

LIAONING YINGKOU TIANCHENG FIRE PROTECTION EQUIPMENT CO., LTD.

# Certifications&domestic sales networks













# **Company Profile**



Since the foundation in 1993, Liaoning • Yingkou Tiancheng Fire Protection Equipment Co., Ltd has focused on the fire alarm field and has owned the advantages of production-and-system solutions in the fire-fighting area, by adhering to prudent management, independent research and development, individual production, sustainable innovation and opening cooperation. Heretofore, Tiancheng has owned the capability to provide the integrated fire-fighting solutions for clients, business users and customers.

By virtue of the powerful R&D team and the determination of forging ahead with innovation for years, Tiancheng products have covered the whole fire alarm area and peripherals. The full realization of customers one-stop procurement and unified reporting improve the progress of projects and eliminate customers' worries.

The latest launched "Smart Fire Protection" system is designed on the notion of smart urban architecture, which is combined with the new generation of IT such as internet of things, big data, clouds computing and mobile internet, and the integrated fire protection and remote monitoring management system. "Smart Fire Protection", both

containing the integrated plans covering existing facilities and the upgrade plans meeting the needs of urban fire-fighting architecture on IT in the future, can greatly improve the efficient operation and the collaborative efficiency of the whole fire alarm system.

Over 30 branch offices of Tiancheng located in Beijing, Shanghai, Guangzhou, Shenzhen and other cities and regions, forming a national selling network and serving the nationwide users of pre-sales and after-sales services, 24-hour service hotline and effective and specific solution to customers' questions.

Now, the headquarters of Liaoning • Yingkou Tiancheng Fire Protection Equipment locates in Yingkou Area Of China (liaoning) Pilot Free Trade Zone, the production area of which has reached to over 18,000 m². Tiancheng, with the outfit of sound and advanced production equipment, inspection equipment and R&D equipment, has ranked in the list of National High-tech Enterprises, been the owner of multiple worldwide-authorized certifications and explored the business at homes and abroad.

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#### JTY-GM-TC5161

# Intelligent Photoelectric Smoke Detector

- Infrared scattering principle
- Non-polarized two-wire
- Drift compensation and fault detecting function
- Reporting dirt fault
- Hotel, restaurant, warehouse, library, office building, teaching building, power plant and other places
- Approvals: LPCB (EN54-7) CE



Operating voltage	Loop 24V(18.5V~26V)
Operating current	Standby current: ≤0.3mA;Alarm current: ≤0.8mA
Operating Environment	Temperature: -10°C~+55°C,Relative Humidity: ≤95%, non-condensing
Indicator	Red,Flashes when polling,Illuminates in alarm
Ingress protection rating	IP23
Material and color of enclosure	ABS; Milky white
Coding method	Electronically coding
Code range	1~255
Weight	About 110g
Mounting hole distance	60mm
Dimension	100mm×51mm (with base)

## JTW-Z0M-TC5162

# Intelligent Rate of Rise & Fixed Temperature Heat Detector

- Advanced single-chip microcomputer technology
- Non-polarized two-wire
- Indoor garage, kitchen, boiler room, generator room, drying room and other places
- Approvals: LPCB (EN54-5) CE



Operating voltage	Loop 24V(18.5V~26V)
Operating current	Standby current: ≤0.3mA;Alarm current: ≤0.8mA
Operating Environment	Temperature: -10°C~+50°C;Relative Humidity: ≤95%, non-condensing
Indicator	Red,Flashes when polling,Illuminates in alarm
Ingress protection rating	IP33
Material and color of enclosure	ABS; Milky white
Coding method	Electronically coding
Code range	1~255
Weight	About 110g
Mounting hole distance	60mm
Dimension	100mm×50mm (with base)

## JTY-GD-TC901

# Independent Photoelectric Smoke Detector

- Suitable for small houses or offices
- 9V alkaline battery and carbon-zinc battery
- Power saving and reliable work
- Low rate of false alarm, good anti-interference ability
- Special chip and advanced optical maze to detect smoke
- Self-test switch, test detector manually



Power supply	6F22 DC9V battery
Operating current	≤5uA
Alarm current	≤7mA
Operating Environment	Temperature: -10°C∼+50°C; Relative Humidity: ≤90%, non-condensing
Indicator	Red. Flashes about every 45s in normal condition
Alarm sound	≥80dB @ 3m
Protection area	60m² ~100m²
Weight	135g (with battery)
Mounting hole distance	60mm
Dimension	100mm×54mm (with base)

# Addressable Loop Isolator

- Isolate the shorted circuit from the whole system to ensure normal operation of other parts
- After removing the shorted circuit fault, it can automatically bring the Isolated part into the system
- Optional 170 mA and 270 mA
- Non-polarized two-wire
- Approvals: LPCB (EN54-17) CE





Operating voltage	Loop 24V(18.5V~26V)
Operating current	Action current≤170 mA or 270 mA (B and ZX2 short circuit here)
Load capacity	Loop 24V, 170mA;Loop 24V, 270mA (B and ZX2 short circuit here)
Indicator	Yellow, light out in normal condition, Illuminates in action
Operating Environment	Temperature: -10°C~+50°C;Relative Humidity: ≤95%, non-condensing
Coding method	Electronically coding
Material and color of enclosure	ABS; Porcelain white
Mouting hole distance	60mm
Dimension (L×W×H)	86mm×38mm×86mm (with base)

# Addressable Single Input Module

- Designed to connect with active devices in field such as water flow indicator, pressure switch, position switch, signal valve and devices able to transmit back switch signals
- The built-in microprocessor processes messages intelligently
- Plug-in structure
- Non-polarized two-wire
- Approvals: LPCB (EN54-18) CE







Operating voltage	Loop: 24V (18.5V~26V)
Operating current	Standby current: ≤0.2mA;Action current: ≤0.8mA
Operating Environment	Temperature: -10°C~+55°C;Relative Humidity: ≤95%, non-condensing
Indicator	Red,Flashes when polling,Illuminates in action
Coding method	Electronically coding
Code range	1~255
Material and color of enclosure	ABS; Porcelain white
Weight	About 110g (with base)
Mounting hole distance	60mm
Dimension (L×W×H)	86mm×38mm×86mm (with base)

# Addressable Single I/O Module

- Designed to connect with linkage devices of fire alarm control panel, such as exhaust valve, air valve, fire damper etc., and can receive feedback signal from device
- Non-polarized two-wire
- Active and passive output
- The input terminal can be in field set to normally open detecting wire or self-feedback mode, which can be connected with passive contact
- Approvals: LPCB (EN54-18) CE







Operating voltage	Loop:24V (18.5V~26V);Power: DC24V (DC19V~DC28V)
Standby current	Loop: ≤0.2mA;Power: ≤2mA
Starting current	Loop: ≤2mA;Power: ≤22mA
Operating Environment	Temperature: -10°C~+55°C;Relative Humidity: ≤95%, non-condensing
Output capacity	Passive:Capacity: DC30V/3A;Contact resistance in normal condition: $100k\Omega$ ;Closed when activated;Suitable for DC or AC12V $\sim$ 48V;Active output: DC24V/1.5A
Indicator	Red,Input indicator,Flashes when polling,Illuminates in action,Output indicator,Illuminates in action
Coding method	Electronically coding
Code range	1~255
Material and color of enclosure	ABS; Porcelain white
Weight	About 147g (with base)
Mounting hole distance	60mm
Dimension (L×W×H)	86mm×38mm×86mm (with base)

# Addressable Single I/O Module

- Two-wire system with non-polarity. There is no extra need of DC24V, low-pow dissipation
- Volt output is volt-free output
- Input and output has the feature of cable checking for the shot or open circuit
- The input and output have their own isolating loop which can filter the interference from the outside
- Input terminal can be in field set to normally open cable monitor or auto feedback mode, can connect volt-free contact
- The addressable code is electrical, which can be written by the Hand Held Programmer in advance, convenience and reliable for the commissioning
- The circuits and wiring parts are designed as plug-in structure, reliable contact and easy for constructing



Operating voltage	Signal bus voltage: loop 24V DC, Range allowed:18.5VDC~26VDC
Operating voltage	Signal bus voltage. 100p 24v DC, Range anoweu. 18.3vDC 20vDC
Operating current	Bus standby current: ≤ 0.3mA, Bus action current: ≤ 0.8mA
Input cable checking	When in normally open cable monitoring, there is open circuit (short circuit for action signal), the module reports fault signal to the FACP
Output cable checking	There is short, open circuit in output cable, the module reports fault signal to the FACP
Output capacity	Volt-free output: DC30V/3A
Indicator	Red (Input indicator: Flashes when polling, and illuminates in action. Output indicator: Illuminates in action.)
Programming method	Electronically programming, taking one addressable point on the loop. Code range: any one address within $1^{\sim}255$
Operating environment	Atmospheric pressure: 86KPa~106KPa,Temperature: -10°C∼+55°C Relative Humidity: ≤95%, non-condensing
Dimension (L×W×H)	86mm×40mm×86mm (with base)
Material and color of enclosure	ABS; porcelain white
Weight	about 147g (with base)
Mounting hole distance	60mm
Standard	EN54-18

## J-SAP-TCSB5264

# Analogue Addressable Manual Call Point

- Installed in public places; when there is a fire, pressing the frangible element on this MCP can send fire signal to fire alarm control panel
- Alarm by pressing, reset by a special key
- Non-polarized two-wire to the control panel
- Reusable
- Approvals: LPCB (EN54-7) CE







Operating voltage	Loop 24V(18.5V~26V)
Operating current	Standby current: ≤0.2mA;Alarm current: ≤0.8mA
Operating Environment	Indoor Temperature: -10°C∼+55°C;Relative Humidity: ≤95%, non-condensing
Indicator	Red. Flashes about every 3s when polling; Illuminates after in alarm
Coding method	Electronically coding
Code range	1~255
Material and color of enclosure	ABS; Red
Weight	About 120g (with base)
Mounting hole distance	60mm
Dimension (L×W×H)	95mm×44mm×95mm (with base)

## **TCSG5267**

# Addressable Sounder Strobe

- Non-polarized two-wireBuilt-in microprocessor, with intelligent fuzzy judgment ability
- Electronically coding
- Equipped with self-diagnosis function to ensure its reliable work
- The state signal value can be provided to directly reflect the current working state of the acousto-optic alarm



Operating voltage	Loop: 24V (18.5V~26V)
Standby current	Loop: ≤0.4mA
Active current	Loop: ≤10mA
Operating Environment	Indoor (Non-residential);Temperature: -10°C~+50°C; Relative Humidity: ≤95%(40±2°C)
Sound level	75dB~115dB (A weighted)
Pitch shift periodic	3S~4S
Basic flashing frequency	1Hz∼1.5Hz
Weight	200g
Dimension	ф101mm×51mm

## **TCSG5266**

# Addressable Sounder Strobe

- Installed in public places
- A kind of audio and visual alarm device used to warn people in field when fire occurs
- Four wires:non-polarized signal two-wire, and non-polarized DC24V power two-wire
- Built-in microprocessor
- Self-diagnostic function
- Electronically coding
- Approvals: LPCB (EN54-3) CE





CE

Operating voltage	Loop: 24V (16V~28V);Power: DC24V (DC19V~DC28V)
Standby current	Loop: ≤0.2mA;Power: ≤0.5mA
Active current	Loop: ≤1.5mA;Power: ≤50mA
Operating Environment	Indoor (Non-residential);Temperature: -10°C∼+50°C; Relative Humidity: ≤95%(40±2°C)
Sound level	80dB∼115dB (A weighted)
Pitch shift periodic	3.55~4.55
Basic flashing frequency	1Hz∼2Hz
Weight	200g
Dimension (L×W×H)	115mm×55.3mm×140mm

## JB-TG-TC5000/JB-LT-TC5200

# Intelligent Fire Alarm Control Panel

- Color menu display
- Intelligent bus control, max 255 points per loop and max 64 loops
- Comprised of 32 pieces of 64-loop or 128-loop intelligent bus control panel
- Comprised of 32 pieces of two-wire or three –wire direct control panel
- Glass fuse per loop
- Black box, with the optional function of "Set Top Box"
- Filter output has been applied to this control panel, including loop bus output, multi-wire output, power output, acousto-optic output and fire alarm relay output
- Independent controlling password for the specially needed gas recharging units
- Self-design loop protocol

	JB-TG-TC5000	JB-LT-TC5200
Mains supply	AC220V (5A);Voltage range: +10%∼-15%	
Standby battery	12V/12AH sealed l	ead acid battery *2
LCD screen size	7-inch color LCD scree	n;Resolution: 800×480
Operating Environment	Temperature: -5°C∼+50°C;Relative	e Humidity: ≤95%, non-condensing
Capacity	16320 addre	ssable points
Communication Interface	RS232、RS48	5、CAN、USB
Dimension (L×W×H)	600×480×1800mm	1068×993×1335mm



JB-TG-TC5000



JB-LT-TC5200

#### **JB-TB-TC5109**

# Intelligent Fire Alarm Control Panel

- Color menu display
- Intelligent bus control mode; max 255 addressable points per loop, max 4 loops, max 48 zones
- Loop card type design:1-4 loop card can be seledted
- Glass fuse per loop
- Black box function
- Independent controlling password for the specially needed gas recharging units
- Self-design loop protocol
- Wall-mounted structure, compact and exquisite
- Language: simplified Chinese and English
- Approvals: LPCB (EN54-2/4) CE







Mains supply	AC230V (50HZ),Voltage range: +10%~-15%
Standby battery	12V/12AH sealed lead acid battery *2
LCD screen size	7-inch color LCD screen
Operating Environment	Temperature: -5°C~+50°C;Relative Humidity: ≤95%, non-condensing
Capacity	1020 addressable points
Communication Interface	RS232、RS485、CAN、USB
Dimension (L×W×H)	420mm×140mm×560mm
Output	Five output. Fault output. 24V power output. Loop output

#### TCBM5023

## Handheld Encoder

- Contact-type encoding method
- Simplify encoding procedure, shorten encoding time, and reduce work intensity
- Complete encoding within a second
- Greatly improve the efficiency of the engineering commissioning
- Manual structure, compact appearance
- LCD and English display
- Battery management function



#### **Technical Specifications**

Power supply	1.5V/AA battery *2
Operating current	≤40mA
Standby current	≤2mA (4mA when the backlight is on)
Operating Environment	Temperature: -10°C∼+50°C,Relative Humidity: ≤95%, non-condensing
Dimension (L×W×H)	60mm×29mm×155mm

#### TCDZ5000

#### **Detector Base**

- Common base for fixing detectors, compatible with TC5101 and TC5102
- No electronics, safe at the time of installation



## JB-QB-QTC5015

# Gas Fire-extinguishing Control Panel

- Color menu display
- Max 4 fire protection zones and 1 fire alarm loop
- Max 6 direct control points
- Networking function
- Built-in printer
- Wall-mounted structure, compact and exquisite
- Connection with field devices through loop control
- The system is a combination of alarm, linkage and gas fire-extinguishing
- Devices can be connected include smoke detector, heat detector, flame detector, MCP, emergency start/abort button, sounder strobe, gas spray indicator, auto/manual switch module and I/O module



Mains supply	AC220V (3A),Voltage range: +10%∼-15%	
Standby battery	DC12V/12AH sealed lead acid battery *2	
LCD screen size	4.3-inch color LCD screen	
Operating Environment	Temperature: 0°C∼+40°C;Relative Humidity: ≤95%, non-condensing	
Capacity	510 addressable points	
Communication Interface	RS485、CAN、USB	
Dimension (L×W×H)	385mm×134mm×510mm	

## TC-S5701

# Auto/Manual Switch Module

- Conversion Between manual operation mode and automatic operation mode
- Installed at the entrance of the protected area
- In manual state, systems will not linkage
- In automatic state, systems will linkage
- Configurable with JB-QB-QTC5015 Gas Fire-Extinguishing Control Panel



Operating voltage	Loop: 24V (16V~28V)
Operating current	≤1mA
Operating Environment	Temperature: -10°C∼+55°C,Relative Humidity: ≤95%, non-condensing
Indicator	Red
Material and color of enclosure	ABS; Porcelain white
Weight	About 110g (with base)
Mounting hole distance	60mm
Dimension (L×W×H)	86mm×38mm×86mm(with base)

# TC-S5712

# **Emergency Start/Abort Switch**

- Non-polarized two bus system
- Installed at the entrance of the protected area
- When fire occurs, press emergency start/abort switch
- Special key resettable



Operating voltage	DC24V (DC16V~DC28V)	
Operating current	≤1mA	
Operating Environment	Temperature: -10°C~+55°C,Relative Humidity: ≤95% (40±2°C)	
Indicator	Red, Flashes when polling Illuminates in action	
Material and color of enclosure	ABS; Porcelain white	
Weight	About 110g (with base)	
Mounting hole distance	60mm	
Dimension (L×W×H)	80mm×55mm×100mm (with base)	

## JB-KR-TC5306

# Combustible Gas Alarm Control Panel

- Color menu display
- Max 1 loop
- Networking Function
- Wall-mounted structure, compact and exquisite
- Built-in printer
- Strong anti-interference capability



Mains supply	AC220V (3A),Voltage range: +10%∼-15%	
Standby battery	12V/7AH sealed lead acid battery *2	
LCD screen size	4.3-inch color LCD screen	
Operating Environment	Temperature: 0°C∼+40°C;Relative Humidity: ≤95%, non-condensing	
Capacity	255 addressable points	
Communication Interface	RS485, CAN, USB	
Dimension (L×W×H)	320mm×120mm×400mm	

#### **JT-TC516**

# Addressable Combustible Gas Detector

- Electronically coding
- Ceiling-mounted
- Electronically addressed
- Widely used in homes, hotels, apartments and other places where combustible gas exists
- Detect natural gas, manufactured gas, liquefied petroleum gas and other combustible gas
- Active contact, applying to DC12V Singlephase dc pulse solenoid valve; the drive capability of a solenoid valve: 1000μF capacity discharge



Operating voltage	DC24V
Standby current	21mA
Alarm current	28mA
Operating Environment	Temperature: -10°C∼+50°C,Relative Humidity: ≤95%
Sound level	>75dB
Pressure	86kPa-106kPa
Dimension	100mm×51mm (with base)

#### **JT-TC518**

# Addressable Combustible Gas Detector

- Electronically coding
- Wall-mounted
- Electronically addressed
- Widely used in homes, hotels, apartments and other places where combustible gas exists
- Monitor natural gas, manufactured gas, liquefied petroleum gas and other combustible gas
- Active contact, applying to DC12V Single-phase dc pulse solenoid valve; the drive capability of a solenoid valve: 1000μF capacity discharge
- Able to shut down the valve



Operating voltage	DC24V
Standby current	21mA
Alarm current	28mA
Operating Environment	Temperature: -10°C∼+50°C,Relative Humidity: ≤95%
Sound level	>75dB
Pressure	86kPa-106kPa
Dimension (L×W×H)	86mm×48mm×120mm

## **JT-TC521**

# Independent Combustible Gas Detector

- Wall-mounted
- Non-coding
- Widely used in homes, hotels, apartments and other places where combustible gas exist
- Monitor natural gas, manufactured gas, liquefied petroleum gas and other combustible gas
- Able to shut down the valve



Operating voltage	AC220V
Standby current	6mA
Alarm current	7mA
Operating Environment	Temperature: -10°C∼+50°C,Relative Humidity: ≤95%
Sound level	>75dB
Pressure	86kPa-106kPa
Dimension (L×W×H)	86mm×48mm×120mm

## ASD-TC5801/ASD-TC5802

# **Aspirating Smoke Detector**

- High precise pipeline sampling and high sensitivity
- Operating environment: clean, large places, or places with high-temperature, high-humidity or strong electromagnetic radiation
- Application places: warehouses, offices, production sites, airports, factories, historical buildings, clean rooms, EDP rooms, communication exchange rooms, shops, cinemas, leisure centers, churches, libraries, hotels, hospitals, electric and nuclear power plants, storerooms, subways and etc
- Wall-mounted structure





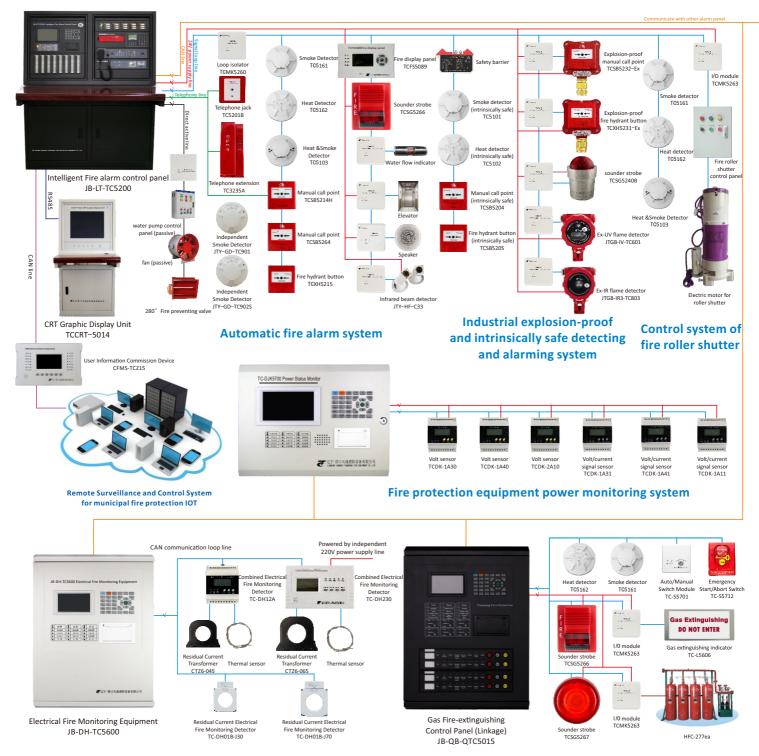
ASD-TC5801

ASD-TC5802

	ASD-TC5801	ASD-TC5802
Operating voltage	Bus voltage:24V, range:16V~28V Power: DC24V, range:DC20V~DC28V	
Operating current	Bus:standby current≤1 mA, alarm current≤1 mA Power Supply:standby current≤0.9 A, alarm current≤1 A	Bus:standby current≤1 mA, alarm current≤1 mA Power Supply:standby current≤1.8A, alarm current≤2A
Relay output	1A/24VDC, 1A/120VAC	
Networking mode	Loop communication, RS-485, CAN bus loop communication	
Information storage capacity	Fire log: 1000 items, fault log: 1000 items and disable log: 1000 items	
Max sampling length of single pipe	100m	
Number of sampling loop	2	4
Material of enclosure	Metal	
Ingress protection rating	IP30	
Dimensions (L×W×H)	290mm×125mm×350mm	476mm×125mm×350mm
Operating environment	Temperature:- $10^{\circ}$ C $\sim$ +55 $^{\circ}$ CRelative humidity: $10\%\sim$ 95%, non-condensing	

# **MANUFACTURER**

# INTEGRAL CONTROL PROJECT FOR



**Electrical Fire Monitoring System** 

**Electrical Fire Monitoring System** 







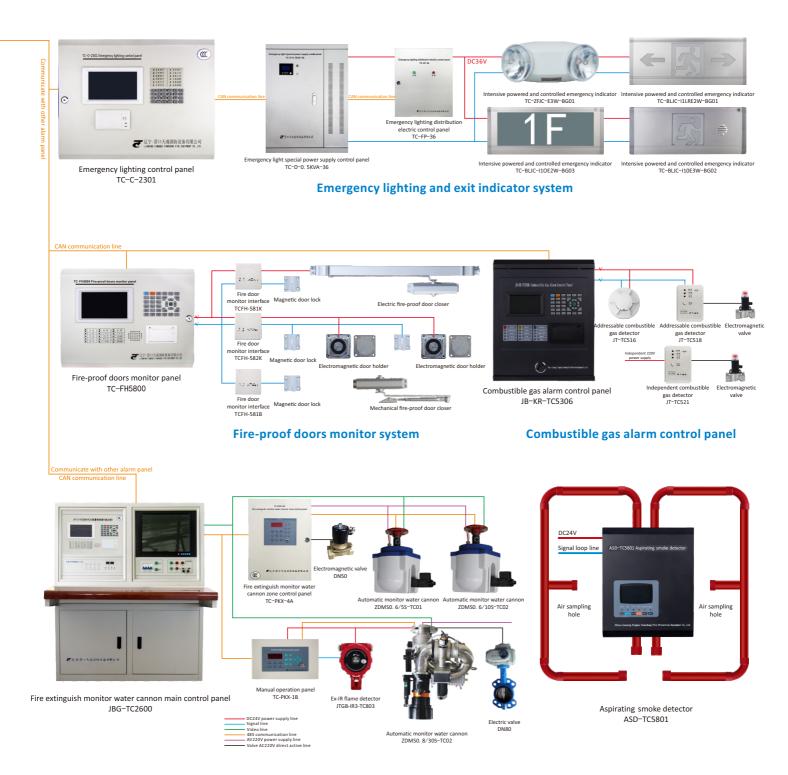








# **AUTOMATIC FIRE ALARM SYSTEM**



Large space automatic fire extinguish monitor water cannon system

Aspirating smoke detection and alarm system















# Construction Fire Fighting Project



Beijing Taiji Information Technology Industry Base



Shanghai North Star Plaza



Shenzhen China Merchants Shipyard (Zizhou Island)



Taiyuan University of Science and Technology, South Campus



Taiyuan Gymnasium



Hangzhou Power Plant of Banqiao Group



Ningbo Lishi Financial Building



Zhengzhou Subway Station



Shangqiu Mengdie Integrated Display Center



Luzhou Yuchan International City



Guiyang Guansu Automobile Trade Co., Ltd



Liuzhou Bailian Airport



Libyan National Stadium



Myanmar Cantaya International Hotel



Fiji The city hall of Suva



Algeria Manders Hospital



Jamaica Kingston Manor



Congo Ipunos Building, Lubumbashi



Jamaica Kingston Manor



Cambodia
Phnom Penh Pedestrian mall



France Rose Mall



Zambia Copper Strip International Airport



Sri Lanka Jie Jie Beach Hotel



Iran
International Auto Production Base

# **MANUFACTURER**



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