# FDX SenIQ RD

SENSOR INTELLIGENCE solution

**FDX SenIQ-RD is an autonomous data logger for level measurement based on 60 GHz FMCW radar.**

# The Product

## ABOUT

FDX-SenIQ-RD is an autonomous data logger for level measurement based on 60 GHz FMCW radar.

- High-precision radar sensor
- Long-lasting battery
- Integrated IoT telemetry

Non-contact with the fluid, ideal for demanding environments and sites without conventional power or connectivity.

## Operating Principle

Measurement is performed by radar, measuring the signal echo to determine the distance.

**Configurable Independent Schedules:**
- **Measurement Schedule:** records measurements at user-defined intervals.
- **Transmission Schedule:** sends the 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.

### CLOUD

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-PERMORMANCE

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

- Rivers and Streams
- Hydrometric Stations and Flood Alert
- Reservoirs and Storage Tanks
- Stormwater Systems and Pumping Chambers
- Treatment Plants and Sewage Networks
- Flood Control
- Irrigation and Drainage Canals
- Environments with Foam, Sediment, or Corrosion

# Cloud & Analitycs

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

# Familia de productos

FDX SenIQ PR

PRESSURE

FDX SenIQ US

ULTRASONIC

FDX SenIQ CR

CURRENT

# Technical Specifications

| DIAMETER | HEIGHT | WEIGHT |
|---|---|---|
| 140mm | 160mm | 0,5Kg |

| | |
|---|---|
| **MEASUREMENT TECHNOLOGY** | FMCW Radar |
| **TYPICAL RANGE** | 0.01 — 30 Meters |
| **ERROR** | ±2 mm @ 25 ˚C |
| **COMMUNICATION** | Local and Global Cellular Network |
| **BANDS** | 3G / NB-IoT / CAT-M1 |
| **PROTOCOL** | MQTT / MQTTS |
| **INTERNAL BATTERIES** | Internal Lithium Thionyl Chloride Batteries ($Li\text{-}SOCl_2$) |
| **CONFIGURATION** | LOCAL Bluetooth / REMOTE FDX Cloud |
| **PROTECTION RATING** | IP68 |
| **MOUNTING** | Wall bracket / eyelet for hanging |
| **MINIMUM/MAXIMUM MEASUREMENT INTERVAL** | 1 minute / 24 hours |
| **MINIMUM/MAXIMUM TRANSMISSION INTERVAL** | 1 minute / 24 hours |
| **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