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STOCK CODE:300480

MA

COAL MINE
Safety Brochure

Coal Mine Safety Monitoring
Methane Drainage Process Evaluation
Personnel and Equipment Tracking
Fire Hazard Monitoring

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CQC	CQC	CQC	CMMi SM	ESI
ISO9001	ISO14001	OHSAS 18001	CMMI-5	CESI

SINCE 1994

1994
Since

100
million$
Yearly
revenue

1000
Employee

70000
m²
Building area

10+
Global
branches

About Us

GLTECH Co. Ltd. is a China-listed company founded in 1994 in Zhengzhou, and we are an international company with multiple overseas offices in countries such as Israel, the UK, and the US. Our mission is to create and maintain a safe and healthy workplace in underground coal mines.

As a major provider of coal mine safety equipment, we offer a range of products, including underground coal mine safety monitoring, gas drainage process monitoring and evaluation, thermal power plant safety monitoring, and CEMS solution.

Our team consists of over 700 employees in China and 300 overseas employees who are dedicated to delivering high-quality products and services. We are proud of our strong R&D team, which includes 47% of our total employees. This team is instrumental in helping us maintain our competitive edge and driving our innovation efforts.

With a building area of 70000 square meters, we are committed to manufacturing products that meet our client's needs and exceed their expectations. We have filed for 473 patents and 300+ software copyrights, showcasing our dedication to innovation and providing our clients with the latest technology.

We are proud of our reputation for excellence in the industry, and we are committed to delivering outstanding products and services to our clients. Thank you for choosing GLTECH Co. Ltd. as your partner in creating a safe and healthy workplace in underground coal mines.

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01

IoT-based Mining Safety Solutions

KJ835X

Comprehensive Mine Safety Monitoring

KJ835X is a next-generation comprehensive monitoring and communication system designed for the coal mining industry with IoT-based(Internet of Things) sensors and equipment. The system is based on leading-edge sensor and big data analytics technologies, offering accurate measurement, stable transmission, and reliable performance. It is integrated with advanced intelligent analysis models to automatically analyze and detect anomalies. The system is for comprehensive real-time monitoring, analysis, and control of personnel, equipment, environment, and production process in coal mines to ensure safe production in coal mines. KJ835X not only monitors the comprehensive parameter of the entire coal mine including tunnel air conditions, ventilation system status, gas drainage status, video surveillance, personnel and equipment position, and equipment status but also supports the integration of external systems such as electrical control and communication.

Multi-system Integration

KJ835X is a system capable of integrating multiple subsystems, including personnel tracking, emergency broadcasting, power monitoring, gas drainage monitoring, safety monitoring, fire hazard monitoring, production process monitoring, water drainage system, conveyer and etc. The software platform of the system enables unified deployment, monitoring, and business integration with both text and visualization. The system also allows real-time and historical data retrieval, and device operation status queries, and supports the execution of manual control commands. By sharing data and conducting multiple source monitoring and diagnostic analysis, the system can evaluate the safety situation and warn of potential hazards, such as gas exceeding limits or power outages. In the event of an evacuation, the system can automatically trigger personnel positioning and emergency broadcasting to facilitate evacuation and command operations. The implementation of KJ835X can enhance the safety and productivity of mining operations, reduce the likelihood of accidents, and protect the safety and health of workers.

3D Visualized Platform

The KJ835X coal mine safety monitoring system's comprehensive display platform implemented 3D visualization methods to present, which enhances coal mine enterprises' safety production supervision capabilities significantly. The software platform is capable of integrating existing and future external systems. The system software provides functions for visual monitoring, drawing, and constructing 3D mine maps. The platform conducts real-time analysis of monitoring data and provides early warning of potential hazards. Users can use this system to view real-time data from sensors such as temperature, humidity, gas concentrations, and monitor the status of equipment and personnel. Additionally, the system can be used to manage and schedule personnel, ensuring their safety and efficient production.

IoT-based Sensors

KJ835X system utilizes the latest advanced sensing and monitoring technology developed by GLTECH along with an IoT system and explosion-proof cameras to achieve integrated monitoring and management from the bottom level monitoring points to the surface platform. The system's sensors include environmental (gas) monitoring sensors for underground tunnels, gas parameter monitoring sensors for extraction pipelines, and video surveillance cameras. The sensors are plug-and-play, and once connected to the monitoring substation, the substation can automatically recognize the sensor information, avoiding the tedious manual configuration required by traditional systems. This system provides comprehensive monitoring services for underground mining industries. The environmental monitoring sensors can monitor temperature, humidity, oxygen, dust, and hazardous gas concentrations in the tunnels in real-time, improving the safety of the working environment. The gas parameter monitoring sensors can monitor the pressure, temperature, flow rate, and gas concentration inside the pipelines, ensuring the normal operation of the gas drainage. In addition, video surveillance cameras can provide real-time monitoring of the underground work area, enhancing the safety and efficiency of the work area.

Features:

- **Advanced sensor technology**
  TDLAS laser technology, EMC immunity
- **High degree of automation**
  Automatic linkage, self-diagnosis, self-calibration
- **Multi-system integration**
  The platform supports data integration analysis and processing
- **Analysis and early warning technology**
  Hazard prevention warning based on big data analysis

System Parameter and Configuration

| Functionality		Specification		
KJ835X	**Monitoring**	**Gas Monitors**		**Certification**
		Atmospheric conditions Gas leakage	CH$_4$	0-100% w/th 0.01% Res.	Exia I Ma
			CO	0-1000 ppm w/th 1ppm Res.	
			CO$_2$	0-5% w/th 0.01% Res.	
			O$_2$	0-25% w/th 0.1% Res.	
			Temperature	-10℃~70℃ w/th 0.1℃ Res.	
			Humidity	0~100%RH w/th 0.1%RH Res.	
			Dust	0~1000mg/m^3	
			Smoke	0~5% obs/m	
			Atmospheric pressure	-100~+30kPa w/th 0.01kPa Res.	Exib I Mb
		Pipeline Meters			
		Gas drainage pipeline	Main pipeline	CH$_4$ 0~100% w/th 0.05% Res. CO 0~500ppm w/th 1ppm Res. CO$_2$ 0~5% w/th 0.01% Res. O$_2$ 0~25% w/th 0.1% Res. Temp -10~100℃ w/th 0.1℃	Exdiaib I Mb Exdb+ia I Ma Exia I Ma
			Drainage pipeline		
			Borehole parameter	Flow rate 0~100m^3/min 0~350m^3/min w/th 0.001m^3/min Differential pressure 10~200kPa w/th 0.1kPa Atmospheric pressure 50~110kPa w/th 0.1kPa	
		Pump Station Monitoring			
		Pump station status Ventilation Fan status	Hall switch sensor	ON/OFF	Exib I Mb
			Ventilator duct	(50±5) mm	
			Tunnel air flow	0.2m/s~20m/s	
		Video	Pump status		
			Pump room		
	Tracking	Personnel & equipment tracking	Head lamp Belt tracker	Headlight Tracking < 0.2 meter Two-way communication	Exib I Mb
			Health bracelet	Heart rate Body temperature Blood oxygen saturation	
		Post-accident tracking	Fully operational post-accident		
	IoT Network	Signal transmission	Analog/Digital/Switch signal supported Max sensor connections: 32 Max controller connection: 8		Exia I Ma
		Data display	4.3 inch TFT LED		Exd[ib] I Mb
		Backup power	Input power rating: 127V/220V/380V/660V/1140V AC (Adaptive) Output power rating: 12V/18V/24V DC		
		Wire/Wireless network	Gigabit optical fiber LC/SC port Ethernet IEEE 802.3 RS485, CAN, SNMP, VLAN		Exib I Mb
	Control	Pumps Electrical supply system interrupt Fans-ventilation automation & control Gas monitors			
	Integration	Two-way voice/video	Water drainage system Electrical supply system	Conveyor belt control	

KJ751

Coal-seam Degasification Process Monitoring System.

KJ751 is an efficient and accurate coal-seam degasification monitoring system. The gas drainage pipeline monitoring system is an IoT-based monitoring system that monitors real-time gas parameters and provides analytical data for evaluating gas extraction efficiency. The system can detect abnormal events and trigger alarms based on its intelligent monitoring and analysis model including real-time monitoring and analysis, multi-parameter monitoring, and cloud storage.

Features
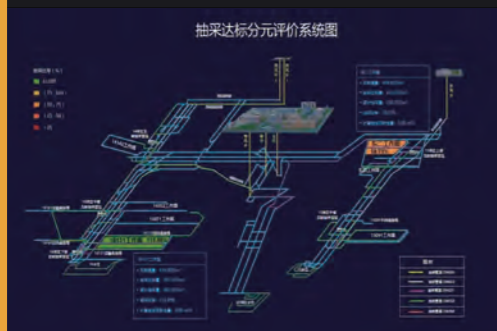
Zonal evaluation

The system uses a zoned evaluation method. The coal-seam face is divided into zones for precise drainage status evaluation.

Complete coverage

KJ751 monitors the entire coal-seam gas drainage pipeline network from a single borehole to the main line and pump station.

Flexible configuration

The system supports integration of various sensors with different communication protocols and is capable of topology expansion.

Function

Real-time monitoring & analysis

Real-time collection of degasification pipeline monitoring data to ensure data accuracy and real-time performance as well as analyzing and diagnosing the collected data to identify abnormal conditions, such as abnormal gas concentration, in the degasification process and trigger alerts to ensure coal mine safety.

Event log & playback

KJ751 system stores past data and events for analysis and review. This function is useful for identifying trends, diagnosing issues, and providing insights into the performance of the degasification process. By reviewing past data and events, the system can help improve safety and efficiency by identifying potential problems and taking corrective action. Event playback allows users to view past events in real time, enabling them to identify what happened, when it happened, and why it happened. This can be useful for training purposes and to aid in incident investigations.

Degas-efficiency evaluation

The KJ751 system can provide data on gas concentration levels before and after degasification, allowing for the evaluation of the degasification process's efficiency. The system not only monitors gas parameters in the pipeline in real-time, so that the operator can adjust according to the needs, but also identifies the areas where improvements can be made.System Configuration and Specification

System Parameter and Configuration

	Monitoring		Functionality and Parameter
	Region	Location	
KJ751	Pump station	Inlet and outlet of drainage pump	Total gas drainage amount @ pump
	Methane power generator		Gas consumption amount
	Drainage pipeline network	Main	Drainage amount @ main
		Branch	Drainage amount @ manifold
		Borehole	Drainage amount @ each borehole

KJ751-P

Gas-drainage Pump Station Monitoring and Control System

The KJ751-P gas-drainage pump station monitoring and control system is a highly integrated system that provides automatic monitoring and control for gas pump stations. The system is designed for unmanned operation, with a high degree of automation, and supports one-button start/stop operations. The system has a comprehensive protection function that automatically cuts off power in case of anomalies in parameters such as water level, gas pressure, and motor temperature. Additionally, the system has features such as motor fault warnings, equipment management, self-diagnosis, and event logs. The system's high degree of integration and flexibility, combined with its advanced features, make it a reliable and efficient solution for gas drainage pump station management.

Features

1 **Real-time**
status monitoring in real time

2 **Comprehensive**
complete solution to safeguard the drainage process

3 **Flexible**
fully customizable solutions

4 **Automatic**
unmanned operation with data analysis and auto-control system

5 **Reliable**
simple design with unparalleled reliability надежностью

6 **Cost-efficient**
delivering exceptional quality and features at an incredible value

System Function

● **Status monitoring and automatic control of equipment**
Continuous monitoring of flow rate, temperature, pressure, concentration of gas drainage line and motor status

● **Monitoring of pump room environment and personnel**
Continuous monitoring of pump room temperature, gas concentration, and personnel entry

● **Real-time data analysis, accident prevention, and alert**
Automatic alert personnel and take corrective action when anomalies are detected

System Parameter and Configuration

	Parameters			Specification	Monitor	Control	Alarm	Data log
Monitoring	CBM drainage pipeline	Concentration		CH₄ 0~100% CO 0-1000ppm	√			√
		Flow rate	Total	0~100 m³/min	√			√
			CH₄					
			Accumulative					
		Temperature		-10~60℃	√			√
		Pressure		10~200kPa	√			√
	Liquid ring vacuum pump	Temperature	Pump shaft bearing Motor bearing	-10~70℃	√		√	√
		Motor	Current/voltage		√		√	√
		Pump	ON/OFF status		√	√	√	
			Vibration	0~10mm/s	√		√	√
		Liquid level of moisture separator		0~10m	√		√	√
		Pressure drop of Flame arrester		0~10kPa	√		√	√
	Pump room	Concentration		CH₄ 0~100%	√			√
		Temperature		-10~70℃				
	Water supply system	System status			√	Pump ON/OFF	√	√
		Flow rate		12~100m³/h @ DN100				
		Tank level		0~10m				
		Pump status		ON/OFF				
		Tank temperature		-10~70℃				
	Key locations	Video surveillance		Pump room entrance 360° omnidirectional monitoring	√			
	Entrance access system			Personnel access (time & location) Authorization management Remote access control	√			
Control	Electric valve			Valve position	√	√		
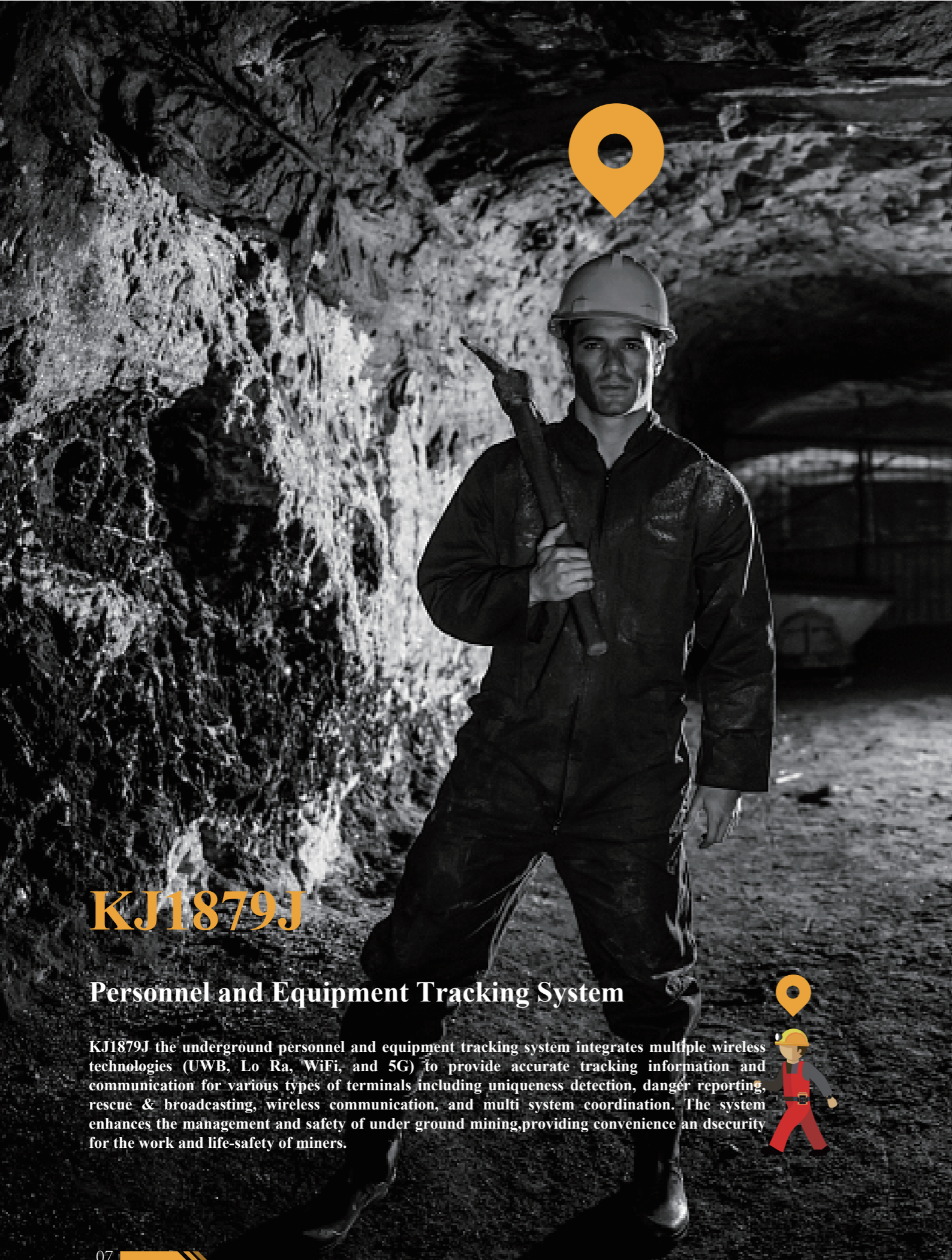
KJ1879J

Personnel and Equipment Tracking System

KJ1879J the underground personnel and equipment tracking system integrates multiple wireless technologies (UWB, Lo Ra, WiFi, and 5G) to provide accurate tracking information and communication for various types of terminals including uniqueness detection, danger reporting, rescue & broadcasting, wireless communication, and multi system coordination. The system enhances the management and safety of under ground mining,providing convenience an dsecurity for the work and life-safety of miners.

Integrated tracking mining lamp

Health monitoring braclet

Belt tracker

System Parameter and Configuration

	Functionality		Parameter
KJ1879J	Communication	• Complete coverage of wireless network • Data transmission • Personnel dispatching-text messaging • Danger reporting • Post-accident communication	UWB, LoRa,WiF5G/4G/3G,Bluetooth 600~800 meter radius base station
	Tracking	Personnel/vehicle/equipment tracking headlight	Accuracy: 0.2 meter Bluetooth
	Emergency rescue	• Emergency broadcasting • Post -accident search& tracking • Life signal monitoring	
	Health monitoring		Heart rate Body temperature Blood oxygen saturation

KJ428

Mine Fire Hazard Monitoring and Early Warning System

- Real-time Monitoring
- Nine Types of Gas
- Characteristic Gas and Temperature Dual Index Monitoring
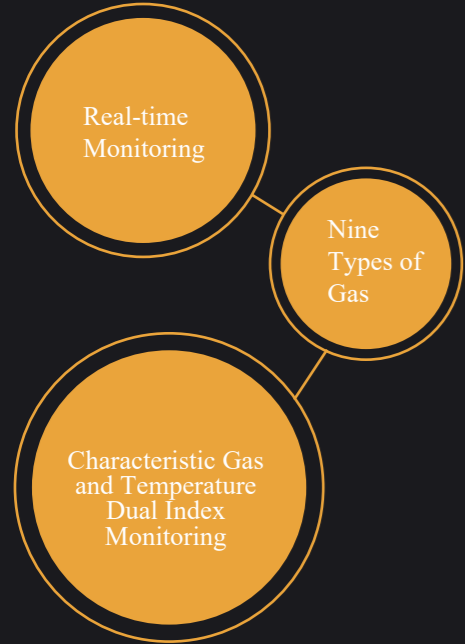
Real-time monitors the concentration of nine coal spontaneous combustion characteristic gases including CH_4, CO, O_2, CO_2, C_2H_2, C_2H_4, C_2H_6, H_2, N_2, and the temperature ateach monitoring point.

The KJ428 mine fire hazard monitoring and early warning system is a state-of-the-art system that uses laser multispectral technology gas analysis technology to monitor and identify spontaneous combustion characteristics of coal in underground mining environments. The system's software provides online monitoring, analysis, and early warning functions, enabling the identification of fire hazard potential and fire location. The system's comprehensive monitoring and early warning capabilities help prevent coal seam fires and ensure the safety of mining operations.
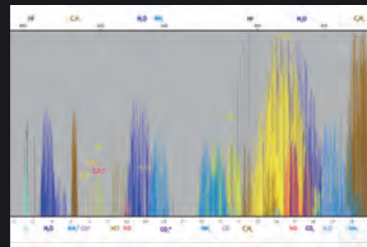
On-site Deployment of Equipment
System equipment is installed in tunnels underground, near the monitoring areas. This avoids problems of blockage and leakage with long-distance tube method gas extraction, greatly improving the system's applicability.

Laser Multispectral Technology
Unlike traditional monitoring method (chromatography), the system uses TDLAS technology, eliminating the need for standard/carrier gas and is immune to interference. The system can operate for up to 6 months without calibration.

Distributed Fiber Temperature-sensing
The system utilizes Distributed Temperature Sensing (DTS) technology via fiber temperature sensing technology to achieve real-time temperature monitoring of the monitored area. This method precisely identifies hazardous locations, such as those that are flammable or explosive.

Visualized Software Platform
The platform provides users with an interactive and graphical interface to access and analyze data. This platform uses various visualization tools to represent complex data sets in an intuitive and easy-to-understand way, enabling users to gain insights and make informed decisions quickly.

Fire hazard prediction and prevention warning
The system uses data analysis technology to identify potential fire hazards and provide early warning to prevent accidents from occurring. Then, machine learning algorithms are used to integrate the data into the analysis model to predict fire trends.

Classification of the "Three Zones" of Spontaneous Combustion in goaf
The system divides the goaf into three zones (escape zone, oxidation zone, and suffocation zone) based on oxygen concentration, making the goaf firefighting plan more targeted.

System Parameter and Configuration

|	Structure	Equipment	Functionality	Monitoring Regions
KJ428	Underground Fire Monitoring Equipment	TDLAS gas parameter analysis host DTS(Distributed temperature sensing) host Pump Power supply and control equipment	Monitors concentration of CH_4, CO, CO_2, O_2, C_2H_2, C_2H_4, C_2H_6, N_2, H_2, and TEMP.	Goaf/Gob Return airway corner Confined space
	Transmission network system	Transmission line (optical fiber) Transmission equipment (ring switch)	Carrying communication and data transmission between underground equipment and ground monitoring room	N/A
	Ground-level server system	Multi-purpose server Monitoring host Network switch Software platform	3D visualized real-time display, data storage, analysis, evaluation, trend prediction and alarm	N/A

KJ1661

Drilling Rig and Borehole Drilling Process Management System

KJ1661 drilling rig and borehole drilling process management system integrate technologies of the automated drilling rig, video surveillance, environmental monitoring, intelligent analysis, communication transmission, and information management, achieving functions such as automatic video-based drill rod counting and two-way voice intercom. This system manages the entire borehole drilling process in underground coal mines, recording drilling parameters, automatically segmenting, and storing videos for later retrieval, monitoring the environment, and implementing power-off interlock.

Image Acquisition, Transmission, and Display

Two-way Voice Intercom

Drilling process is monitored and analyzed by utilizing AI-based video analysis

system function

Vocal alert feature – the system can provide voice prompts to drilling personnel when there is a communication interruption

Power status monitoring, remote control, automated power cut when methane concentration exceeds the limit

RJ45, fiber optic, twisted pair, and WiFi supported

Downhole drilling depth and trajectory monitoring device

System Parameter and Configuration

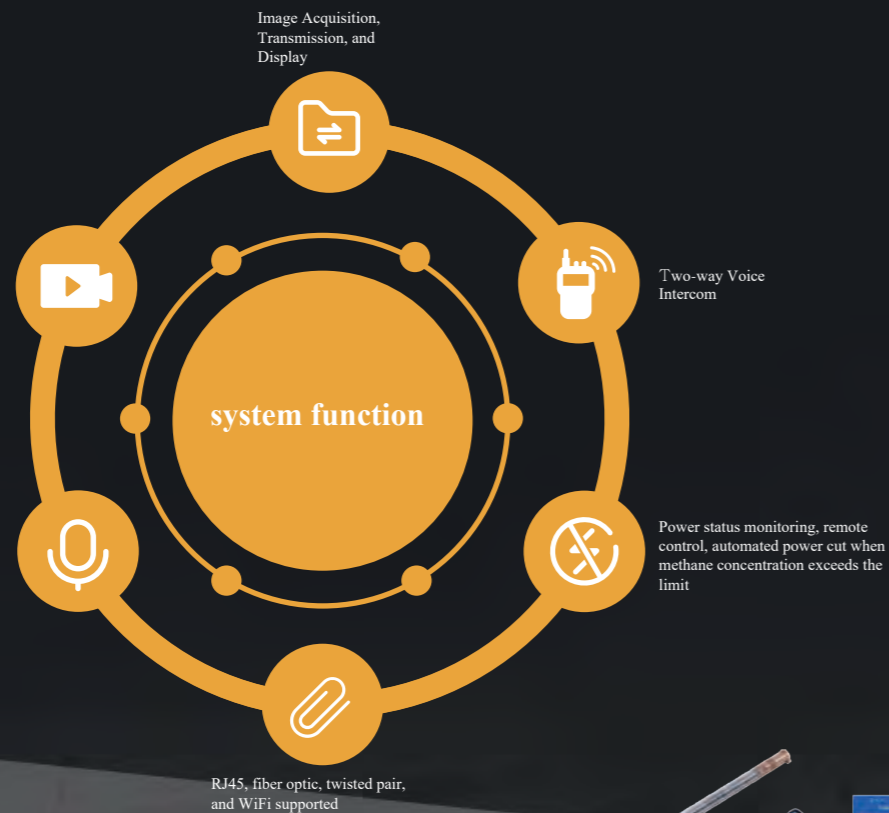| Location	Equipment	Function
KJ1661 Drilling Rig and Borehole Drilling Process Management System		
Upper ground	Server Software monitoring platform	Video surveillance display and storage Data analysis Intercom and remote control
Underground tunnel	Network switch Substation	Communication transmission
Drilling site	Drill rig Borehole trajectory tracker Surveillance camera Circuit breaker & feeder Gas monitoring sensor	Drilling Borehole trajectory monitoring Drill Site Monitoring

ZYWL-6000

The ZYWL-6000 automatic drilling rig is primarily designed for drilling boreholes in underground coal mines for purposes such as gas extraction, water hazard control, pressure relief, geological exploration, and other drilling operations. The drilling rig system consists of the main drilling rig unit, remote controller, wireless substation, mobile application, and management software. The software enables automatic borehole drilling plan design and process management. The entire drilling process can be remotely monitored through the video surveillance system. The drilling rig can be equipped with a borehole trajectory device and a single-hole gas extraction metering device, allowing for analysis and evaluation of the drilling process and results using analytical software.
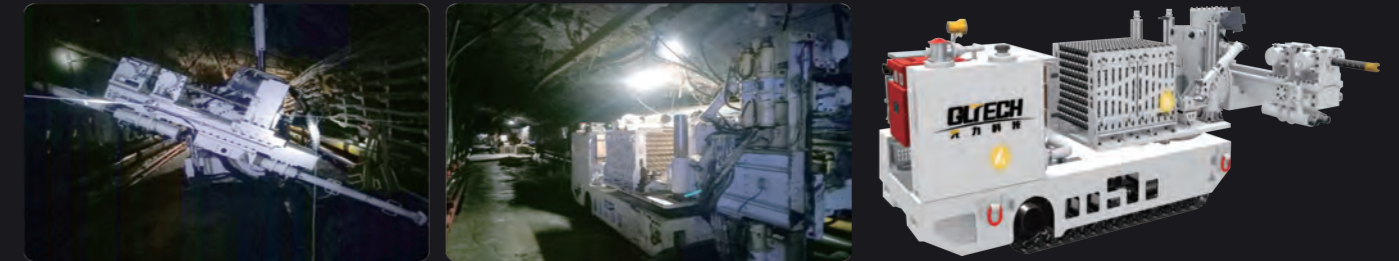
Technical Parameter

Parameter		Specification
Maximum drilling depth		600(m)
Punching hole diameter		94/113/133(mm)
Finished hole diameter		133/153(mm)
Drill rod diameter		73/89(mm)
Allowed drilling angle		-45°-90°
Rod box capacity		120(Ø73x800)(шт.)
Rated output ration speed		70-270(r/min)
Required flow volume of moter		145(L/min)
Rated output torque		6000-1200(N.m)
Feeding(propulsion) force		140（kN）
Traction force		210（kN）
Anchoring force		725（kN）
Idle feeding speed		0-12.7（m/min）
Idle traction speed		0-8.5（m/min）
Feeding distance		980（mm）
Max control distance		≤50（m）
Typical remote control distance		≤20（m）
Pump	Motor power	75（KW）
	Motor model	YBK3-280S-4
	Fuel tank capacity	300（L）
	Driven mode	Crawler-type
Crawler mechanism	Crawling speed	35(m/min)
	Max climbing angle	20°
	Track width	260（mm）
	Operating flow volume	145(L/min)
Control console	System calibrating pressure	27(MPa)
	Propulsion pressure	17(MPa)
	Anchoring pressure	125(MPa)
	Rotational pressure (reverse)	27(MPa)
	Rotational pressure (forward)	27(MPa)
	Operating pressure of the travel mechanism	27(MPa)
Noise level		≤95dB(A)
Max external dimensions		4777 x 2369 x 1950(mm)
Weight		9980(kg)

02

IoT-based
Mining Safety Equipment

Ambient Atmospheric Parameter Monitoring Sensor Series

GYH25(A)

GJG100J(A)

GRG5H(A)

GTH500(A)

GFXM20/60(A)

GWD80(A)

GD7

GD3

Description

The ambient atmospheric parameter monitoring sensor series is a range of equipment that can monitor real-time environmental parameters in coal mine tunnels. It includes various sensors that can collect data on gas concentration, temperature, humidity, wind direction, and speed in the underground mine tunnel, and analyze and process the data. The product has advantages such as high accuracy, high reliability, high automation, and easy installation, which can improve the safety and production efficiency of coal mines.

Features

- TDLAS technology——accurate, long calibration period
- EMC immunity, dustproof, waterproof - IP65
- Audio and visual alarm - high brightness, high decibel alarm function
- Integration - multi-parameter integration, simultaneous measurement of multiple parameters

Technical Parameter

Model		Main Parameter		Explosion-proof
GJG100J(A)	GJJ100W (Wireless)	CH$_4$	0.00-100%	
GYH25(A)		O$_2$	0.0-25.0%	
GTH500(A)		CO	0-1000 ppm	Exia I Ma
GRG5H(A)		CO$_2$	0.00-5.00%	
GWD80(A)		Temp.	-10.0-70.0 ℃	
CW8-Z		Temp.	-40.0-200.0 ℃	
GFXW20/60(A)		Air direction/speed	0.2-20.0 m/s	Exib I Mb
		Temp.	-10.0-60.0 ℃	
GD3		CH$_4$	0.0-100.0%	
		CO	0-500 ppm	
		Temp.	-10.0-70.0 ℃	
GD7		CH$_4$	0.0-100.0%	Exia I Ma
		O$_2$	0.0-25.0%	
		CO	0-500 ppm	
		CO$_2$	0.00-5.00%	
		Air pressure	-5.0-5.0 kPa	
		Temp.	-10.0-70.0 ℃	
		RH (Relative Humidity)	0-100%	

Gas Pipeline Comprehensive Parameter Measurement Instrument Series

Description

The pipeline gas comprehensive parameter measurement instrument series is a product line consisting of multiple models and specifications of instruments that can measure various parameters such as gas concentration, flow rate, and pressure in pipelines to ensure production efficiency and safety. Different models of the instruments are suitable for different field scenarios. They are accurate, reliable, easy to use, and have fast data processing and various communication mode. The series includes handheld, portable, and fixed instruments, with the former two being suitable for on-site quick measurement and detection and the latter being suitable for real-time monitoring. The instruments have a wide range of applications in industries such as coal mining, oil fields, and natural gas pipelines. Their high precision, reliability, and ease of use make them an important device in the field of gas parameter measurement.

Features

- TDLAS technology——accurate, long calibration period
- Simultaneous multi-parameter monitoring
- Cyclic Self-Excitation (CSE) technology——extremely low flow rate detection limit (0.2 m/s)
- Wireless connectivity and remote access

Technical Parameter

Parameter		Fixed		Portable	
Flow volume(m³/min)		0.0-100.0 m³/min 0.0-150.0 m³/min 0.0-350.0 m³/min		0.040-1.600 m³/min 0.090-3.600 m³/min 2.5-100.0 m³/min	
Flow rate		0.0~23.6 m/s		N/A	
Concentration	CH_4		0.00-100.0%		
	CO		0-2000 ppm		
	CO_2	N/A		0.00-5.00%	
	O_2	N/A		0.0-25.0%	
Pressure	Absolute		10.0-200.0 kPa		
	Differential	N/A		-250-2500 Pa	
	Ambient	N/A		50-110 kPa	
Temperature		-10.0-60.0 ℃		CJZ7/CJZ70	-10.0-60.0
				CJZ7(A)/CJZ10J	-10.0-50.0 ℃
				CJW4	-20.0-60.0 ℃
Power		9-25V DC		N/A	
Communication		RS485		Bluetooth	
Pipeline Dia.		DN50-DN1000		DN50-DN300	
Installation		Insertion	Flange	N/A	
Explosion-proof		Exdiaib I Mb		Exia I Ma	
Other functions		N/A		Mobile App	

1. GD5W/GD6W Methane drainage borehole multiparameter meter
2. CJZ6Z/100 Methane drainage manifold multiparameter meter
3. CGWZ-100/350 Methane drainage main pipeline multiparameter meter
4. CJZ10J Portable methane drainage pipeline multiparameter analyzer
5. ZD6W-J Methane drainage pipeline multiparameter verification instrument

IoT Communication and Control Equipment Series

IoT communication and control equipment series are utilized for power supply, communication, and control in coal mines. They are the backbone of multiple systems. The power supply equipment ensures reliable and efficient electricity distribution. Communication devices, such as substations and network switches, establish a stable network infrastructure. Control devices, such as power breakers and feeders, enable remote control of power cuts and resupply. Together, these devices enhance safety, reliability, and automation in coal mining operations.

Features

- Support simultaneous linkage to multiple sensors, multi-channel data monitoring
- Automatic devices pairing, plug-and-play,no manual debugging required
- Support multiple communication modes(expandable) - Ethernet interface(IEEE802.3), RS485, CAN, SNMP, VLAN
- Rmote (equipment) automated control and(power supply) status feedback

KDW1140/24

KDW660/24

KDY660/24

DXHL5 (Portable)

KJ370-F(B)

KJJ660

KJJ18 (w/th CAN)

KJJ12

KZG18 -Signal converter

KDG1140/ KDG1140(A)

KDG1.5/127

Technical Parameter

Classification	Model	Parameters					
		AC input rating		DC output rating			
Power supply	KDW1140/24	Voltage	Power	12.5V @1.6A	18.5V @800mA	24.5V @470mA	
		127V/220V/380V/660V/1140V	≤180W	1 channel	4 channels	4 channels	
	KDW660/24	127V/220V/380V/660V (Adaptive)	≤200W	12.8V @1.6A	18.5V @1.1A	24.5V @500mA	
	KDY660/24			1 channel	1-3 channels	1-3 channels	
						6 channels	
	DXHL5 (Portable)	N/A		14.8V@800mA w/th 4800mAh capacity (rechargeable)			
				1 channel			
Substation	KJ370-F(B)	Supported signal type		Analog	200-1000 Hz		
				Digital	RS485		
				Binary	1mA/5mA		
		Connection type		RS485，RJ45，Ethernet，Wireless			
		Max connection capacity		Sensor	32		
				Breaker	8		
Network switch and converter		Connection type (Number of ports)					
		Optical	Ethernet	RS485			
	KJJ660	GbE x 3 Mbps x 16	Mbps x8	4			
	KJJ18 (w/th CAN)						
	KJJ12	GbE x2 Mbps x 4	GbE x1 Mbps x 4	1			
	KZG18 -Signal converter	Mpbs x 0-2	Mpbs x 1	1-2			
Power breaker and feeder		Feed voltage monitoring range					
	KDG1140/ KDG1140(A)	(127-1140)V AC					
	KDG1.5/127	(1140-10k)V AC					

03
Standalone Devices

CCF-7000

Portable Ambient Dust Meter

CCF-7000 is a portable environmental dust concentration meter with a built-in display screen, allowing users to directly read the results from the device. This equipment can determine the concentration of dust particles in the air within 30 seconds. The CCF-7000 dust concentration meter adopts laser measurement principles. It uses diffusive sampling methods instead of membrane sampling. This makes it environmentally friendly, safe, timely, and convenient for use.

Features

- Brand-new laser measuring principle
- Real-time measurement with diffusive sampling
- Automatic calibration function for simple operation.
- Lightweight and easy to carry
- Capable of storing 1000 sets of data with data analysis function

Technical Parameters

Measuring range	0.01-7000 mg/m^3
Accuracy	±15%
Resolution	0.01 mg/m^3
Display	128x61 pixels OLED
Power	Built-in Li-battery, 12 hrs operation (1 charge)
Explosion-proof standard	Mine Intrinsically Safe Ex ia I Ma
Water/dust protection	IP65
Size	ø48 mm x 380 mm
Weight	≤1kg

GCG-1000Z

Ambient Dust Meter

GCG-1000Z is an stand-alone online ambient dust concentration meter designed with laser principle. It adopts an open structure, fundamentally avoiding dust accumulation issues. The sensor integrates photoelectric detection system, display system, self-calibration system, processor system, and self-cleaning mechanism, enabling online real-time measurement of dust concentration. It features intelligent functions such as automatic calibration, automatic cleaning, and maintenance reminders, making it suitable for online monitoring of dust concentration in dust environments like underground coal mines, other mines, and workshops.

Features

- Open-cavity structure, effectively solving dust accumulation issues and reducing maintenance workload.
- Uses natural air flow sampling, eliminating the need for an internal pump.
- Automatic calibration function for simple operation.
- Low power consumption design.

Technical Parameters

Measuring range		0.00-1000 mg/m^3
Accuracy		±10%
Output signal	Frequency	200-1000 Hz
	Digital	RS485
	Logic	0V/5V
	Analog	1-5 mA, 4-20 mA, 0-40 mA
Operating Voltage		9-24 V DC
Explosion-proof standard		Intrinsically safe Exia I Ma
Water/dust protection		IP65

CD9

Portable Gas Analyzer

CD9 is a portable gas analyzer capable of simultaneously measuring various gases and environmental parameters. This analyzer can detect combustible gases, toxic pollutants, and other harmful gases, making it suitable for a wide range of applications in mining, environmental protection, chemical industries, public utilities, petrochemicals, and civil engineering.

Features

- Capable of simultaneously detecting 6 types of gases, with 16 gas types available for selection.
- Equipped with real-time measurement, concentration curve plotting, data storage, and analysis functions.
- Includes PC data management software for data analysis.
- Features both diffusive and pump sampling modes.
- Powered by a lithium battery, providing up to 24 hours of continuous operation.
- Designed with a shock-resistant composite material casing, with EMC interference resistance and a dust/waterproof rating of IP67.
- Offers audio, visual, and vibration alarm modes.

Technical parameters

Parameter	Measuring range	Resolution
Methane	0-5%	0.01%
Oxygen	0-25%	0.1%
Carbon monoxide	0-1000 ppm	1ppm
Carbon dioxide	0-100 ppm	0.1ppm
Hydrogen sulfide	0-100 ppm	0.1ppm
Sulfur dioxide	0-100 ppm	0.1ppm
Temperature	-10-60 ℃	0.1℃
Humidity	0-100% RH	1% RH
Differential pressure	0-100 kPa	0.1 kPa

GXG-209

Multi-gas Analyzer

The GXG-209 laser spectrum multi-gas analyzer is a laboratory-grade equipment designed for multi-component gas measurement and analysis. This device is capable of simultaneously analyzing 9 different gases, including CH_4, CO, CO_2, C_2H_2, C_2H_4, C_2H_6, making it a comprehensive gas analyzer. It comes equipped with an automatic sampling system, enabling automated sample introduction and automatic gas switching. The equipment is easy to operate, provides efficient measurements, and allows data to be uploaded to PC software for analysis and report generation.

Features

- Utilizes laser spectrum technology, capable of simultaneously detecting CH_4, CO, CO_2, C_2H_2, C_2H_4, C_2H_6, O_2, H_2, N_2 gases.
- Rapid gas concentration analysis (5-8 minutes) without the need for calibration gases or carrier gas, making it a viable alternative to gas chromatographs.
- Automatic zero-point calibration and self-diagnostic functions.
- Equipped with an automatic gas path switching device, enabling fully automated sample injection, analysis, data storage, and data uploading.
- Offers trend analysis and over-limit alarm functions, supporting historical data queries, report exporting, and printing.

Technical parameters

| Parameter	Measuring range	Accuracy
CH_4	0.00-100.00 %	±5% от истинного значения
CO	0-10000 ppm	±6% от истинного значения
CO_2	0.00-30.00 %	±(0.08+5% от истинного значения）
O_2	0.0-25.0 %	±0.8%
C_2H_2	0.0-20.0 ppm	±2% FS
C_2H_4	0.0-20.0 ppm	±(1+10% от истинного значения)
C_2H_6	0.0-500 ppm	±6% от истинного значения
H_2	0-10000 ppm	±3% FS
N_2	0.0-99.9 %	±2% FS

04

Calibration Equipment

Calibration Equipment

GCGL-70

GCGL-70 Calibration Equipment for Gas(methane) Measuring Instrument

This system is used for calibrating gas detection equipment's parameters such as concentration, flow rate, temperature, and pressure to ensure the proper functioning and accurate measurements of the instruments.
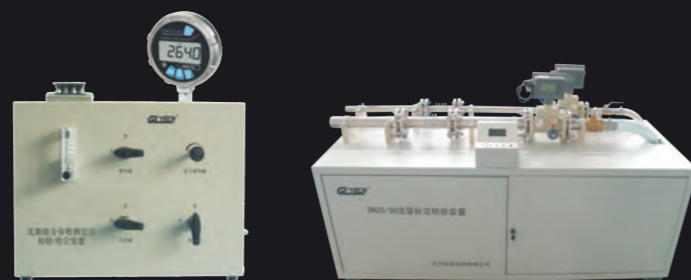
Methane Concentration and Pressure Sensor Calibration System

Flow Meter Calibration and Verification Device

GFC-II

GFC-II Dust Calibration/Certification Device

The GFC-II is used for the verification of error and repeatability of dust concentration measuring instruments. The device is composed of a dust test duct and a sampling device (including an air compressor and an analytical balance). It has the advantages of stable dust generation, continuous adjustability, reliable dust emission, uniform dust distribution in the test area, and the ability to recycle dust.
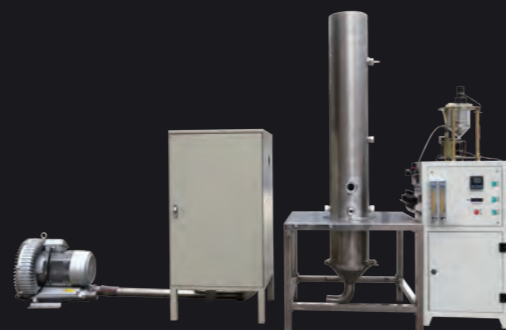
JFC -II

JFC -II Dust Sampler Verification Device

The JFC-II is used for the calibration of key technical parameters of dust samplers, including sampling flow rate and error, flow rate stability, flow meter accuracy, continuous working time, load capacity (or suction pressure), and airtightness of the sampling head. This device is suitable for dust sampler manufacturers, metrology verification departments, and industrial enterprises to calibrate newly manufactured, in-use, and repaired dust samplers. It features automatic calibration, compact structure, stable flow rate, and easy operation, providing significant advantages for the calibration process.

ZD6W- J

ZD6W-J Methane drainage pipeline multiparameter verification instrument

The ZD6W-J Methane drainage pipeline multiparameter verification instrument is a portable comparative device developed for the accuracy comparison of gas drainage online equipment. It can be used as a comparison tool for gas drainage flow rate, methane concentration, carbon monoxide concentration, oxygen concentration, pipeline pressure, and pipeline temperature online equipment.

After-sales Program

Passionate, active, professional, efficient

GLTECH is also committed to the construction of a perfect after-sales service system, making it a bridge connecting users and the company. The technical support center is responsible for accepting services from customers, supplying spare parts, technical support, and handling customer complaints. It is responsible for pre-sale consultation, installation and commissioning, regular calibration, and lifetime maintenance of all products of the company.

Our Advantage

- 1. Professional team: We have a team of experienced technical experts who have excellent expertise and skills in various equipment maintenance and support.

- 2. Quick Response: We value your time, so we promise to respond to your request with in the shortest possible time. We will dispatch technicians to your site as soon as possible to ensure that the problem is solved in time.

- 3. Original Parts and Warranty : To ensure the performance and stability of your equipment,we only use original parts for repairs and replacements. We provide quality assurance services to provide long-term and reliable protection for your equipment.

- 4. Personalized service: We understand that each client's needs are unique, so we provide personalized service solutions. Whether you are an individual user or an enterprise customer, we will tailor the best after-sales service solution for you according to yourspecific requirements.

- 5. 24/7 Support: Equipment issues don't happen on time, so we offer 24/7 technical support.No matter what difficulties you face, our customer service team is always ready to answer your questions and provide assistance.

Pledge:

- The product warranty period is one year (customizable scheme), life-long maintenance,and repair parts are provided at cost price outside the warranty period.

- Responsible for guiding commissioning and providing free technical training and support.

- Set up service outlets in the customer's local area, return to users from time to time, an answer questions raised by users in a timely manner.

- Provide 7x 24 hours after-sales service. Professional technical support team will solve the problem in the fastest time.

Technical consulting | Installation and commissioning | Field repair | Return to factory for repair | Parts management | Technical training | Customer return visit | Complaint acceptance

Service hotline： +86 0371 67853916