

Detectronic NC-Flow™



Advanced Non-Contact
Radar Flow Meter



Product datasheet

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The Detectronic NC-Flow™ is a next-generation, non-contact radar flow meter designed for high-accuracy open channel flow monitoring. Engineered for reliability and ease of deployment, it integrates dual radar sensors, onboard flow computation, and multi-network connectivity in a single, rugged enclosure. Ideal for wastewater, stormwater, and industrial applications, NC-Flow™ delivers precise, maintenance-free performance even in the harshest environments.



Key Features

- **Dual Radar Sensors**
 - Enhanced accuracy and redundancy for velocity and level measurement.
- **All-in-One Enclosure**
 - Combines sensors, logger, and antenna in a compact, IP68-rated housing.
- **External Replaceable Battery**
 - Field-swappable power module for extended deployments and minimal downtime.
- **Wide Velocity Range**
 - Measures flow velocities from 0.3 to 4.6 m/s, suitable for diverse flow conditions.
- **Onboard Flow Calculation**
 - Real-time flow computation using velocity and level data—no external processing required.
- **Multi-Network Connectivity**
 - Supports 2G, 4G, LTE-M1, and NB-IoT for flexible, global telemetry integration.
- **API Integration**
 - Seamless data access and integration with SCADA, cloud platforms, and third-party systems.
- **ATEX Zone 0 Certified**
 - Safe for use in explosive atmospheres (ATEX, IECEx, UKCA compliant).

Technical Specifications

Parameter	Specification
Velocity Range	0.3 – 4.6 m/s
Measurement Method	Dual non-contact radar (velocity + level)
Flow Calculation	Onboard, real-time
Enclosure Rating	IP68 (fully sealed, submersible)
Power Supply	External replaceable lithium battery
Battery Life	Up to 5 years (application dependent)
Connectivity	2G, 4G, LTE-M1, NB-IoT
Data Access	API, cloud dashboard, local download
Certifications	ATEX Zone 0, IECEx, UKCA
Operating Temp.	-20°C to +60°C
Mounting Options	Manhole, bridge, or custom brackets
Diagnostics	Internal health monitoring & alerts

Applications

- Combined Sewer Overflow (CSO) Monitoring
- Stormwater & Drainage Networks
- River and Open Channel Monitoring
- Pass Forward Flow (PFF) Compliance Monitoring
- Flow to Full Treatment (FFT) Verification
- Industrial Effluent Monitoring

