing | 1 lux~80,000 lux; 23-bit |
| Temperature sensing | -20°C~60°C (limited by working conditions), the max sensing accuracy is ±0.5°C |
| Humidity sensing | 10~90%RH (no condensation, limited by working conditions), typical accuracy error ±3% |
| Air pressure sensing | 0~20,000hPa, typical accuracy error ±1hPa |
| Sampling rate | Humidity/pressure/temperature 182Hz |
| Port/slot | LED status display, adjustable PIR shield, reset button, OTA button |
| Material | PC polycarbonate plastic |
| Power consumption | Working mode 30mw, low power mode 0.18mw |
| Installation mode | Ceiling, pendent, or side-mounted installation (only used for temperature and humidity monitoring) |
| Power supply | 5V ~ 24V DALI Power supply interface |
| Working temperature | -20°C ~ 60°C |
| Relative humidity | 10~90%RH (no condensation) |
| Protection class | IP42 (IEC 60529) |
| Dimension | Φ86mm*26mm |
| Weight | About 100g |

Interactive Smart Sensor TI-S3



Description:

The interactive smart sensor is suitable for smart building systems. It has multiple built-in MEMS sensors and ready-to-use software packages, provides an open interface API, and supports quick deployment through BLE/ BLE mesh flexible networking. It provides the best solutions for applications such as indoor environmental monitoring, intelligent lighting, HVAC automation, space management, energy management, and personnel and asset management of smart building systems.

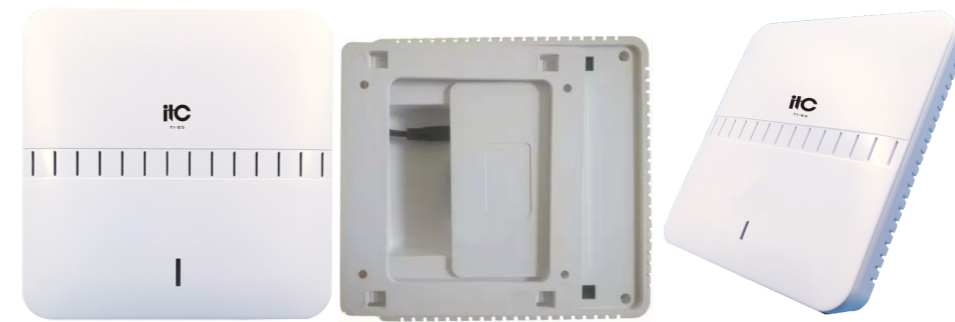
Features:

- * Integrated multiple MEMS sensors for various data collection of environment, space and predictive maintenance.
- * Stable and reliable BLE/ BLE Mesh wireless communication, with a typical communication distance of 50m.
- * The safety data protocol supports completeness management of sensor data and high-speed transmission data.
- * Support local algorithm and rule execution.
- * Support lithium battery power supply, no need for wiring, and provide 5V ~ 24V DALI power supply interface at the same time.
- * Support DALI/SR drive dimming.
- * Support RS485 data transmission.
- * Innovative adjustable PIR shield design, used to shield areas such as corridors and areas near sensor control.

Specifications:

| | |
|-----------------------------|--|
| Model | TI-S3 |
| Communication | Advanced Bluetooth 5.0 IEEE 802.15.1, BLE/ BLE Mesh, integrated antenna |
| Kernel | ARM Cortex M4F, 1MB Flash, 256KB RAM |
| Interface | DALI/SR drive dimming (RJ11), RS485 data transmission (RJ11) |
| Motion sensing | PIR 5m, 106°x97° |
| Light sensing | 1 lux~80,000 lux; 23-bit |
| Temperature sensing | -20°C~60°C (limited by working conditions), the max sensing accuracy is ±0.5°C |
| Humidity sensing | 10~90%RH (no condensation, limited by working conditions), typical accuracy error ±3% |
| Air pressure sensing | 0~20,000hPa, typical accuracy error ±1hPa |
| Sampling rate | Humidity/pressure/temperature 182Hz |
| Volatile organics | IAQ 0~500 |
| Port/slot | LED status display, adjustable PIR shield, reset button, OTA button |
| Material | PC polycarbonate plastic |
| Power consumption | Working mode 30mw, low power mode 0.18mw |
| Installation mode | Ceiling, pendent, or side-mounted installation (only used for temperature and humidity monitoring) |
| Power supply | Battery or RJ11 |
| Working temperature | -20°C~ 60°C |
| Relative humidity | 10~90%RH (no condensation) |
| Protection class | IP42 (IEC 60529) |
| Dimension | Φ86mm*26mm |
| Weight | About 100g |

Interactive Smart Sensor TI-S5



Description:

The interactive smart sensor is suitable for smart building systems. Using wired network, WIFI (TCP), RS485 ModBus RTU and other transmission modes, it supports the detection of indoor temperature, humidity, PM2.5, CO2, formaldehyde, VOC, pressure, illumination intensity, etc. In conclusion, it is a sensor with centralized functions that supports all-weather detection of indoor air quality.

Specifications:

| | |
|----------------------------|--|
| Model | TI-S5 |
| Temperature range | -20~80°C, resolution 0.1°C |
| Humidity range | 0~100%RH, resolution 0.1%RH |
| PM2.5 range | 0~1000ug/m3, resolution 0.1ug/m3 |
| CO2 range | 400~2000PPM, resolution 0.1PPM |
| Formaldehyde range | 0~1mg/m3, resolution 0.001mg/m3 |
| VOC range | 0~1mg/m3, resolution 0.001mg/m3 |
| Pressure range | 300~1100hPa, resolution 0.1hPa |
| Others | Built-in RJ45/WIFI module; RS485*1; Ethernet*1; Reset button*1 |
| Communication mode | Wired network, WIFI (TCP), RS485 ModBus RTU protocol |
| Power supply | 12V DC/POE 48V AC (15W) |
| Working temperature | -20°C~80°C |
| Working humidity | 0%Rh ~99%RH (no water vapor condensation) |
| Dimension | 168*168*28mm |
| Weight | 0.45kg |