



Flexim™ FLUXUS F/G631

Portable Ultrasonic Flow Measurement of Liquids, Thermal Energy, Gases, Compressed Air and Steam

Emerson's Flexim FLUXUS F/G631 portable ultrasonic clamp-on flow meter is the ultimate advancement in flow measurement technology, engineered to meet the requirements of a wide range of industrial applications. It delivers clear benefits for facility operators across the oil & gas, chemical, power generation, life sciences, marine, and many other industries.

Whenever and wherever reliable flow insight is required, the 631 provides precise, on-demand measurement of liquids, gases, steam, and thermal energy - without the need for shutdowns or permanent installation. Designed for temporary and investigative field use, it supports tasks such as verifying existing installations, inspection, maintenance, and pre-evaluation ahead of permanent meter installation. It also ensures immediate measurement capability when permanent systems are unavailable.

Non-intrusive measurement across virtually any pipe material and diameter, combined with advanced correction for disturbed flow profiles and high-performance gas and steam measurement, enables reliable results even under challenging conditions - providing answers every time they're needed.

High-performance Flow Measurement on the Go

✓ One for all – including steam

Leveraging multiple measurement principles, the 631 can measure liquids, gases as well as both low- and high-temperature steam.

✓ Ease of use

The 631 series delivers a consistent and intuitive user experience, with quick setup – a liquid measurement can be running in under five minutes.

✓ Unrivalled Performance

Advanced signal processing and diagnostics ensure exceptional reliability and accuracy, even in the most demanding environments.

✓ Outstanding Agility

Synchronized Channel Averaging measurement allows for instantaneous flow profile compensation despite highly dynamic flows and turbulence induced by difficult inlet conditions.

✓ Space Efficiency

Disturbance correction technology allows accurate measurements in tight spaces with reduced inlet lengths.

✓ Optimized for Harsh Conditions

Long-term, outdoor, remote measurement is now possible thanks to the low power mode and the IP65/67 ingress protection standard.

Key Features

- Non-intrusive ultrasonic technology for installation without process interruption and pipe modifications
- No pressure loss, no risk of leaks
- New, robust, and flexible mounting system improves measurement adaptability
- Modbus RTU process interface (optional)
- Wide turndown ratio for varying flow conditions
- Graphical display visualizes flow trends and diagnostic signal SNAPS.

Application Industries

- Power Generation
- Chemical
- Power Generation
- Life Sciences
- Data Centers
- Metals & Mining
- Marine
- Building Automation
- Semiconductor
- Water & Wastewater
- Food & Beverage
- General Production
- Other



TECHNICAL FACTS

	Flexim FLUXUS F631	Flexim FLUXUS G631
Transmitter		
Process Media	all acoustically conductive liquids with < 10 % gaseous or solid content in volume	- all acoustically conductive gases, e.g. nitrogen, air, oxygen, hydrogen, argon, helium, ethylene, propane - all acoustically conductive liquids with < 10 % gaseous or solid content in volume - optional: saturated steam, superheated steam
Flow channels	2	
Measurement uncertainty (volumetric flow rate)	± 1 % MV ± 0.005 m/s (0.02 ft/s)	±1 to 2 % MV ±0.005 m/s (0.02 ft/s)
Response time	down to 0.02 s	
Repeatability	±0.15% of reading, ±0.005 m/s (±0.02 ft/s)	
Power supply	100...240 V/50...60 Hz (power supply unit: IP40, 0...40 °C (32...104 °F)) 10.5...13.5 V DC (socket at transmitter) integrated battery	
Outputs	2 switchable current and 2 multi-purpose outputs (MPO)	
Inputs	Temperature, current	
Service interface	USB-C	
Ingress protection (meter / during measurement)	IP65 & IP67	
Battery operating time	25 h (up to 80 days in low-power mode)	
Available transducers		
Pipe size range (inner diameter)	6mm ... 6.5m (0.24...256 in)	7mm ...1.6m (0.28...63 in)
Temperature range (pipe wall)	-40...200 °C (-40...392 °F) (extension possible with WaveInjector)	
Flow velocity range	0.01...25 m/s (0.03...82 ft/s)	0.01...35 m/s (0.03...115 ft/s), depending on pipe diameter, transducer and application



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