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ABB MEASUREMENT & ANALYTICS

# SwirlMaster and VortexMaster with Ethernet-APL

Flow measurement  
performance at the  
speed of light



# Step into the future of industrial efficiency and safety

Leverage ABB's new Ethernet-APL measurement technology

**Harness the power of Ethernet – the most common computer network – now at the field instruments level even in hazardous areas.**



Take advantage of measurement performance at the speed of light.



Utilize the most popular network at the field instrument level in all areas, even in hazardous areas zone 1/21.



Elevate your process safety, efficiency, and quality to new heights.



Gain unprecedented remote monitoring capabilities.

The screenshot displays the ABB FSV4x0 3K67 web interface. The top navigation bar includes icons for Home, Device settings, Diagnostics, Software update, SSL Certificate, User data, Downloads, and Verification. The left sidebar lists Overview, Observe, Totalizer, and Identification. The main content area is divided into three sections:

- Process variables:** A table listing various process parameters such as QD [%], Qm, Qv, Temperature, and Qpower with their respective values and units.
- Data logger settings:** A section for configuring the data logger, including a sampling rate of 0.5 s and a file selection of log1.csv.
- Graph:** A multi-axis line graph showing Qm (kg/h), Qv (m3/h), and Temperature (°C) over time. The x-axis labels are 11-10-18 am, 11-10-22 am, 11-10-26 am, and 11-10-27 am. The y-axis ranges from 0 to 1.0 for Qm and Qv, and 0 to 180 for Temperature.

At the bottom of the interface, there is an image of two industrial flow meters.

# Process data at your fingertips

For real-time decisions and predictive maintenance

ABB's Swirl and Vortex flow meters with Ethernet-APL technology provide more than just a flow value. Make use of the integrated webserver, Modbus TCP or Profinet communication protocols. These advancements enable real-time, data-driven decisions and predictive maintenance, significantly reducing potential errors and downtime.

**Providing detailed insights on the following parameters at the same time depending on device configuration:**



**Volumetric flow**



**Process temperature**



**Mass flow**



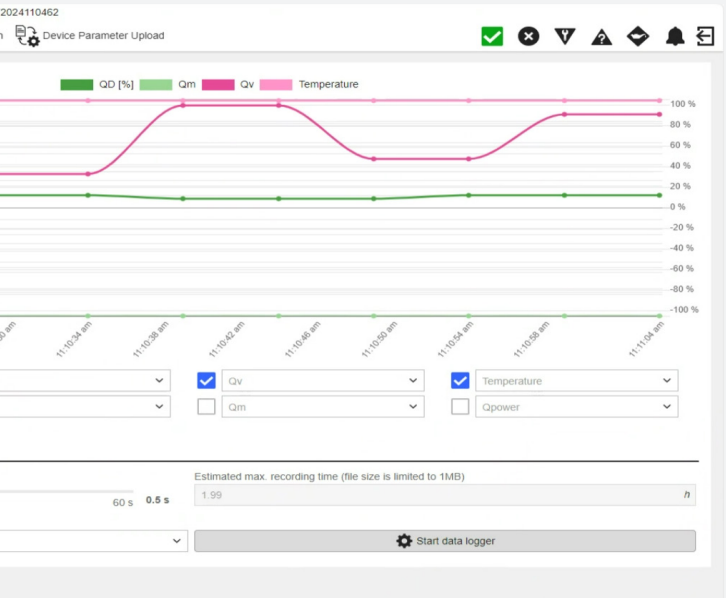
**Totalizer values**



**Energy flow**



**Diagnostic information**



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## Discover ABB's first Ethernet-APL flow meters

For measurement of liquids, gases, and steam

### Swirl flow meters



FSS430

The FSS430 swirl flow meter is available with Profinet, Modbus TCP or RTU, Profibus, Foundation Fieldbus, or classic 4 to 20 mA with HART 7 communication options.



FSS450

The FSS450 swirl flow meter offers the same measurement and communication capabilities as the FSS430, but it also includes analog input and enhanced flow computer functionality.

### Vortex flow meters



FSV430

The FSV430 vortex flow meter is available with Profinet, Modbus TCP or RTU, Profibus, Foundation Fieldbus, or classic 4 to 20 mA with HART 7 communication options.



FSV450

The FSV450 vortex flow meter offers the same measurement and communication capabilities as the FSV430, but it also includes analog input and enhanced flow computer functionality.



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# Contact

**ABB**  
**Measurement & Analytics**



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