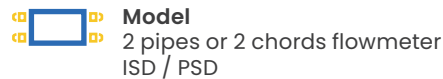
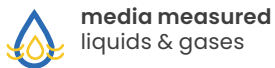




SPECIFICATION SHEET

Minisonic II Ex



High performing

• Optional versions :

- 2 pipes flow measurement or 2 chords single pipe
- Interface detection ISD or PIG/SIG detection PSD

- OLED graphical display
- Display of the measurement echo, gain and quality index
- Accuracy up to 0,5 % of flow reading
- Repetability up to 0,1%
- Resolution : 0,1 ns
- Multi-parameter data logger

Reliable

- On site zero point automatic calibration
- 2 validated flow calculation per second

Compatible

- All Ultraflux probes

Typical applications

Oil & Gas

- Product change detection in pipelines - ISD
- Detection of pigs, spheres & scrapers - PSD
- Detection of oil in tank draining - ISD
- Flow measurement in fuel distribution systems - Flowmeter
- Injected water flow measurement - Flowmeter
- Crude oil flow measurement - Flowmeter
- Condensate flow measurement - Flowmeter
- Injection media flow measurement - Flowmeter

Refineries

- Process flow measurement - Flowmeter

Sub-sea

- Control of hydrocarbon type discharging from tankers - ISD

Offshore

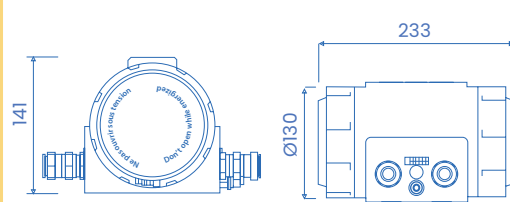
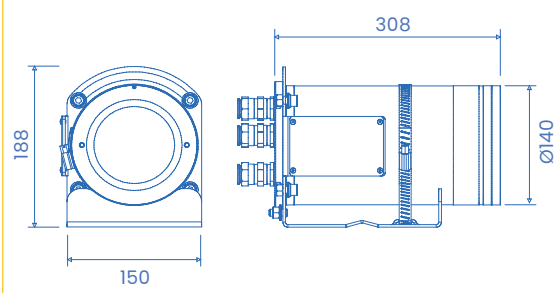
- Monophasic liquids flow measurement - Flowmeter
- Refined products and crude oil flow measurement - Flowmeter

Chemical products

- Flow measurement for acids, chlorides & aggressive liquids - Flowmeter

Technical specifications

Model	Aluminum housing with Epoxy paint	316L Stainless Steel housing
Technology	Transit time ultrasonic flowmeter or ISD/PSD	
Signal treatment	Analogic + ESC (Echo Shape Control)	
Usage	ATEX area compatible (zone 1 and 2)	
Max. number of chords	1	2
Measured values	Optional versions : • Volumetric flowrate, Velocity, Speed of sound, Totalizers, Signal quality, Gain, Transit time... • ISD/PSD	
Standard outputs	(2x) isolated 4-20 mA output (active - common grounding) (2x) isolated contact output (max 50mA - 24V)	
Standard inputs	(2x) 4-20 mA (active or passive - common grounding) (2x) PT100/1000 (2 or 3 wires)	
Display	Clear OLED Graphic display 128x64 pixels	
Help for diagnosis	Multi parameters as Quality index, Gain, Echo display, Celerity, Transit time.	
Configuration	Intuitive programming with easy to use MMI and keypad	
Data logger	Logger of 1,8 GB - 33 M of recorded data-Up to 10 recordable parameters Recording period adjustable from 1 second to 1 hour Recording mode adjustable between: Average - Average Min Max - Average Min Max Standard deviation	
Filters	Damping time - Memory time - Low-flow cut off	
Languages	French - English - German - Spanish - Portuguese - Thai - Bahasa - Korean - Polish (For more, please contact us)	
Communication	Modbus RTU Through RS 485 or HART (as an option) Modbus TCP Through Ethernet RJ45 USB port for update and logger downloading	
Power supply	110 - 230 VAC 50/60Hz or 12 - 24 VDC (average consumption 6W - 10W peak)	
Dimensions	L 233 mm x l 226mm x H 141mm (without support)	L 308 mm x l 150 mm x H 188 mm
Weight	< 7kg	< 12kg
Protection	EN/IEC 60659 IP67	
Explosion proof	Ex db IIC T6 - IECEx INE 22.0016X	Ex db IIC T6 - IECEx INE 13.0068X
Conformity	EMC: EN/IEC 61326-1	
Temperature limits	-20 °C to 60°C	

Dimensions (millimeters)		
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Technical data subject to change. Data not contractual