

6000 Portable Ultrasonic Technical Brief

Description:

The Vantage 6000 is a hand held portable transit time ultrasonic flow meter designed for temporary use in full pipe liquid flow applications from 1 inch to 300 inch in diameter. The 6000 utilizes the chordal velocity measurement principle which provides accurate and reliable flow information. The externally mounted sensors are provided with the SpeedRail mounting hardware. The SpeedRail mounting technique allows mounting of the sensors quickly and easily without the use of hand tools.

The hand held electronics is enclosed in a water resistant molded polyamide housing. A rubber boot encasing the housing provides protection from external shocks. The meter is powered by an internal 9.6 VDC rechargeable battery that allows up to 5 hours of operation. The meter can also be powered by the 115 to 230 VAC adaptor/charger for extended flow monitoring time.

The microprocessor based meter has a graphical LED backlit 160 X 128 pixel display and a 24 button keypad for programming through menu driven entry screens. The 6000 will display flow rate, flow totals and velocity and is provided with a built in programmable data logger. The application parameters are entered through the easy to understand data entry screens which then graphically displays the sensors mounting and separation. The logged data can be graphically displayed or downloaded through the RS232 port to a PC.

Applications:

The Model 6000 can be applied to water, wastewater and industrial process fluid applications:

- ***Water:** Influent/Effluent of WTP, distribution monitoring and water wells.
- ***Wastewater:** Lift station monitoring, WWTP influent/effluent, clarifier underflows, RAS and WAS.
- ***Industrial Process:** In plant monitoring, transportation lines, chilled water and HVAC.





Sensor Options: *V30S: For small pipes 1 inch to 12 inch. *V30L: For pipes 4 inch and greater. *V or Z shot rails

Features:

•Easy Programming

Large 160 x 128 pixel graphical backlit display & 24 button keypad

•Easy Installation

Speedrail design for simple installation of sensors

•High Accuracy of +/- 0.5% of actual flow

•Rugged Carrying Case 21" x 18" x 8" Plastic

•Data Logger

Stores up to 32,000 records



General Specifications:

or or or or other	
Accuracy:	+/- 0.5% above 1 FPS
Linearity:	+/- 0.25%
Repeatability:	0.25%
Temperature Rating:	
Electronics	32° F to 160° F
Sensors	-30° F to 180° F
Humidity Rating:	5 to 95%
Output:	RS232 Data Logger
Display:	160 x 128 Pixels graphical LED
	backlit
Keypad:	24 button tactical feed back
Power Requirements:	Internal rechargeable 9.6 VDC
	battery
	External 115 to 230 VAC adaptor/
	Charger
Electronics Enclosure:	Water resistant molded polyamide
	with rubber boot
Dimensions:	11" x 5.5" x 3.5"
Sensor Material:	Ultem plastic, anodized aluminum
Sensor Cable:	3 meter length, optional 10 meter
	extension
Speedrail:	Anodized Aluminum and 316 S/S
Mounting Chain:	Stainless Steel

Recommended Speed Rail/Sensor Options:

Pipe Size	Pipe Material	Speed Rail	Sensor
1" to 12"	C/S, S/S, PVC,	Z, V or	V30S
	Copper	W Shot	
4" and	C/S, S/S, PVC,	V or ZShot	V30L
Larger	Duct. Iron, Copper		



Flow	,	GPM		
3568				
Velo	city	Ft/S		
	8	.42		
Tota	l	GAL		
2567				
Status	S	Ok		
[Sig]	[Sen]	[Log]		



