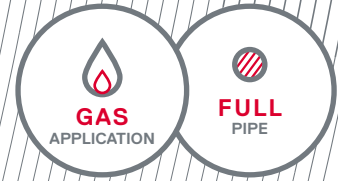


Minisonic ISD

INTERFACE, SPHERE AND PIG DETECTOR



MEDIA MEASURED LIQUIDS & GASES



PIPE DIAMETERS UP TO 1500MM



MODEL STANDARD PORTABLE



EXPLOSION-PROOF ENCLOSURE OPTION AVAILABLE WITH STANDARD MODEL

19"

19" RACK OPTION AVAILABLE WITH STANDARD MODEL

SIMPLE

- > Non-intrusive installation
- > No process interruption
- > Intuitive operation

RELIABLE AND ROBUST

- > Signal quality display
- > IP67 cast aluminium enclosure

HIGH PERFORMANCE

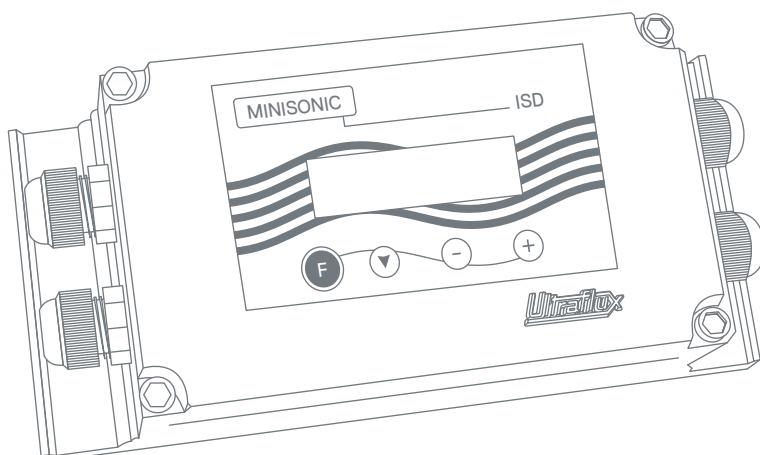
- > Sound speed measurement (velocity) up to 2000m per sec
- > Density measurement possible (via the velocity measurement)
- > Detection of spheres at up to 10m per sec

MULTIPLE USES

- > With any type of liquid or gas*
- > With any «Pig Sig» model
- > Built-in PSD function

COMPATIBLE

- > External probes (no contact with the fluid, no loss of head)
- > Insertion probes (increased head possible)



TYPICAL APPLICATIONS

Hydrocarbons:
Product change detection in pipelines, detection of the passing of spheres or pigs in pipelines, detection of oil in drainage water in cleaning tanks

Sub-sea:
Control of hydrocarbon type discharging from tankers

Offshore

* APPLICATION CONDITIONS: PLEASE CONTACT US



Minisonic ISD

MODEL	STANDARD	STANDARD EXPLOSION PROOF	PORTABLE
NATURE OF EQUIPMENT	Fixed		Portable
DETECTION IN PIPE UNDER LOAD	Yes		
FLOW MEASUREMENT ON OPEN CHANNEL	No		
EXTERNAL Ø OF PIPE	100mm to 1500mm / 4" to 60"		
INPUTS/OUTPUTS	> 2 analogue outputs > 2 static relay outputs		
USE	Detection of the passing of a sphere or pig and change of product in the pipe	Detection in an explosive environment of the passing of a sphere or pig and change of product in the pipe	Detection of the passing of a sphere or pig and change of product in the pipe
IN OPTION, 2U 19" RACK	Available	—	—
SINGLE OR DUAL PIPE	Single pipe	Single pipe	Single pipe
SINGLE OR DUAL CHORD	Single chord	Single chord	Single chord
DISPLAY	> Alphanumeric (2 lines x 16 characters) > Backlit LCD screen with time delay feature		
SET-UP	> Quick and simple using 4-key touch pad - or - via dedicated software supplied > Possible to build in an access code		
OPERATING SYSTEM	Windows for set-up and saving application data		
6 LANGUES	French • English • German • Portuguese • Spanish • Italian		
SERIAL LINK	RS232 or RS485 to JBUS/MODBUS protocol • 9600 Bauds		RS232 to JBUS/MODBUS protocol • 9600 Bauds
ACCESSORY (OPTIONAL)	1 RS232 to USB converter link cable		
ELECTRICAL CHARACTERISTICS	> 2 Static relays (100V - 100mA - 10VA max) > 1 RS232/RS485 serial link to MODBUS/JBUS protocol		> 2 Static relays (100V - 100mA - 10VA max) > 1 RS232 serial link to MODBUS/JBUS protocol
	> Basic power supply • Low voltage: 9-36V dc or 7-25V ac > Optional power supply 18-72V dc or 90-230 V ac > 2 current outputs, 4-20mA (1000 Ω galvanically isolated as passive output/150 Ω impedance as an active output)		> 12V NiMh sealed internal battery > 100-240V ac charger and aux. power supply function > 2 active current outputs, 4-20mA (150Ω impedance)
ENCLOSURE	> Cast aluminium & epoxy paint > 1.5kg • 237 x 108 x 79mm	> Cast aluminium & epoxy paint > 6.6kg • 244 x 130 x 232mm	> ABS • Supplied with a slip case and storage bag > 835g • 220 x 115 x 64mm
PROTECTION	IP67 (except rack 19")	IP67	
TEMPERATURE RANGE	For use from 0°C to 50°C		

TECHNOLOGY	PERFORMANCES	
ULTRASONIC TRANSIT TIME > Continuous measurement SIGNAL ANALYSIS > By Echo Shape Control (optimisation of the acoustic signal)	ACCURACY > Up to 0.5%	LINEARITY > Up to 0.1%
	REPEATABILITY > Up to 0.1%	UNITS OF MEASUREMENT > Metres per sec.

NON CONTRACTUAL DOCUMENT

