FDX SenIQ CR

SENSOR INTELLIGENCE solution

FDX SenIQ-CR is an autonomous data logger ideal for remote monitoring in hydraulic and industrial infrastructure.

The product

ABOUT

Autonomous data logger for industrial sensors with 4-20 mA signal and two pulse inputs.
It integrates:

- 2 inputs (4-20 mA)
- 2 pulse inputs
- Internal sensor power supply (20 V)
- Long-lasting battery
- Integrated IoT telemetry
- Ultra-low power consumption

Ideal for remote monitoring in hydraulic and industrial infrastructure.

Operating Principle

Operational Sequence:

1. Energizes sensors (20 V)
2. Measures 4-20 mA signal
3. Captures pulses
4. Processes, stores data, and sends data to the server.

Configurable Independent Schedules:
- Measurement Schedule: records measurements at user-defined intervals.
- Transmission Schedule: sends data to the server at user-programmed times.

Between measurements and transmissions, the equipment operates in ultra-low power consumption mode, maximizing autonomy and allowing years of maintenance-free operation.

KEY BENEFITS

ECO

Superior autonomy of over a year with internal batteries, without requiring external power, thanks to an ultra-low power design optimized for continuous field operation.

NUBE

Cloud connectivity via 3G, LTE-CAT-M1, NB-IoT, utilizing a global multi-operator SIM to ensure maximum coverage, availability, and reliable data transmission.

HIGH-PERFORMANCE

Built for extreme use with IP68 protection, resistant to prolonged immersion, dust, humidity, corrosive gases, and atmospheres with the presence of acids for safe operation in severe environments.

Typical Applications

- Drinking Water and Sanitation
- Hydrology and Water Resources
- Agriculture and Smart Irrigation
- Smart Cities and Critical Infrastructure
- Remote Industrial Processes

Cloud & Analitycs

Real-time data and intelligent analysis with FDX-Cloud for faster, more accurate decisions.

Product Family

FDX SenIQ PR

PRESSURE

FDX SenIQ US

ULTRASONIC

FDX SenIQ RD

RADAR

FDX

Technical Specifications

DIAMETER	HEIGHT	WEIGHT
140mm	160mm	0,5Kg

MEASUREMENT TECHNOLOGY	Internal Current Measurement
TYPICAL RANGE	4-20 mA (internal 20V source)
PULSE COUNTER	2 Up to 30 Hz (ultra-low power consumption mode) or 2 Up to 1kHz (low power consumption mode)
COMMUNICATION	Red celular local y global
BANDS	3G / NB-IoT / CAT-M1
PROTOCOL	MQTT / MQTTS
INTERNAL BATTERIES	Internal Lithium Thionyl Chloride Batteries (Li-$SOCl_2$)
CONFIGURATION	Bluetooth local / REMOTE FDX Cloud
PROTECTION RATING	IP68
MOUNTING	Wall bracket / eyelet for hanging
MINIMUM/MAXIMUM MEASUREMENT INTERVAL	1 min – 24 h
MINIMUM/MAXIMUM TRANSMISSION INTERVAL	1 min – 24 h
UPDATE FIRMWARE	Bluetooth
THREE-AXIS ACCELEROMETER	Yes — Tilt detection
INTERNAL TEMPERATURE AND HUMIDITY SENSOR	YES
INTERNAL PRESSURE SENSOR	YES

FACTORY SUPPORT.
ASSISTANCE AND ADVICE ON INSTALLATION

CUSTOMIZABLE QUOTES
TAILORED TO YOUR INDUSTRY

www.fdx-ingenieria.com