SICHUAN YUANHENGDING
TRADING CO., LTD.

AUTOMATION
& IoT

PRODUCT MANUAL

SMART GAS · MONITORING · REMOTE CONTROL · STATION AUTOMATION

2010
Founded in Sichuan
City-gas industry since 2010

11
Core product lines
Terminals · Detectors · Systems

4G / NB-IoT
Connectivity
Zero-packet-loss upload

COMPANY PROFILE

ABOUT US · EST. 2010

Founded in 2010 and headquartered in Sichuan, Sichuan Yuanhengding Trading Co., Ltd. is a professional service provider dedicated to the city-gas sector, offering full-chain technical solutions. Its business spans the entire life cycle of gas engineering — from customised solution design at the front end, to precise selection and supply of equipment and materials, to professional diagnosis, evaluation and digital upgrade of existing pipeline distribution systems — delivering one-stop, turnkey services for clients across the gas industry chain.

Backed by years of industry experience, Yuanhengding has built a complete product and supply system covering pressure regulating equipment, metering instruments and flow meters, valves, automatic control equipment, and pipes & fittings. Its products are widely applied in city gate stations, district regulating stations, and industrial, commercial and residential gas distribution scenarios, meeting multi-level, multi-condition requirements from station-scale projects down to end users.

In the automation and IoT domain, Yuanhengding supplies intelligent terminals, gas detection instruments, smart remote regulation systems and station automation solutions. These products support 4G / NB-IoT wireless communication, zero-packet-loss data upload, remote configuration and cloud or third-party platform integration — enabling utilities to move from manual site operation towards unmanned, data-driven network management.

CORE BUSINESS

Gas-engineering solution design · Equipment & material selection and supply · Network diagnosis · IoT digital upgrade

QUALITY COMMITMENT

Rigorous engineering selection and full-process quality control; every unit strictly inspected before shipment, with responsive service support

TECHNICAL SUPPORT

Selection assistance, protocol and platform integration guidance, commissioning support and spare-parts supply for the full product life cycle

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JMA-RTU Multifunction IoT Terminal

All-in-one IoT data acquisition & remote control terminal for gas networks



Actual product appearance

CORE PARAMETERS

Communication	4G wireless data transmission
Power Supply	220V AC / 24V DC / solar
Data Acquisition	Pressure, temperature, leakage, flow meter & more
Remote Control	Yes - remote control of field devices
Data Integrity	Breakpoint resume, 0 packet loss
Remote Config	Acquisition & upload frequency adjustable remotely
Backup Power	Built-in backup lithium battery
Data Storage	Non-volatile memory, data retained on power loss
Protection	Explosion-proof, waterproof, dustproof	

PRODUCT FEATURES

- Explosion-proof, waterproof and dustproof design for harsh environments
- Self-developed breakpoint resume technology ensures 0-packet-loss upload
- Built-in backup lithium battery keeps operating during external power outage
- Multi-type data acquisition with remote field device control
- Remote configuration of collection and upload frequency
- Compact size with easy installation

Standard Price	MOQ	Monthly Capacity	Lead Time
On request	On request	On request	On request

Specifications are subject to final selection data. Please contact our team for detailed drawings, dimensional tables, test reports and certificates. Commercial terms are confirmed in the formal quotation.

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JMA-RPU Wireless Pressure Monitoring Terminal

True wireless pressure monitoring with 0.2% accuracy



Actual product appearance

CORE PARAMETERS

Accuracy
0.2% standard (higher precision customizable)

Communication
4G wireless; Bluetooth master-slave link

Power Supply
Solar / lithium battery / AC power

Mounting
Same installation as standard pressure gauge

Monitoring
Single or dual-point (inlet & outlet pressure)

Alarm
Immediate upload when data anomaly detected

Design
Intrinsically safe, all-aluminum housing

Integration
Compatible with SCADA cloud platforms & third-party systems

PRODUCT FEATURES

- Installs like a normal pressure gauge - battery version needs no field wiring
- Dual-point version monitors inlet & outlet pressure via wireless Bluetooth link
- Remote adjustment of collection/upload frequency and remote fault diagnosis
- Intrinsically safe explosion-proof design with all-aluminum housing
- 0.2% standard accuracy, higher precision available on request
- Immediate data upload on anomaly detection

Standard Price	MOQ	Monthly Capacity	Lead Time
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JMA-RVU Valve Pit Monitoring Terminal

Dedicated monitoring for gas valve pits - leakage, flooding, pressure & cover status



Actual product appearance

CORE PARAMETERS

Battery Life	3+ years (rechargeable lithium battery)
Communication	4G wireless data transmission
Monitoring	Leakage, flooding, pressure, cover status
Leak Sensor	Catalytic combustion or laser (optional)
Protection	Explosion-proof, waterproof, dustproof, anti-corrosion
Alarm	Immediate upload when pre-set threshold exceeded
Remote Config	Collection/upload frequency & thresholds adjustable
Data Integrity	Breakpoint resume, 0 packet loss

PRODUCT FEATURES

- Purpose-built for gas valve pit environments
- Monitors leakage, flooding, pressure and cover status (pressure/cover optional)
- 3+ years of battery life on a single charge
- 0-packet-loss data upload with breakpoint resume technology
- Remote threshold setting with instant alarm upload
- Explosion-proof, waterproof, dustproof and corrosion-resistant design

Standard Price	MOQ	Monthly Capacity	Lead Time
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JMA-RVU-E Leakage Monitoring Terminal

Dedicated leakage monitoring terminal for enclosed and hazardous gas spaces



Actual product appearance

CORE PARAMETERS

Leakage Sensing
Catalytic combustion or laser type (selectable)

Communication
4G wireless data transmission

Protection
Explosion-proof, waterproof, dustproof, anti-corrosion

Remote Config
Collection/upload frequency & thresholds adjustable

Data Integrity
Breakpoint resume, 0 packet loss

Alarm
Immediate upload when pre-set threshold exceeded

Application
Valve pits, enclosed spaces, gas facilities

PRODUCT FEATURES

- Selectable leakage concentration sensing - catalytic combustion or laser
- Suitable for valve pits and other enclosed gas spaces
- Remote threshold setting with instant alarm upload
- Explosion-proof, waterproof, dustproof and corrosion-resistant design
- 0-packet-loss data upload with breakpoint resume

Standard Price	MOQ	Monthly Capacity	Lead Time
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JMA-RFU Flow Meter Monitoring Terminal

Wireless monitoring terminal for gas flow metering data



Actual product appearance

CORE PARAMETERS

Signal Input
Pulse / 4-20mA flow meter signals

Communication
4G wireless data transmission

Power Supply
220V AC / 24V DC / solar

Data Integrity
Breakpoint resume, 0 packet loss

Remote Config
Collection/upload frequency adjustable

Protection
Explosion-proof, waterproof, dustproof

Integration
Compatible with SCADA cloud platforms

PRODUCT FEATURES

- Collects and transmits flow meter data wirelessly
- Supports pulse and 4-20mA signal inputs
- Self-developed breakpoint resume ensures 0-packet-loss upload
- Remote configuration and instant alarm upload
- Explosion-proof, waterproof and dustproof design

Standard Price	MOQ	Monthly Capacity	Lead Time
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JMA-LAM Laser Leakage Monitoring Platform

360° automatic laser scanning for early leak detection at stations & large areas



Actual product appearance

CORE PARAMETERS

Scanning	360° horizontal & vertical automatic scanning
Detection Mode	Remote active laser detection
Application	Gas stations, large production areas
Response	Fast response, no missed alarms
Accuracy	High accuracy, no false alarms
Maintenance	No calibration required, low maintenance cost
Reliability	High reliability, long service life
Qualification	Qualified product for major national oil & gas groups

PRODUCT FEATURES

- Dual 360° auto-scanning covers stations and large areas without blind spots
- Detects early-stage micro leaks at distance
- No calibration needed - low maintenance workload and cost
- Fast response with zero missed alarms; high accuracy with zero false alarms
- Long service life with low total cost of ownership

Standard Price	MOQ	Monthly Capacity	Lead Time
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Smart Remote Regulation System (RAS)

Remote pressure & flow control for gas stations - no process modification needed



Actual product appearance

CORE PARAMETERS

Functions	Remote pressure control & remote flow control
Line Switching	Duty/standby line switching
Load Distribution	Gas supply load distribution
Flow Control	Multi-path equalization; valve-opening based flow control
Flow Meter	Optional - control based on valve opening works without it
Installation	No change to existing process equipment
Certification	Independent invention patents & third-party certification
References	CNPC Kunlun, China Resources Gas, Towngas, ENN projects

PRODUCT FEATURES

- Achieves truly unmanned station operation
- Duty/standby line switching and supply load distribution
- Installed without modifying existing process equipment
- Remote pressure and flow control from the dispatching center
- Flow control based on valve opening - flow meter not required
- Cost-effective alternative to imported systems with localization policy support

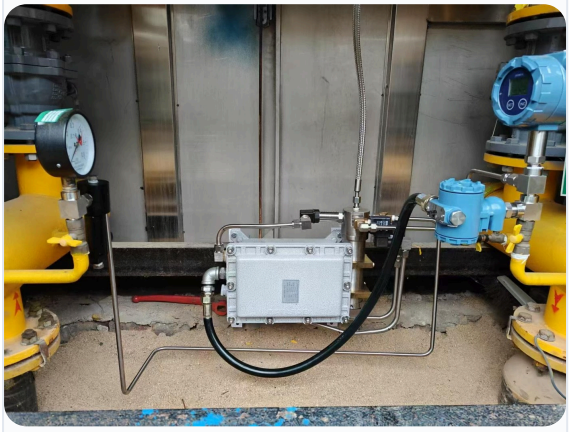
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Smart Remote Regulation System for Medium/Low Pressure (RAS-E)

Remote regulation for medium & low pressure regulator cabinets



Actual product appearance

CORE PARAMETERS

Application
Medium & low pressure gas regulator cabinets

Functions
Remote pressure regulation & monitoring

Load Adaption
Adapts to new high-consumption loads (e.g. wall-hung boilers)

Installation
No modification to existing process equipment

Communication
Remote data transmission to dispatching center

Integration
Compatible with SCADA dispatching systems

PRODUCT FEATURES

- Enables remote regulation of medium & low pressure cabinets
- Installed without modifying existing process equipment
- Improves supply stability for growing urban gas demand
- Adapts networks to new high-consumption equipment loads
- Remote monitoring and control from dispatching center

Standard Price	MOQ	Monthly Capacity	Lead Time
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Station Automation Control System

Complete SCADA-based automation for gas stations - design, integration & programming



Actual product appearance

CORE PARAMETERS

Experience
10+ years in station automation design & commissioning

Scope
Control configuration, HMI & system programming

Integration
Seamless with our full hardware & software portfolio

Applications
Gate stations, distribution stations, CNG/LNG stations

Deliverables
Turnkey automation control solutions

Customization
Configured per station requirements

PRODUCT FEATURES

- 10+ years of station automation design, engineering, commissioning and maintenance
- Seamless integration with our complete hardware & software product portfolio
- Full-service: design, selection, construction, programming and support
- Customized control configuration and HMI programming per station type
- Covers gate stations, distribution stations and CNG/LNG stations

Standard Price	MOQ	Monthly Capacity	Lead Time
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JM-EPH Pilot Heater

Anti-freeze electric heating for regulator pilots in cold climates



Actual product appearance

CORE PARAMETERS

Application	Regulator pilot / actuator anti-freeze heating
Power Supply	AC power supply
Control	Automatic temperature control
Safety	Explosion-proof design
Installation	Simple retrofit on existing pilots
Compatibility	Fits common regulator pilot types

PRODUCT FEATURES

- Prevents pilot freezing in low-temperature environments
- Automatic temperature control for energy efficiency
- Explosion-proof design for gas facilities
- Easy installation on existing regulator pilots

Standard Price	MOQ	Monthly Capacity	Lead Time
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Portable Gas Detector

Handheld multi-gas detection for field safety inspection



Actual product appearance

CORE PARAMETERS

Detection Gas	LEL / O2 / CO / H2S (configurable)
Alarm	Sound, light & vibration alarm
Power	Rechargeable battery
Display	Real-time concentration display
Protection	Dust & waterproof, impact resistant
Application	Field inspection, confined space entry, maintenance

PRODUCT FEATURES

- Compact handheld design for field use
- Multi-gas detection with configurable sensors
- Sound, light and vibration alarms
- Rechargeable battery for extended operation
- Suitable for inspection and confined-space entry

Standard Price	MOQ	Monthly Capacity	Lead Time
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