

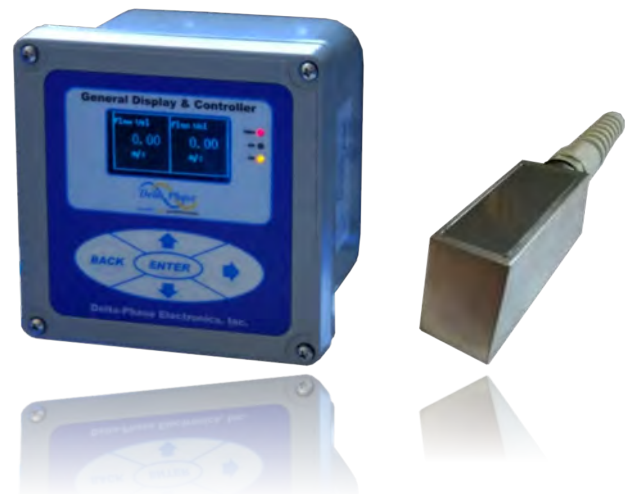
ULTRASONIC FLOW

ALPHA2000: ULTRASONIC DOPPLER FLOWMETER

DIGITAL TECHNOLOGY FOR OPTIMIZED MEASURES

TYPICAL APPLICATIONS

- Water, Waste water
- Sea water, River water
- brine solutions, slurries
- And most applications with liquids having at least 50 ppm and 30 micron size suspended particles .



The Alpha2000 is an Ultrasonic Doppler Flowmeter consisting of a transmitter, a clamp-on transmit/receive sensor, The transmitter's electronics is specifically designed to analyze, separate and reject noise frequencies. The ultrasonic sound waves are coupled from the sensor, through the pipe walls and are reflected off the particles in the fluid and back through the pipe walls to the sensor.

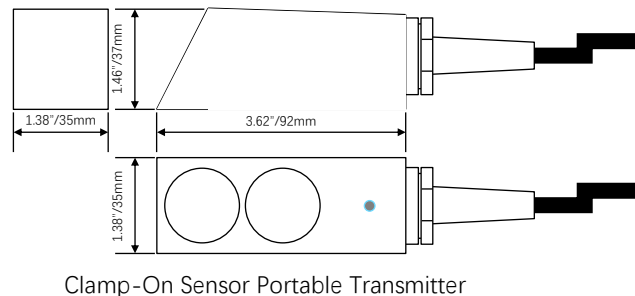
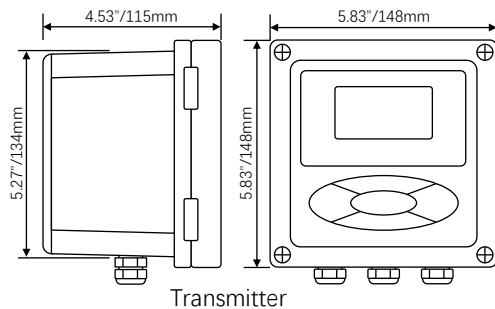
OTHER FEATURES INCLUDE:

- The non-intrusive clamp-on transducer can be installed without flow interruption to insure leak free measurements with zero pressure drop.
- Stable readings are assured with a design immune to vibrations and temperature changes.
- Unique ultrasonic sensors & circuitry using Doppler technique.
- Typical field performance is receiving sensor or an insertion sensor $\pm 0.5\%$ for repeatability and up to $\pm 2\%$ of velocity depending on fluid conditions.

SPECIFICATIONS

Measure principle	Ultrasonic Doppler method
Accuracy	For flows at 1 FPS (0.3 m/s) or greater to $\pm 2\%$ of velocity reading for Reynolds #'s above 100,000 depending on fluid conditions. To $\pm 5\%$ of velocity reading for Reynolds #'s 10,000 -100,000 (3:1 any range approximately) depending on fluid conditions. Linearity and repeatability to $\pm 0.5\%$ under the same pumping conditions.
Flow Range	0.3 to 40 FPS (0.09 to 12.19 m/s) liquids.50 parts per million (PPM) of a minimum of 30 micron size suspended solids, turbulence or bubbles to ensure accurate, repeatable flow measurement.
Pipe size	0.5 to 15 ft (12.7 mm to 4.6 m)
Operating Temp.	-4 to 158 °F (-20 to 70 °C) for electronics unit and sensor.
Power Supply	18 to 36VDC or 90 to 240VAC 50/60Hz
Outputs	Analog: 4 to 20 mA, Max 600 Ω Digital: RS485 Modbus RTU; Bluetooth; Isolated Pulse
Display	LCD Display for Flow rate, Totalizer and Operation Manual.
Housing	Transmitter: polycarbonate material, IP66 Sensor: Stainless steel, IP6

DIMENSION



Specifications subject to change without notice.

ORDER CODE

Transmitter

Alpha2000 Ultrasonic Doppler			
	-4	Standard Encloser	
	-Ex	Ex Proof Encloser	
		-AC	220VAC
		-DC	24VDC
Alpha2000	-4	-AC	

Sensor

Alpha2000 Ultrasonic Doppler			
	-XDR	Ultrasonic Flow Sensor	
		-C10	10' Cable Length
		-C20	20' Cable Length
		-C30	30' Cable Length
		Contact factory for more length	
Alpha2000	-XDR	-C30	



DELTA-PHASE ELECTRONICS, INC.
3 Peters Canyon Rd, Suite 100,
Irvine, CA 92606 U.S.A.
Phone: (949) 701-7728
<http://www.delta-phase.us>

Represented by: