

TDJ



NANO Material

Independent Invention Patents



先驱者 - 创

TENG DAJIE SCIENTIFIC VECTOR

福建省腾达洁环保工程有限公司

Fujian Tengdajie Environment Protection Engineering Co., Ltd.

Dreams set sail  
Create brilliance

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# Company Profile



Fujian Tengdajie Environmental Protection Engineering Co., Ltd. is a mainstream service-oriented production enterprise, set research and development, production, sales, service as one of the comprehensive service system, committed to the research and development of new material technology and application. Through years of industry experience, our company has repeatedly communicated with managers and technical departments of customers to understand customers' challenges and demand. Adhering to the principle of considering customers' difficulties and urgent customers' needs, we have jointly developed diversified products with equipment safety as the core and electric cleaning and maintenance as the center, together with many experts and professors from several R&D institutions. At present, our company has launched a series of products on the market, such as "no flash point power electric live cleaning detergent, visual hard film insulation protection agent, small space intelligent network extinguishing terminal, water-based fire extinguishing agent (household and industrial) etc., as well as the research and development and production of power electric equipment live cleaning and maintenance, live cleaning and maintenance technology innovation, high and low voltage frequency conversion and PLC maintenance, new energy DC power supply maintenance and other high-tech innovation, provide security for the power electric equipment in all kinds of working conditions and all kinds of industries.

# Honors and Qualifications



★ 经过工业和信息化部电子第五研究所检测合格



★ 经过武汉高压电力研究所检测合格



★ 经过南京医科大学应用毒理研究所毒理学检测合格，对人体无毒无害



★ 产品责任险由中国太平洋财产保险股份有限公司承保



★ 经过第三方权威机构检测，对我公司的工器具进行工频耐压试验合格



★ 实用新型专利证书



# Products Introduction

## Live cleaning maintenance service

Tengdajie's live cleaning and maintenance service is to clean the equipment 360 degrees without dead ends. The product belongs to liquid nanomaterials, which use tiny particles to infiltrate, decompose, wrap, and peel off pollutants, and finally clean the equipment in a purely physical way through liquid scouring. It can completely remove dust and deep-seated pollutants on the surface of equipment during live work, effectively reduce the operating temperature of transformers and other equipment by 10-30%, eliminate the static electricity accumulated by equipment, better ensure the safe and normal operation of equipment, and effectively improve the efficiency and safety of enterprises. The construction technology can not only clean the dust on the surface, but also clean the inside of the switch or components to remove dust and carbon deposits, remove the "conductive pollutants" formed on various power equipment circuits and related mechanical parts, and eliminate the shock of sensitive components. The root cause of wear (unexplained tripping, leakage, abnormal temperature rises of equipment), thereby reducing the failure rate of equipment and slowing down secondary pollution.

### Project service process

1. On-site equipment survey
2. Equipment operation data collection
3. Working out implementation and contingency plans
4. Implementation and contingency plans verification
5. Prepare implementation plan
6. Handling project service related procedures
7. Implement according to the implementation plan
8. Collect equipment operation data after implementation



### ◆ Power Electric Primary Equipment

Generator sets, step-up stations (lightning arresters, disconnectors, voltage transformers, current transformers, high-voltage circuit breakers, transformers, busbars), transmission lines (tension insulators), step-down stations (lightning arresters, disconnectors, voltage transformers, current transformers, high-voltage circuit breakers, transformers, busbars) and other power and electrical equipment maintenance from scrubbing to cleaning, from power outage operations to live insulation maintenance, is the embodiment of scientific and technological progress, and has great impact on the safety of power supply and distribution system grids. Stable operation provides reliable technical support and has great economic benefits.

**A.** It has great economic benefits for the power grid. Even if the operation mode of some equipment is changed, it is impossible to be completely out of power. If the power is cut off and cleaned, it will cause large economic losses. The higher the working voltage, the more power will be lost, which can be calculated according to the following formula:  $P=U^2/R$ ,  $Q=Pt$ . Although the actual power outage operation time is not long, the auxiliary work takes a long time. Based on a 4-hour power outage, the 110KV power loss is about 100,000-200,000 kwh. 220kV can reach 300,000-500,000 kwh. Calculated at 0.5 yuan for 1kwh, the loss will reach 50,000-250,000 yuan, which is the direct loss of the power grid. Live insulation maintenance can avoid this part of the economic loss, thereby ensuring the safe and stable operation of the power grid and bringing considerable economic benefits. .

**B.** Greater economic benefits to society and enterprises. Calculated according to the above situation, the indirect loss of 1kwh power failure in modern society can be calculated as 20 times in medium-sized areas, and more than 50 times in enterprises in developed areas (special economic zones, coastal areas, high-tech content). This is a very considerable number, from which it can be estimated that the live insulation maintenance technology will generate huge economic benefits to the power grid, and at the same time will certainly bring greater economic and social benefits to society and enterprises.

**C.** Timely and regular live insulation maintenance of power and electrical equipment can avoid pollution flashover accidents, increase power supply, increase output value for enterprises, and make more contributions to society. Electricity accidents are a day's disaster in modern society. To avoid disasters and prolong the service life of equipment, live insulation maintenance is the preferred mode to ensure normal power supply and stable and safe operation of the power grid.



## ◇Power Electric Secondary Equipment

Inside substation high-voltage and low-voltage power distribution cabinet (GCS low-voltage withdrawable switchgear, GCK low-voltage withdrawable switchgear, MNS low-voltage withdrawable switchgear), automation control equipment (PLC automation control system, PLC control cabinet, DCS Distributed control system, DCS control cabinet, FSC fieldbus control system, FSC control cabinet), other instrumentation equipment, etc.

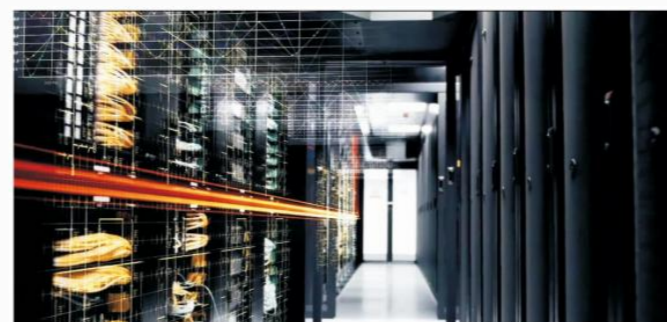
All kinds of secondary equipment in substations (substations) and power distribution rooms, such as high and low voltage power distribution cabinets, relays, terminal boxes, power distribution panels (cabinets), protection panels (cabinets), control panels (cabinets), and measurement and control panel cabinets Due to their own working characteristics, equipment such as equipment screens (cabinets) generate potential differences and static electricity during operation, which will lead to the adsorption of various dust particles, and will inevitably absorb dust, oil, moisture, salt, and metals in the atmospheric environment. Dust, carbon stains and other dirt bedding and form accumulation. It affects the normal dissipation of the components in the electrical panel, leading to an abnormal rise in temperature, and makes the components in the electrical panel more likely to absorb moisture, resulting in a decrease in insulation; Short circuits or microcircuits are formed on the board, which may cause loss and distortion of control and measurement equipment signals; under humid conditions, these pollutants containing salt, acid, and alkaline substances become electrolytes, enhancing conductivity, reducing insulation resistance, and increasing leakage current. Large, it is easy to cause accidents such as short circuit, electric arc, poor dispersion and equipment malfunction, which will cause greater safety hazards.



## ◇Network Communication Equipment

Servers (rack servers, tower servers, blade servers), switches (box switches, frame switches, core switches), routers (box routers, frame routers, core routers), firewalls, disk arrays, small machine, UPS power supply, optical transceiver, core network computer room (switching equipment, transmission equipment, data equipment), communication base station (BTS equipment, transmission cabinet, integrated cabinet), microwave equipment, UPS power supply, etc. With the rapid development of network communication, after long-term use of the equipment room, or problems such as installation of equipment while the new machine room is being renovated, a large amount of dust, oil, smoke, moisture and even salt have accumulated in the equipment. Due to the dense arrangement of equipment in the equipment room and the need for personnel to enter and exit to replace and inspect equipment, compared with equipment rooms without switches, dust and electrostatic adsorption particles are easier to accumulate on the surface of the equipment.

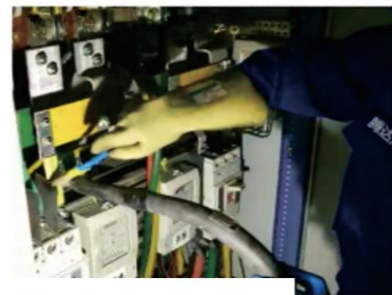
A large number of facts have proved that the accumulation of a large amount of dirt affects not only the environment of the computer room, but also the operational reliability of communication equipment. Environmental pollution will greatly reduce the working efficiency, stability, accuracy and reliability of network communication equipment, resulting in service quality not reaching the due level, huge investment not being fully utilized, and also affecting the reputation of the system operation department. The performance degradation of microcircuits caused by comprehensive pollution is increasingly changing the original design operating conditions of communication equipment, seriously affecting the quality of network communication equipment, and there are electrostatic fields in areas with different potentials between the charged parts inside the equipment and the surrounding space. This electrostatic field will induce electrification of metal dust on component circuit boards, especially on circuit boards with dense components, resulting in degradation of microcircuit performance; This electrostatic field also polarizes the dust to form a micro-electric field; a micro-battery is formed in the electrolyte; parts at different potentials form complex additional capacitance, all of these factors not only accelerate the corrosion of exposed metal of components, but also The operating conditions of the original design of communication equipment are increasingly seriously changed, resulting in dysfunction of equipment and components, forming the main source of "soft faults" in communication equipment, resulting in a decrease in signal-to-noise ratio, channel congestion, signal crosstalk, and signal failure. Delay, chip speed drop, large-scale memory failure, system software information loss, logic gate circuit misoperation, bit error rate increase, frequent misoperation, command refusal to operate, formation of peak current voltage exceeding tolerance limit, breakdown PN junction, device arcing, sparking phenomenon, corona effect lead to component destruction, hardware damage and other problems.



Tengdajie's technical process is to clean the equipment 360 degrees without dead ends. The product belongs to liquid nanomaterials, which use tiny particles to infiltrate, decompose, wrap, and puncture pollutants, and finally clean the equipment in a purely physical way through liquid scouring. It can completely remove dust and deep-seated pollutants on the surface of equipment during live work, effectively reduce the operating temperature of transformers and other equipment by 10-30%, eliminate the static electricity accumulated by equipment, better ensure the safe and normal operation of equipment, and effectively improve the efficiency and safety of enterprises, the construction technology process can not only clean the dust on the surface, but also clean the inside of the switch or components to remove dust and carbon deposits, remove the "conductive pollutants" formed on various power equipment circuits and related mechanical parts, and eliminate the breakdown of sensitive devices The root cause (unexplained tripping, leakage, abnormal temperature rise of equipment), thereby reducing the failure rate of equipment and slowing down secondary pollution.



Live test



Physical collection



Dissolving decontamination



Nano material protection

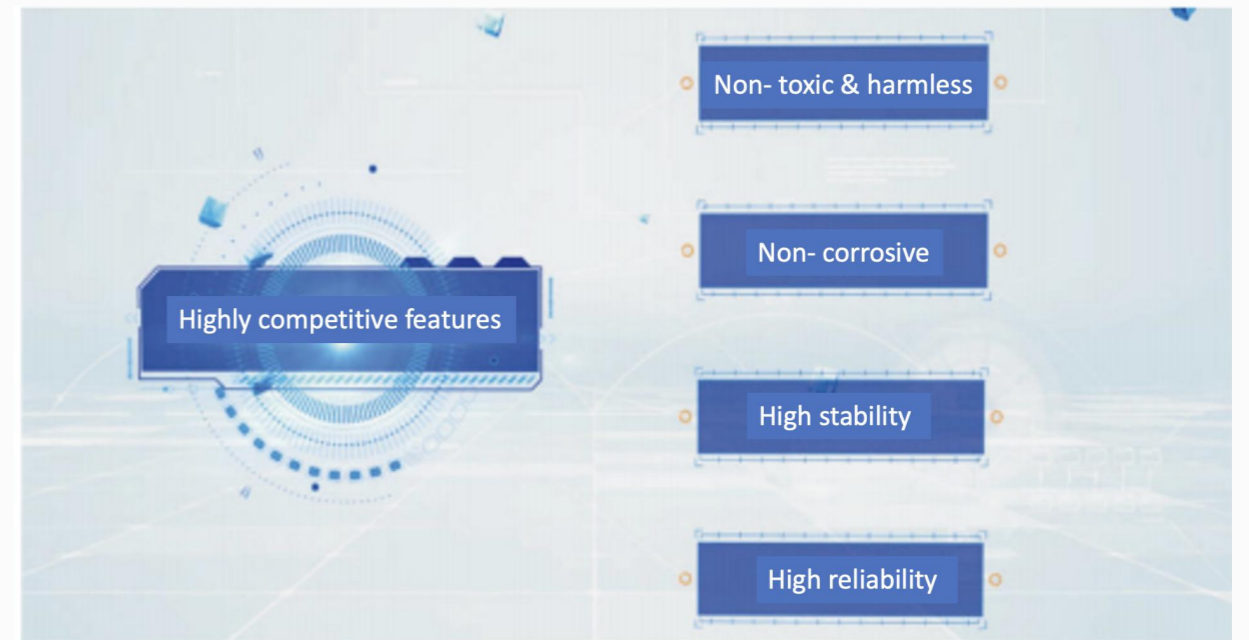


Live retest

Pictures is Tengdajie operation procedure for secondary power electric equipment live cleaning

### ◇ Operation Safety Guarantee

To ensure personal safety, equipment safety and maintenance quality in live cleaning maintenance technical work, in addition to having excellent products and advanced and standardized maintenance technology, management elements and related non-technical aspects that exist in the entire cleaning and maintenance work must also be Factors are strictly controlled. Tengdajie has been constantly exploring, summarizing, and improving the operation process procedures in the long-term live cleaning maintenance project. At present, a complete set of operation process procedures has been established to ensure the effective implementation of process procedures. Established a complete operation management system to ensure quality and safety at the same time.



### Live Cleaning Detergent Series

This product is professionally used in electrical equipment cleaning and maintenance, for some power and electrical equipment that cannot be powered off or has a high cost of power failure, it can efficiently and safely remove comprehensive pollution caused by oil, dust, moisture, salt, ice and snow on high-voltage power and electrical equipment, and eliminate short circuit, heat, and discharge phenomena, avoid flashover accidents such as pollution flashover and fog flashover, prolong the service life of equipment and reduce equipment loss.

## Protective Agent Series

After the product is coated and cured at room temperature to form a film, it can form a micron-sized transparent hard insulating paint film on the surface of the equipment/medium, making the surface of the equipment/medium smooth and not easy to be stained with dust, and at the same time, it can significantly improve the surface of the coating film. Hydrophobicity and insulation grade.

The material compatibility of this product is strong, and it does not corrode most common plastics, metals, ceramics and other materials, ensuring that the function of the equipment will not be affected; it has excellent weather resistance, mildew proof, moisture proof and salt spray performance, and high breakdown voltage/volume resistance High efficiency and anti-ultraviolet ability; it has excellent three-proof performance and high electrical insulation, and is safe and reliable to use. The product does not contain toxic, harmful or ozone-depleting substances, which is friendly to the environment and harmless to human health. It can self-cure at room temperature and has a very low viscosity, which is convenient for outdoor spraying construction.

### Application Scenario

**Network equipment:** including switches, routers, firewalls, servers, minicomputers, disk arrays, etc.;

**Communication equipment:** switch room, transmission room, base station equipment, data equipment, etc.;

**Electric equipment:** Refers to primary equipment and secondary equipment. Including power plants, substations, transmission lines, power grids, power distribution rooms of general enterprises, etc. The main cleaning objects are generators, motors, insulators, power distribution cabinets, lightning arresters, CT, PT, switches, circuit breakers, transformers, high and low voltage power distribution cabinets, etc.;

**Precision instruments:** automatic control equipment, electronic medical equipment, imaging equipment, etc.

**Product Features** High insulation, safety, environmental protection, live working, high flame retardant, controllable volatilization

### Product technical advantages

**Safety performance:** no flash point, non-flammable, good flame retardant effect.

**Corrosion performance:** It is non-corrosive to various metals such as copper, iron, aluminum, PVC, PE, plastic, and water, soil, plants, and atmosphere.

**Temperature difference performance:** Under normal live insulation maintenance operations, the temperature difference range is between 10-22° C, and no ice crystals or condensation will occur.

**Insulation properties:** dielectric strength greater than 32KV/mm; volume resistivity greater than  $1 \times 10^{12} \Omega \cdot \text{cm}$ .

**Cleaning performance:** KB value is 56, which has excellent cleaning ability for dust, oil, moisture and other dirt.

**Environmental protection performance:** does not contain ozone depleting substances (ODS); non-toxic, harmless to human body.

**Volatility performance:** Controllable volatilization of live insulation maintenance products, the residual amount after complete volatilization is  $< 0.0001$ , and the volatilization rate is between 0.01-0.10mg/c m<sup>2</sup>.

## Canned Product Series



**Cleaning detergent OLC-10 for power electric equipment live cleaning**  
This product can quickly and thoroughly remove dust, oil, salt, moisture, metal dust and other pollutants attached to the equipment; eliminate short circuit, heat generation, and discharge phenomena, avoid flashover accidents such as pollution flashover, prolong the service life of the equipment, and reduce equipment damage. loss and prolong the service life of the equipment.



**Network communication equipment live cleaning detergent EC-004**  
This product is used for live insulation maintenance of network communication equipment. It can quickly remove dust, salt, moisture and other pollutants, effectively eliminate static electricity, make the equipment run at its best, reduce power consumption and prolong the service life of the equipment.



### Live maintenance protection agent CP-001

It can make all kinds of electric power equipment and network communication form a protective film on the surface of the equipment to isolate the erosion of the equipment by moisture, salt spray, dust, oil and other pollutants in the environment; the equipment can achieve anti-corrosion, anti-rust and anti-leakage in harsh environments And improve the insulation value of equipment, prevent the occurrence of pollution flashover accidents, so as to achieve safe operation and prolong the service life of equipment.



### Anti-rust lubricant RPL-01

This product has strong penetrating ability and has the functions of rust loosening, rust prevention, lubrication, dehumidification and cleaning. No corrosion to metals, plastics, etc., and has the function of

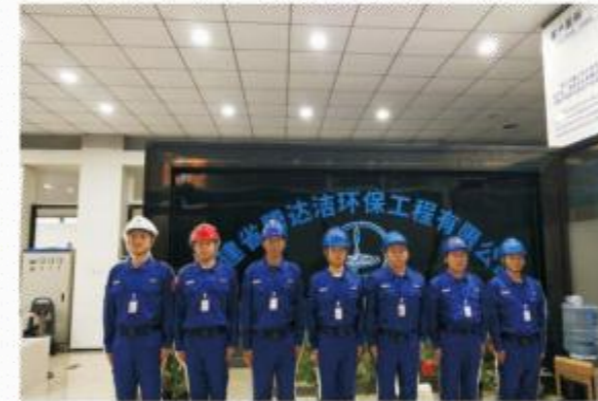
	Feature	Parameter	Remark	Qualification
1	Withstand voltage	$\geq 35\text{kv}/2.5\text{mm}$	Live maintenance can be carried out for equipment below 500kv	1. Passed test in the 5th Research Institute of Electronics (Saibao Laboratory) of the Ministry of Industry and Information Technology and a test report issued. 2. Several invention patents have been applied. 3. Experimental report from Institute of Applied Toxicology of Nanjing Medical University, non-toxic and harmless to human body. 4. Product liability insurance is underwritten by China Pacific Insurance Group
2	Insulation resistance	$\geq 6 \times 10^{12} \Omega$	Ensure that the product itself is not conductive	
3	Combustibility	High flame retardant without flash point	Avoid safety accidents caused by weak electric sparks	
4	Corrosiveness	Neutral PH value non corrosive	Non corrosive to metals, plastics, ceramics, silicone rubber and other materials	
5	Residue	No residue	Residue $\leq 0.00001\%$	
6	Dynamic insulation	Dynamic insulation value is consistent with static insulation value	The insulation value of the product will not be affected due to the dissolution of pollutants	
7	Detergency	KB $\geq 56$	Better decontamination effect	
8	Environmental protection	Green product	Does not contain ozone depleting ODS substances such as Freon and carbon tetrachloride	
9	Toxicity	Non toxic & harmless	Experimental report from Institute of Applied Toxicology of Nanjing Medical University, non-toxic and harmless to human body	

### ◇ Features Comparison

Compared with other similar products with strong smell, flammability, and non-electrical cleaning, the "Pioneer-Creation" series products independently developed by Tengdajie not only have multiple authoritative organizations, but also are non-toxic and non-toxic issued by the Institute of Applied Toxicology of Nanjing Medical University. The harmless test report, and the third-party liability insurance issued by Pacific Insurance Company: In addition to proving the superiority of the product itself, it also brings reliable protection to consumers. Based on the "Pioneer-Chuang" series Maintenance service, according to the actual situation of the equipment, special implementation, real-time monitoring, electrification detection, static electricity elimination, physical cleaning, dissolution and decontamination, nano-protection, electrification retest and other related processes, to ensure the safe operation of the equipment while improving efficiency and reducing consumption Energy saving, prolonging the service life of equipment and other effects, restoring and maintaining the best operating condition of equipment.



### ◇ Professional Operation Team



	Artificial cleaning	Live washing using water	Live washing using chemicals	Live cleaning by TDJ
Clean effect	★	★★	★★★★★★	★★★★★★
No corrosion	★★★★★★	★★★★★★	☆	★★★★★★
Non-toxic harmless	★★★★★★	★★★★★★	☆	★★★★★★
Withstand voltage	☆	★★	★★★	★★★★★★
Static insulation	☆	★★★★★★	★★★★★	★★★★★★
Dynamic insulation	☆	☆	★★★	★★★★★★



#### ◇ Professional Operation Team

The curing agent independently developed and produced by Tengdajie is divided into two series of cleaning detergent and protective agent according to different application fields, and has obtained a number of invention patents issued by the State Intellectual Property Office. Then use protective agent for anti-corrosion, anti-oxidation, anti-sulfurization, anti-leakage, anti-static polymer protection, so as to achieve the best maintenance effect.



#### 1. Safety guarantee of tools

Tengdajie has independently developed a variety of live maintenance tools such as static balancers for network communication equipment, physical recycling machines, portable live maintenance machines for network communication equipment, multi-functional live maintenance machines, and intelligent live maintenance machines for network communication equipment.

#### 3. Guarantee of technical service personnel

Tengdajie has independently developed a variety of live maintenance tools such as static balancers for network communication equipment, physical recycling machines, portable live maintenance machines for network communication equipment, multi-functional live maintenance machines, and intelligent live maintenance machines for network communication equipment.

#### 2. Safety guarantee of tools

Tengdajie has independently developed a variety of live maintenance tools such as static balancers for network communication equipment, physical recycling machines, portable live maintenance machines for network communication equipment, multi-functional live maintenance machines, and intelligent live maintenance machines for network communication equipment.

#### 4. Production safety guarantee

Organizational measures to ensure safety include on-site survey system, work ticket system, work permit system, work guardianship system, work interruption system, work termination and recovery system, and the establishment of a live maintenance site safety management system.

#### 5. Process safety assurance

Refer to relevant national standards + combined with actual construction experience = "Tengdajie Power Electric and Network Communication Equipment Live Maintenance Operation Regulations"

#### ◇ Comparison of Equipment Before and After Live Cleaning



## Intelligent Extinguishing Material Integration Serie

### Extinguishing Early Small Source

Based on the current market situation, our company has developed a new type of fire extinguishing system—intelligent fire extinguishing materials—that can actively extinguish fires in small spaces that are prone to fire. This product is a simple and highly reliable independent automatic fire extinguishing device.



- Nano material fully insulated shell
- Core fire extinguishing material integration
- Double base lead (military technology)
- Product anti-counterfeiting traceability code

**No power supply, special smoke and temperature detectors, no complicated equipment and pipelines**

Just simply paste it inside the device, it can accurately and effectively detect and extinguish the fire source, and extinguish the fire at the initial stage. It can greatly reduce the project cost, and can also reduce the single fire extinguishing cost, and is suitable for use in the case of aging old distribution box lines and difficult to modify distribution lines, and will not cause any harm to people.

#### ZMM-20TDJ1

Size: 75×58×10mm

Protect Volume: ≤0.075m<sup>3</sup>

Weight: 26g±2g



#### ZMM-20TDJ2

Size: 105×74×17.4mm

Protect Volume: ≤0.15m<sup>3</sup>

Weight: 78g±2g



#### ZMM-20TDJ4

Size: 115×82.3×21mm

Protect Volume: ≤0.3m<sup>3</sup>

Weight: 111g±2g



## ZMM-20TDJ Series

Response time: ≤12s

Service life: 3 years

Extinguishing Type: Gas

Fire extinguishing method: physical + chemical

Activate mode: open flame or 170°C±10°C temperature sensor activate

Working temperature: -50°C~+80°C

Working Humility: ≤95%

Ambient sensing temperature: 170°C±10°C

Flame sensing temperature: 420°C±20°C

Fire extinguishing type: it can extinguish Class A surface fire, Class B, C, E, F fire

#### ZMM-20TDJ8

Size: 14×104×26mm

Protect Volume: ≤0.6m<sup>3</sup>

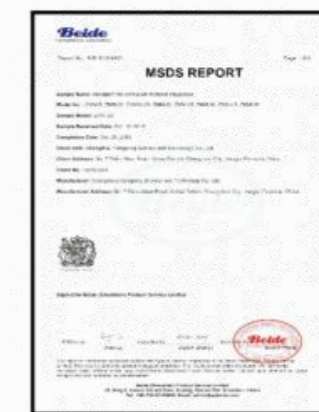
Weight: 173g±2g



### Qualifications





CE 认证



化学品安全说明书 MSDS

## ◇ Products Comparison

Product Name	Intelligent Extinguishing Material Integration	Aerosol	Fire detector tube (heptafluoropropane)
Product Picture			
Extinguishing Category	Class B/C/E/F/A surface fire	Class B/C/E	Class B/C/E
Method	Physical+ Chemical	Physical+ Chemical	Chemical
Gas Toxicity	None	Slightly	Low
Gas Corrosive	None	Slightly	Slightly
Shell Insulation	Insulation	Shell Conductive	Shell Conductive
Working Temperature	-50°C~+80°C	-25°C~+55°C	0°C~+50°C
Activating method	Open flame /170° C	Open flame /Temperature Sensor	Temperature Sensor
Installation	Paste inside cabinet, Cabinet No damaging	Paste/ punching then screw installation	Need to lay pipes in cabinet
Product development	Remote start can be added. Shape changeable.	Shape fixed, not changeable.	Shape fixed, not changeable.
Pressure and Temperature	Always normal temperature and pressure	Instantaneous high temperature and high-pressure spraying moment (Explosion risk)	Extinguishing agent storage tank Pressure>d2.5MPa
Maintenance	Maintenance free within validity	Maintenance free within validity	Check and maintenance annually
Disadvantages	Not suitable for large space	not suitable for large spaces possibility of explosion	High cost

## ◇ installation steps



1. Identify corresponding model, take out product, and then check if the temperature detection start wire is off or broken, and whether the product structure is intact. Once the product is qualified, it is ready to use. Take out the smart fire extinguishing material and 3M double-sided film from packaging bag, and check whether product is damaged.



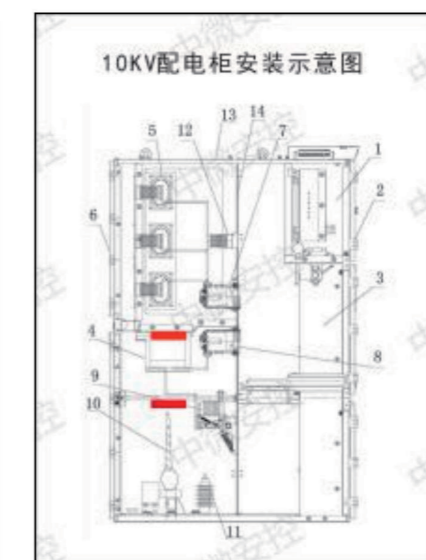
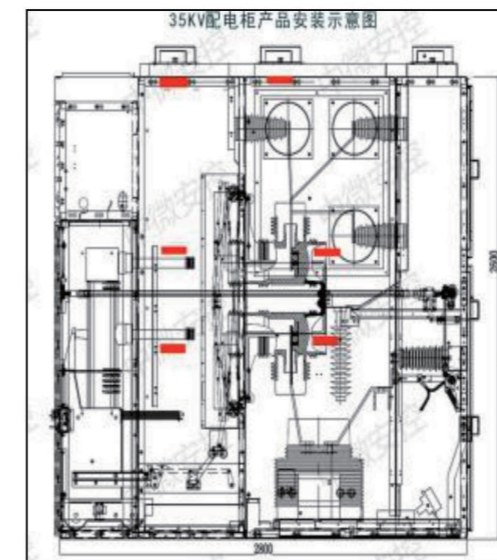
2. After tearing off the double-sided tape, then stick the double-sided tape on the product side without label and press it hard. Paste the 3M double-sided film on the non-vented side of the product, press firmly, and stick



3. After the product is installed, it is necessary to fix the temperature detection line, which can be tied to the cable or fixed on the box. When finished, close the cabinet door. Keep the protective space in a relatively closed state.



## Samples of installation diagrams



## Application Scenario

The self-developed products are highly targeted, and are mainly suitable for switch cabinets, meter boxes, control boxes of machine tools, inverter cabinets, confluence cabinets, and ring networks in various power distribution rooms, uninterruptible power supply rooms, and machine rooms. Fire prevention in unattended narrow spaces such as cabinets, bus coupler cabinets, outlet cabinets, terminal boxes, DCS main control cabinets, PLC main control cabinets, power transformation and distribution cabinets, elevator control cabinets, ATM machines, charging piles, etc.



## IoT product series

Adopting the innovative idea of "high-tech + new chemical materials", it integrates a variety of sensors, narrow-band Internet of Things, cloud computing, edge computing, big data analysis, artificial intelligence (AI) and other high-tech, and deeply combines non-toxic and residue-free, Non-corrosive new chemical materials, in the application scenarios of strong and weak current cabinets in small spaces such as distribution cabinets, switch boxes, equipment cabinets, server cabinets, and network cabinets.

Through systematic technology integration innovation and "cloud-pipe-side-end" computing power balance design, real-time monitoring including large-scale unattended equipment, big data processing (AI), proactive edge monitoring algorithm (AI), Internet of Things Multi-level and multi-dimensional intelligent Internet of Things (AIoT) system functions such as communication security, digital twins, and remote centralized control. These functions have achieved high sensitivity, high real-time performance, high reliability, and data Accurate analysis and early warning, intuitive data display and other effects.

At present, it has provided typical industrial Internet application examples for micro-fire protection applications in small space scenarios in industries such as electric power, factories and mines, ports, schools, hospitals, and industrial parks.

# Industrial IoT Communication Module

Industrial IoT communication terminals (DTU-G9718 series) are suitable for general industrial/commercial IoT applications such as generator sets, air compressors, intelligent integrated prevention and control systems, electromechanical equipment monitoring, and network-controlled meters. The entire series of terminals have sold more than 200,000 sets

Interface	Twisted pair RJ-45
Network Speed	10Base-T ethernet, 100Base-TX ethernet 1000Base-TX ethernet
Connection Characteristics	Support category 5 and category 6 cables, Support POE deployment



## Sensor Control Terminal

The sensor control terminal (FSC-TDJ series) is a key component of the intelligent integrated prevention and control system. It is directly deployed in a small space equipment cabinet to directly measure the temperature of hidden danger points, control the edge side plan, data collection, and Internet of Things communication.

FSC-HD1	With temperature measurement, active excitation, IoT communication, support for two years without external power supply, settable equipment number, support one-drive-fifteen
FSC-HD6	With temperature measurement, active excitation, IoT communication, support for two years without external power supply, settable equipment number, support one-drive-fifteen



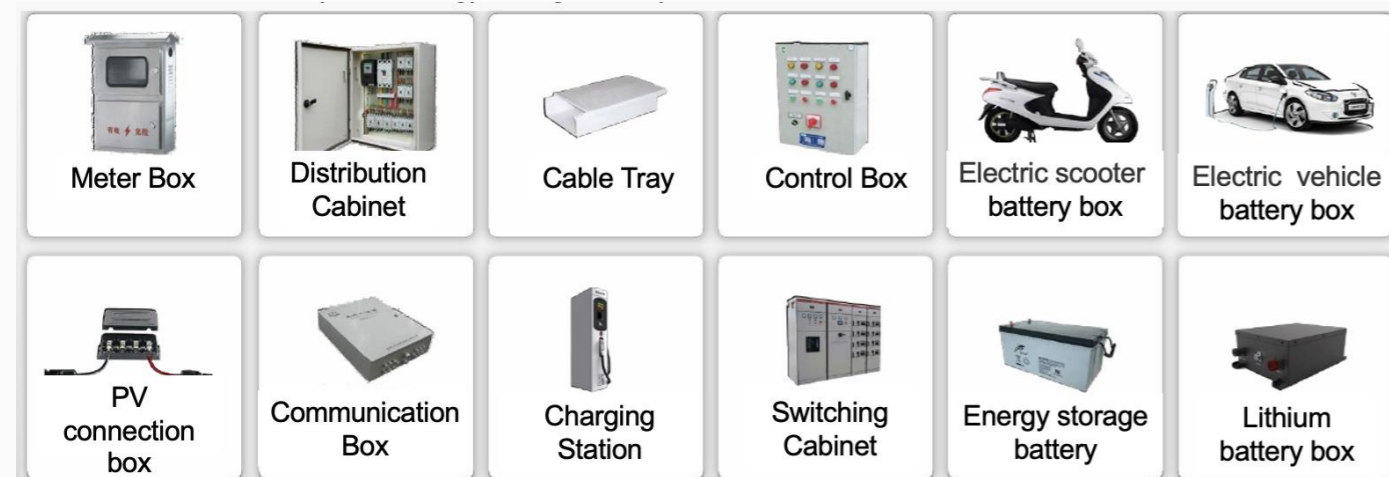


■ **Features** The application of new fire extinguishing materials is safer – environmental protection, high efficiency, no residue, non-toxic, non-corrosive

A fire “extinguishes in seconds”. Using a new type of solid fire extinguishing agent, activated by the fuse, it can instantly release the fire extinguishing gas (close to the release speed of the anti-collision airbag of the car). Generally, various types of fire extinguishing can be realized within 10 seconds, including B, C, E, F and Solid surface fires in class A.

Lightweight and precise control. The product is installed with 3M glue on the back, strapping and other thin sheets. And the gas release is directly released into the cabinet of the smallest unit, which truly realizes the purpose of “early detection and source”.

■ **Application Scenario**



## Company Culture

**Corporate purposes**

We always pursue to provide professional cleaning and maintenance services for electric power and communication enterprises through high-tech products and professional technology, and escort the safe operation of China's electric power and communication.

**Social image**

Tengdajie is an enterprise with a number of core technologies and a professional construction team.

**Corporate vision**

Become the pioneer of the live cleaning maintenance industry standard and an excellent demonstration enterprise group in the industry, and set the stage for the enterprise to achieve business success.

**Core value**

Integrity is the foundation of the enterprise, safety is the guarantee of the enterprise, innovation is the life of the enterprise, and the team is the soul of the enterprise.



Our technical team is all over the country, providing professional and personalized maintenance services for hundreds of customers. In order to solve the pain points of customers, formulate efficient and safe construction maintenance plans. The live cleaning and maintenance technology is widely used in communication, electric power, petroleum, petrochemical, aviation, aerospace, navigation, transportation, national defense, medical treatment, automation system, satellite navigation and other fields.

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## Exclusive Oversea Agent

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