

The Tekneka FM220 Portable Ultrasonic Flowmeter is designed for clean liquids and has a flow range of 0.01 to 5m/s (0.03 to 16ft/s). It can be used on pipes ranging in size from Ø1" to Ø32" (Ø25mm to Ø800mm) that are made from materials like carbon steel, stainless steel, PVC, and copper. The FM220's ARM CoMA chip technology and low-voltage broadband pulse transmission system provide a high level of precision and dependability. Its ability to resist jamming and consume low power also contributes to its reliability. The flowmeter also has self-diagnostic functions and a user-friendly menu, which make it easy to operate and troubleshoot. This device is widely used to measure the linear, non-linear, mass, or volumetric flow rate of a liquid, helping to monitor and control the movement of fluids within a system.

Features

- Flow Measurement:** The ARM CoMA chip delivers high-precision and reliable results.
- Menu Options:** A touch keypad makes it easy to navigate the settings from the main menu.
- Pipe Size:** Recommended for pipes from Ø1" to Ø32" (Ø25mm to Ø800mm).
- Flow Totalizer Menu:** This menu displays the flow rate, velocity, and both positive and today's totalizer readings.
- Initial Parameter Setup:** Users can set the pipe's inner/outer diameter, wall thickness, and material.
- Flow Units:** Users can change the units for flow rate (m³, l, gal, ig, mg, cf, bal, ib, ob), velocity (metric/imperial), and totalizer. The flow rate units can be displayed in Day, Hour, Minute, or Second.
- Data Recording:** Users can customize the collection duration (1 to 9,999 minutes) and recording intervals (1 to 60 seconds). The recorded data can be extracted in a .txt format.
- Input/Output Setup:** The device includes an RS485 serial port and a current loop mode for 0.4-20mA flow and 1.4-20mA velocity.
- Device Diagnosis:** It's easy to check the transducer's upstream/downstream signal strength, fluid sound velocity, TOM/TOS*100, total time and delta time, Reynolds number, and factor.



Application

Tekneka FM220, a non-invasive clamp-on ultrasonic flow meter, is used in various industries for clean water monitoring. Its applications include municipal water and wastewater management, optimizing HVAC and energy systems, and controlling process water in industrial and food and beverage facilities. Its non-intrusive design allows for easy installation and maintenance across these sectors without disrupting operations.

Package Includes

- Transmitter
- Transducer CP036
- Carry Case
- Transducer Rail
- Pipe Straps
- Junction Box
- Card Reader
- Coupling Compound
- Measuring Tape
- Charger
- User Manual
- Factory Calibrated Certificate

General Specification	
Communication	RS485, MODBUS, FUJI Protocol
Analog Output	4 ~ 20mA, max load 500Ω
Pulse Output	0 ~ 9999Hz
Power Supply	10.8V rechargeable Li-ion
Keyboard	Touch keys
Display Screen	2.8" TFT, 240 x 320p
Operating Temperature	-10°C ~ 50°C, transducer: 0°C ~ 80°C
Memory	16GB micro-SD card
Transmitter	IP54
Box Size/Weight	44 x 34 x14cm/4.6kg

Transmitter	
Flow Range	0.01 to 5m/s (0.03 to 16ft/s)
Accuracy	±1% (0.5 ~ 5m/s)
Repeatability	±0.2%
Medium	Water
Units	Flow: m³, l, gal, ig, mg, cf, bal, ib, ob Velocity: Metric/Imperial
Data Logging	1 ~ 60s; Micro-SD; (.txt) format
Size/Weight	110 x 175 x 38mm/700g

Transducer	
Pipe Diameter	Ø1" ~ Ø32" (Ø25mm ~ Ø800mm)
Pipe Material	Carbon steel, Stainless steel, PVC, Copper
Sensor Type	Magnetic Clamp-on
Medium Temperature	0°C ~ 80°C
Installation Method	V-Type, Z-Type
Probe Housing Material	CPVC
Guide Rail Material	Aluminum alloy
IP Rating	IP68
Standard Cable Length	5m
Size/Weight	70 x 30 x 25mm/1.2kg

Ordering Info.

- FM220.....Portable Ultrasonic Flowmeter
P1335201.....Transducer CP036 (5m)
P1335203.....Coupling Compound Gel
P1335204.....Transducer Magnetic Rail
P1335205.....Pipe Straps

