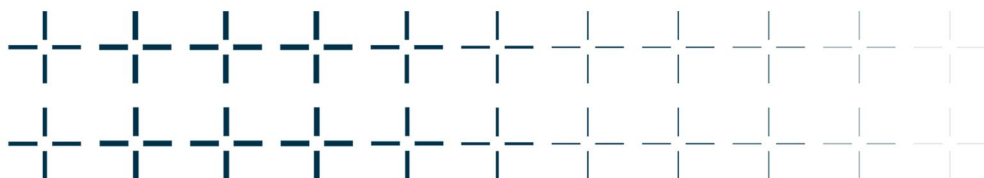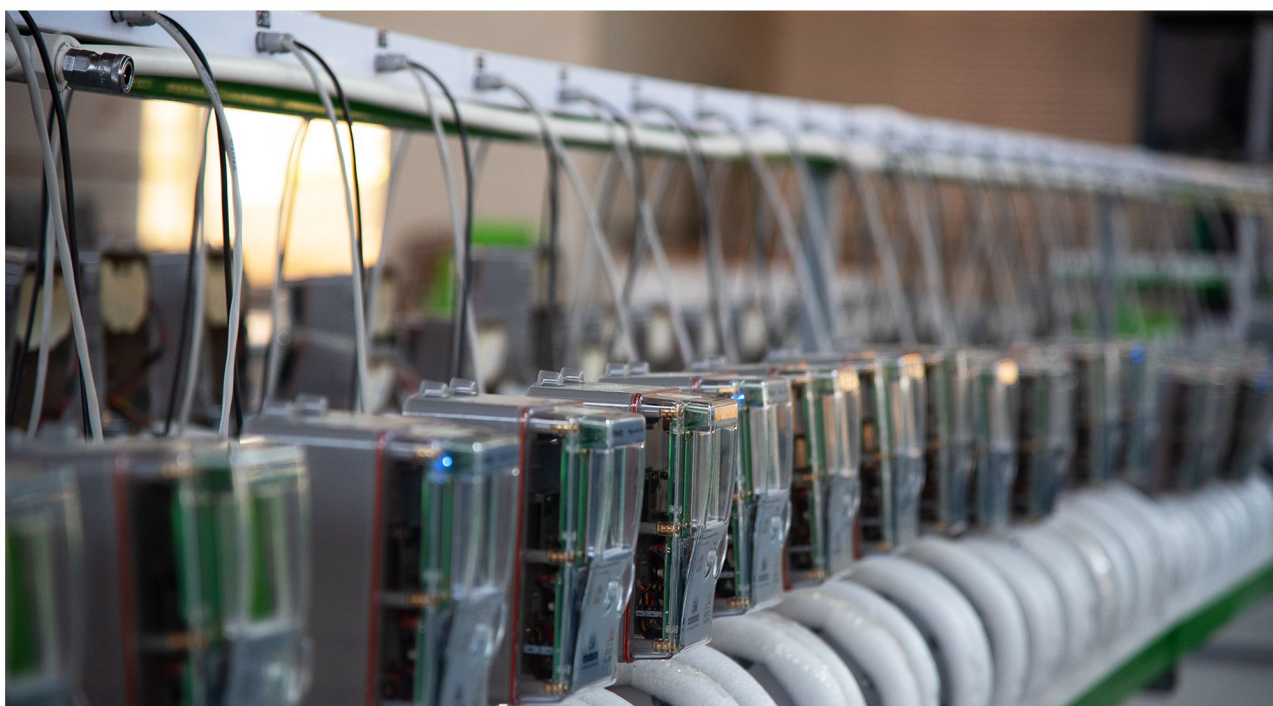# POOYNC

Product Catalogue

2023/2024

ABOUT POOYAC

"Sanjesh Abzar Pooyaye Ayandeh," also known as POOYAC, was founded in 2016 with the primary goal of developing precision instrumentation devices. Drawing upon over a decade of collective experience in water, electricity, oil, and gas automation industries, our management team recognized the growing need for accurate instruments in our country.

Initially, our focus was on electromagnetic flowmeters, as the demand for precise and reliable flow measurement became increasingly evident, especially within the water and wastewater sector. Through relentless dedication and innovation from our research and development department, we successfully designed and manufactured the first version of our product in December 2017 after testing more than a hundred prototypes.

Today, POOYAC stands as a leading producer in the Middle East. We have continued to expand our product line by integrating cutting-edge technology into the design and production of pressure transmitters, level transmitters, residential ultrasonic water meters, and more. Our unwavering commitment to accuracy and our company's mission have established us as a reputable and trusted choice within the industry.

Smart Electromagnetic Flowmeter

POOYAB-SM4 smart electromagnetic flowmeter determines fluid flow using Faraday's law of electromagnetic induction. This product accurately evaluates the flow of conductive fluids. The measured flow is stored in the device's data logger along with other significant parameters like positive and negative volume, critical system warnings, battery level, etc., and has the capability to sent data to the online monitoring platform at predetermined intervals.

Features

- Using IoT technology
- Equipped with a smart data logger to store information for up to 100 years
- Support multiple industrial communication protocols including M-Bus, Pulse, Loop-current (4-20mA)
- Resistant to water and dust penetration (IP68 standard)
- Display daily, monthly, and annual consumption rates
- Utilizing a battery with a life span of at least 10 years
- Maintaining the same pressure before and after the meter

Applications
- Oil and petrochemical industry
- Industrial automation
- Water and wastewater industry
- Agriculture

Specifications

Output: Modbus, Loop current, Pulse, M-Bus, LoRa
Battery: 3.6VDC/40Ah
External power supply: 12...24VDC, 220VAC
Accuracy: Class 1 for cold and hot potable water
Working temperature: 0...70°C
Ambient temperature: -20...80°C
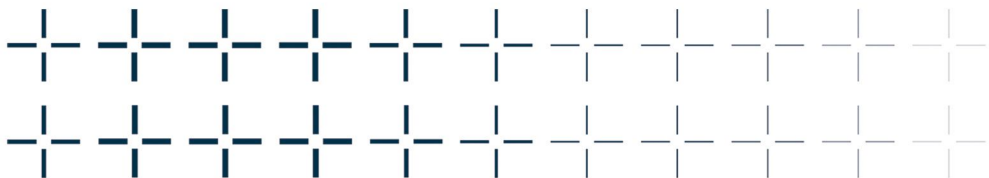**Sensor material:** SS316L, Hastelloy, Titanium
Liner material: PTFE, EPDM
nominal diameter:

DN50	DN80	DN100	DN125	DN150	DN200
2"	3"	4"	5"	6"	8"

DN250	DN300	DN350	DN400	DN500
10"	12"	14"	16"	20"

POOYAB-SM4

Smart Electromagnetic Flowmeter

Residential Ultrasonic Water Meter

In order to address water scarcity, it is crucial to have precise and reliable measurements of water consumption. The ZIG residential ultrasonic water meter plays a pivotal role in achieving this objective. This state-of-the-art water meter employs ultrasonic wave technology to meticulously measure fluid flow. Unlike traditional meters with moving mechanical components, the ZIG ultrasonic water meter maintains consistent accuracy throughout its operational range and exhibits minimal pressure drop.

Features

- Using IoT technology
- Equipped with a smart data logger
- Resistant to water and dust penetration (IP68 standard)
- Display daily, monthly, and annual consumption rates
- Utilizing a battery with a life span of at least 10 years
- Utilizing ultrasonic measuring technology, that works without any mechanical moving parts and minimizes pressure loss.

Specifications

Communication technology: Wireless M-Bus, LoRa, NB-IoT, Wi-Fi, GPRS, RS485
Wireless communication: IR
Battery: 3.6VDC/40 Ah
Accuracy: Class 2 for cold and hot potable water
Working temperature: 0...70°C
Ambient temperature: -20...80°C
Display parameters:
Cumulative flow (m3, Gal, L)
Instantaneous flow (m3/h, GPM, L/h)
Customize (water temperature, date, time, software version)
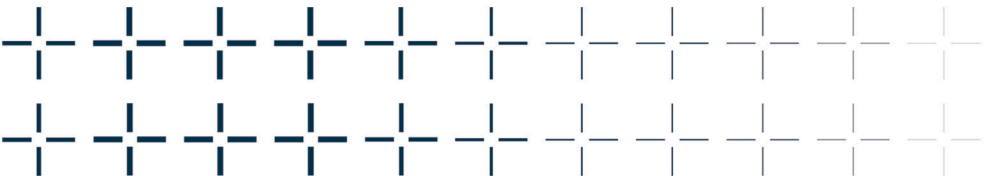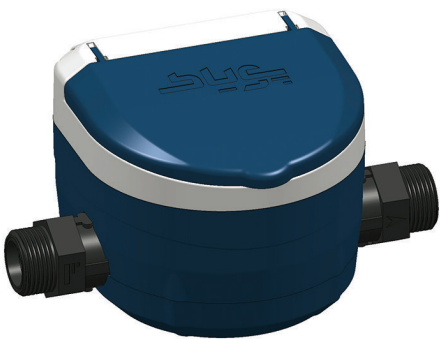**Sensor material:** Piezoelectric Crystal
Body material: Brass
nominal diameter:

DN15	DN20	DN25	DN32	DN40
½"	¾"	1"	1 ¼"	1 ½"

ZIG series

Residential Ultrasonic Watermeter

Pressure Transmitter

The ADG pressure transmitter is versatile, capable of accurately measuring the pressure of both liquids and gases. This product excels in precisely gauging the differential pressure between the substance and its surroundings. Its sensor is crafted from a robust ceramic material, ensuring resilience against adverse weather conditions and withstanding burst pressures up to 1.5 times its specified range.

Features

- Resistance to corrosion, impact, and vibration
- Resistance to water and dust penetration (IP65 standard)
- Compliance with EMC standards
- Stabilized output

Applications

- Oil and petrochemical industry
- Industrial automation
- Hydraulic and pneumatic systems
- Heating and cooling systems

Specifications

Measuring range: 0...6 up to 100 bar
Output signal: 4...20mA
Power supply: 8...36VDC
Accuracy: ±0.5%
Overpressure limit: 1.5 × range
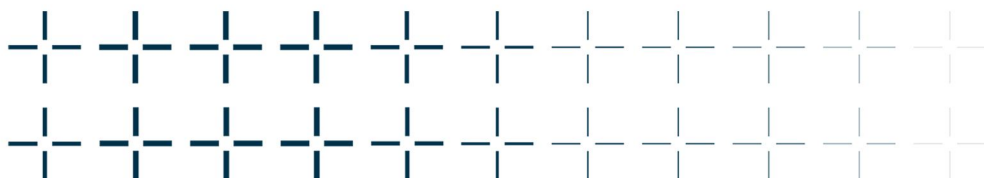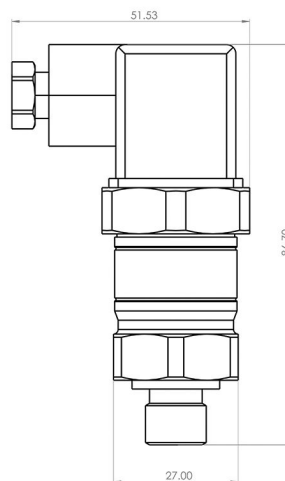**Working temperature:** -25...80°C
Mechanical connections: G¼, G½, NPT½, NPT¼, M20 –Male
Sensor material: Ceramic alloy Al2O3
Body material: SS304, SS316L

ADG series

Pressure Transmitter

51.53

86.70

27.00

Hydrostatic level transmitter

The MARUS level transmitter is employed for gauging the liquid surface height in tanks and wells. This device is submerged in the liquid, and it utilizes a sensitive piezoresistive sensor to measure the variance in pressure between the liquid and the surrounding atmosphere.

Features

- Resistance to corrosion and erosion
- Resistance to water and dust penetration (IP68 standard)
- Compliance with EMC standards
- Stabilized output

Applications

- Oil and petrochemical industry
- Industrial automation
- Tanks
- Deep wells

Specifications

Measurement range: 0...6 up to 20 mH2O
Output signal: 4...20mA
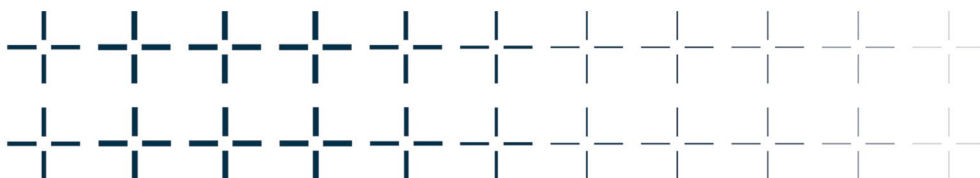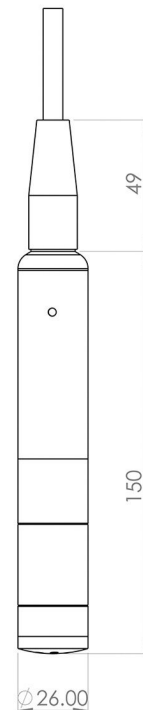**Power supply:** 8...36VDC
Accuracy: ±0.5%
Working temperature: 0...80°C
Type: Throw-in
Body material: SS304, SS316L

MARUS series

Hydrostatic Level Transmitter

49
150
∅26.00

Smart Remote Relay

MEJ smart remote relay is used in conjunction with the POOYAC Smart Electromagnetic Flowmeter to effectively manage water consumption. Based on information obtained from the smart meter, this switch enables remote connection and disconnection of the command relay. In the wireless model, GSM signals are used to establish the connection between the POOYAC smart flowmeter and the Smart Switch Terminal.

Features

- Protected input
- Display relay status
- Display GSM signal strength
- Support all cellular vendors

Applications

- Water and wastewater industry
- Agriculture

Specifications

Communication technology: GSM
Wireless communication port: IR
External power supply: 12...24VDC, 220VAC
Working temperature: 0...70°C
Ambient temperature: –20...80°C

MEJ series

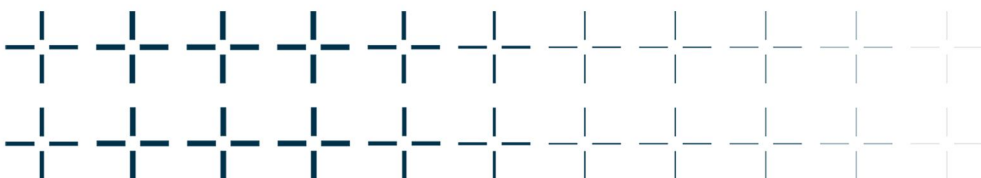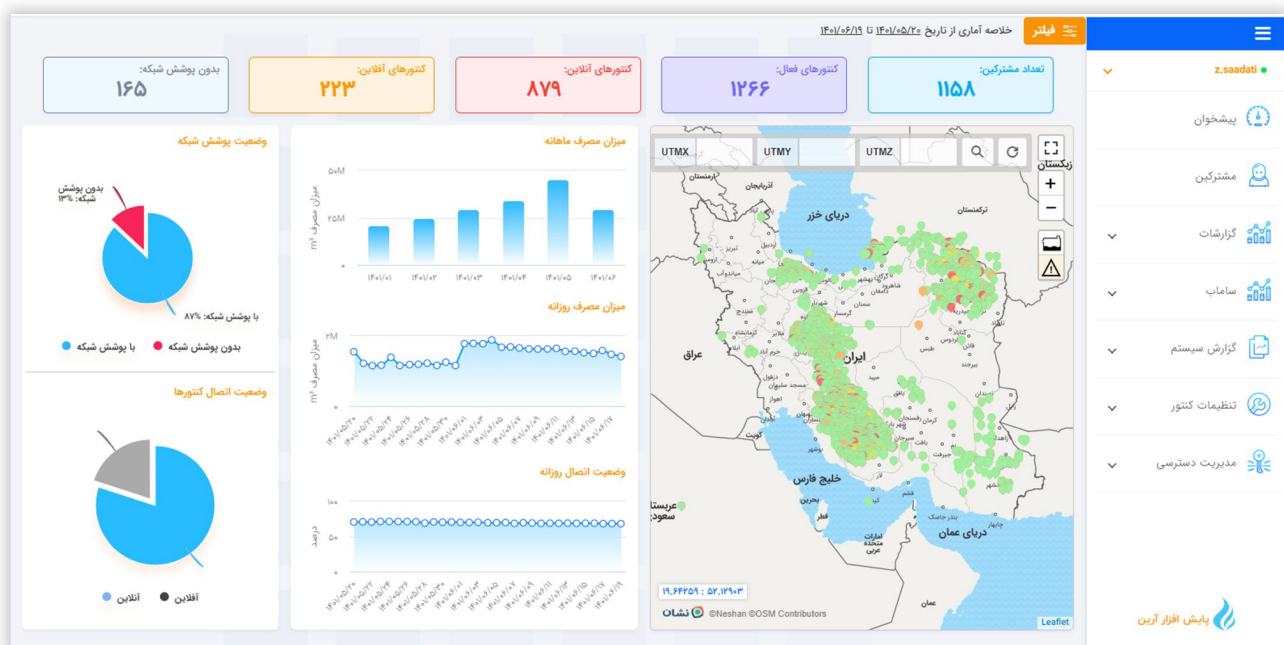## Smart Remote Relay

Online monitoring platform

POOYAC Online Monitoring Platform is an integrated website for monitoring and controlling smart flowmeters. All including information related with these meters, graph of consumption rate, general meter status, time and volume allocation relevant data, balance, events, etc., can be collected, analyzed, and displayed by this system. With its cutting-edge features, this platform offers a functional system for managing water consumption.

Applications

- Water and wastewater industry
- Agriculture
- Water resource management
- Oil and petrochemical industry
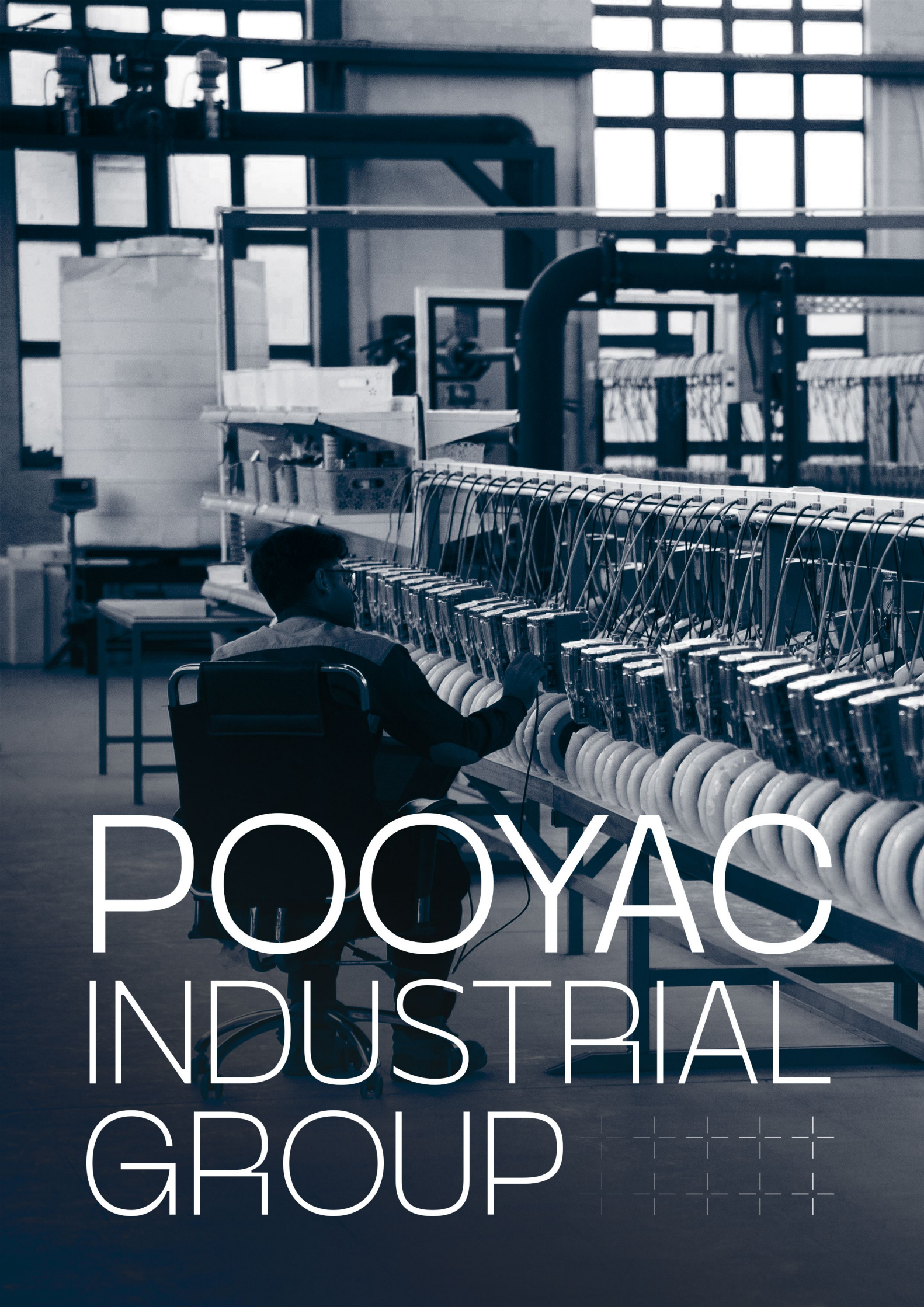- Industrial automation

Specifications

- Secure communication with SSL encryption
  User authentication
- Daily data collection with the detection of more than 20 different types of errors and warnings
- Produce reports in PDF, csv, JPG, and xlsx formats.
- Connects to SCADA, DCS, and urban water and wastewater systems
- Show relay status and allow remote connection and disconnect
- Produce various charts and reports.
- Show negative and positive flow
- Connection status and SIM card balance
- Display time and volume allocation details
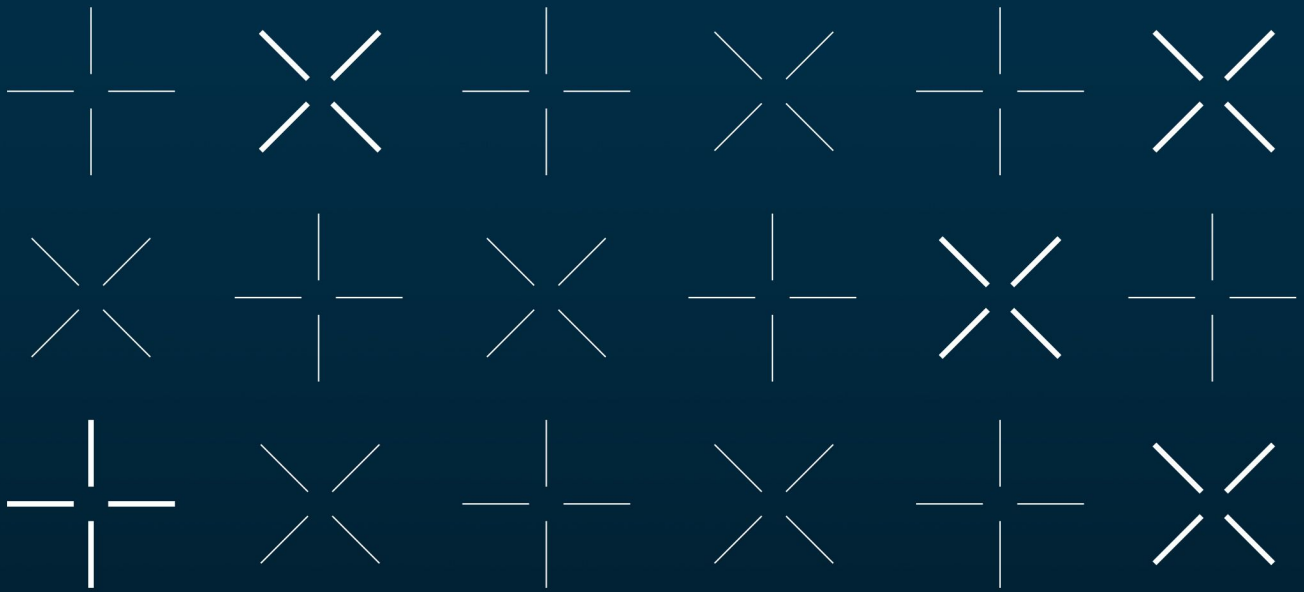- Battery status, etc.

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GROUP

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