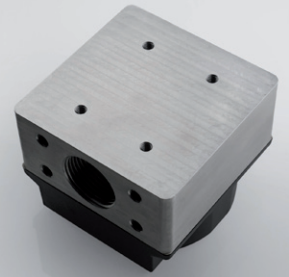




iDFM-500 (BASIC)



iDFM-500 (INOX)

# Silesius iDFM-500

## TECHNICAL SPECIFICATION FOR COMPACT FLOWMETER

### General Information

- Device Type: Battery-Powered Compact Flowmeter
- Application: Measurement of fluid flow in industrial, agricultural, and commercial systems
- Power Supply: Two AAA alkaline batteries
- Battery Life: Up to 2 years (typical usage conditions)

### Measurement Specifications

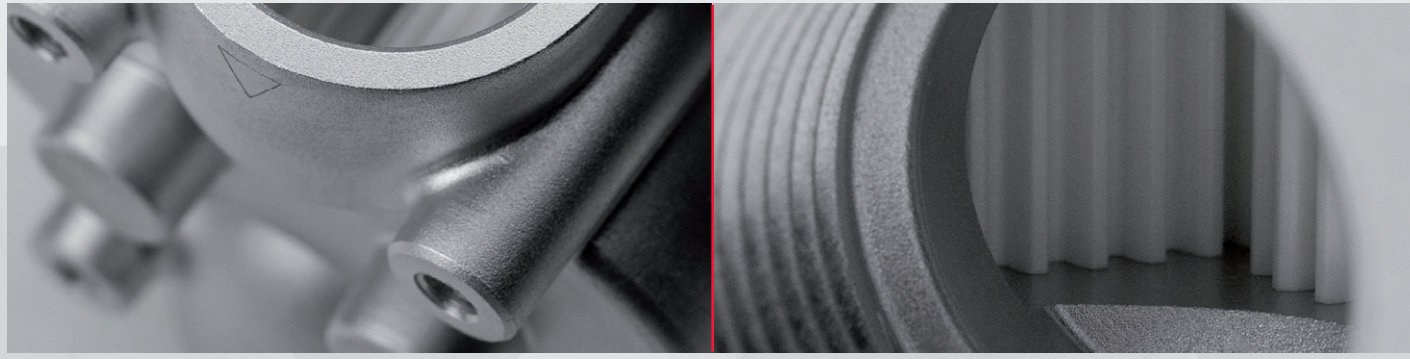
- Measurement Units: Liters or Gallons (user-selectable)
- Measurement Accuracy: Better than  $\pm 0.5\%$
- Flow Range: Configurable based on installation requirements (specific range available upon request)
- Response Time: <1 second
- Logging Capacity: Last 32 flow measurements stored in onboard memory

### Hardware Specifications

- Display:
  - LCD with clear visibility in outdoor environments
  - Real-time display of current flow and totalized volume
- Microcontroller: Ultra-Low Power 8-bit MCU with integrated LCD controller
  - Built-in Real-Time Clock (RTC):
    - Provides accurate time and date for logged measurements
    - Calendar functionality for time-stamped data

### Power Management

- Battery Type:
  - Standard AAA alkaline (2x)
- Power Consumption:
  - Standby mode: <40  $\mu\text{A}$  with active LCD
  - During measurement: <0.4 mA
- Battery Replacement: Simple and tool-free process



# Silesius iDFM-500

## Mechanical and Environmental Specifications

- Dimensions: Compact design (exact dimensions customizable)
- Weight: Approx. 600g (including batteries)
- Operating Temperature Range: -20°C to +70°C
- Storage Temperature Range: -30°C to +80°C
- Housing Material: Chemical-resistant plastic
- Body Material: Aluminum or optionally stainless steel
- Fluid Compatibility:
  - Diesel fuel
  - AdBlue
  - Urea-based solutions
  - Alcohols (e.g., ethanol, methanol)
  - Ingress Protection: IP65 (dust-tight and water-resistant)

## Additional Features

- Anti-Tampering Security:
  - Mechanisms to detect unauthorized access or attempts at tampering
- Data Logging and Statistics:
  - Stored measurements accessible for analysis
  - Basic statistical summaries available on the device
- Production Tools:
  - Tailored assembly and testing stations developed for efficient and scalable manufacturing

## Certifications and Standards

- Compliance: CE, RoHS
- Production standard: ISO 9001:2015, IPC610D.

## Applications

- Fuel monitoring in transportation and logistics
- Fluid management in agriculture and chemical industries
- AdBlue and urea solutions management
- Industrial process control for fluids

For more details, customized configurations, or inquiries about large-scale orders, please contact us directly.