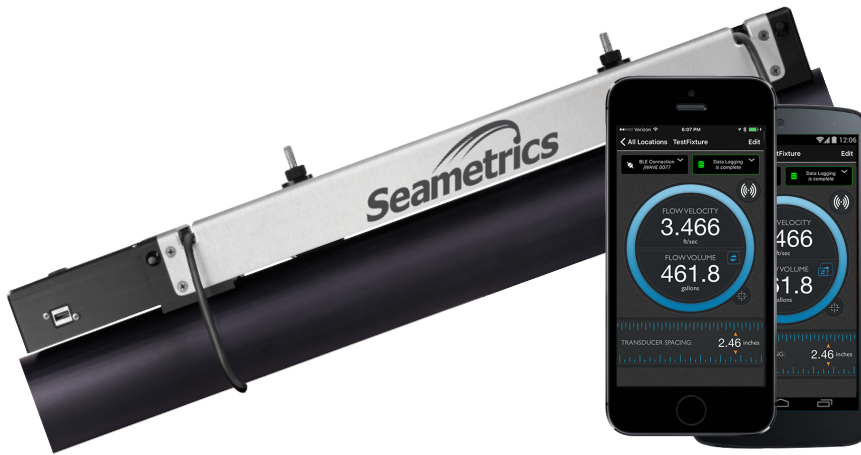


# jWAVE™

PORTABLE TRANSIT TIME  
ULTRASONIC FLOW METER



## MARKETS

Building services  
Chemical  
Energy management  
Food  
Petrochemical  
Pharmaceutical  
Power generation  
Water  
Irrigation

## Features

- Portable, accurate, versatile
- Quick, easy setup
- Installed on outside of pipe—non-invasive, no break in piping, no production down time
- Use with iOS and Android phones or tablets
- Bluetooth 4.0 (BT LE) communication—no wires
- Built-in data logging
- Reusable location settings
- Measures a wide range of fluids
- CE and FCC approved

## Contact Your Supplier

Meet the **Seametrics jWAVE**. Capture accurate and reliable flow readings with your mobile device, with less hassle and in less time—wherever you need a flow or volume measurement.

No wires. No bulky electronics box to lug around. Your ultrasonic flow meter hardware installs on the outside of your pipe in a snap—and senses through the pipe wall. Your mobile device displays readings and helps you set up the hardware.

The jWAVE Flow Meter solution starts with the jWAVE App (downloadable from the app stores) and works on both iOS and Android devices with Bluetooth 4.0 (BT LE).

The jWAVE Flow meter is a compact, strap-on transit time ultrasonic transducer device. The jWAVE operates by alternately transmitting and receiving a frequency modulated burst of sound energy between two transducers. It then wirelessly transmits flow measurements to your mobile device.

Use the built-in data logger to conveniently record flow for as long as 14 days or as little as one minute.

The jWAVE is highly portable. Just bring the rechargeable clamp-on meter in its lightweight, weatherproof case, along with a tablet or smartphone (iOS or Android). Bluetooth connectivity replaces wires, and the jWAVE App guides you through setup.

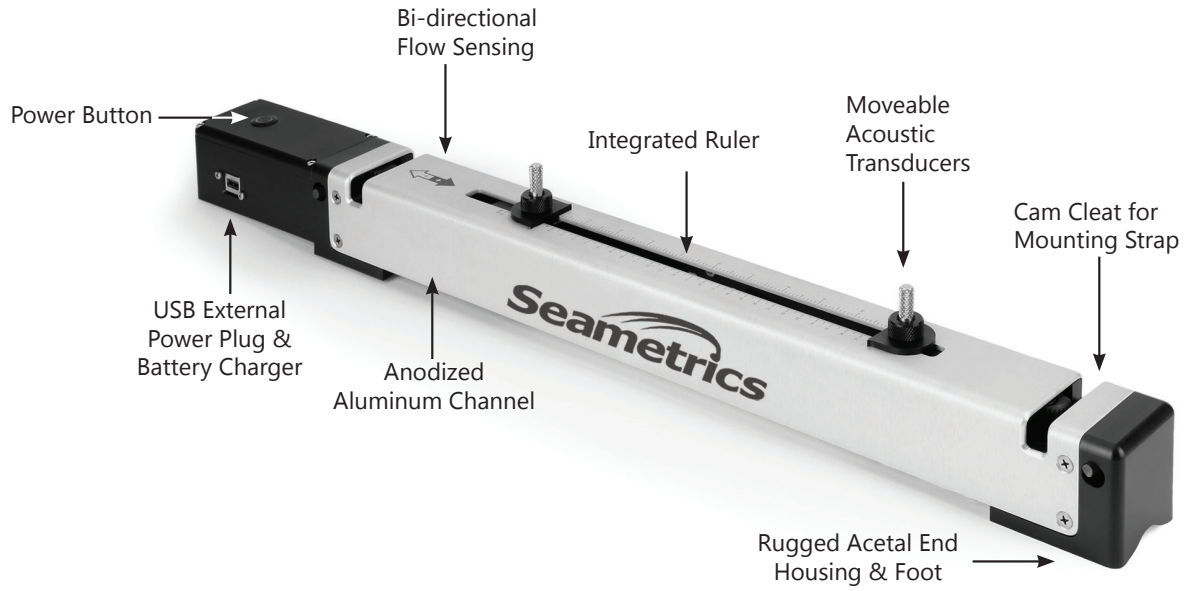
The convenient Cam Cleat lets you mount the meter on any pipe in seconds—no cumbersome clamps required.

Bi-directional readings are transmitted to your mobile device for display, and your location's settings are stored in the jWAVE App, ready for reuse.

When you are done, simply release the cleats, then take the compact flow meter on to your next location.



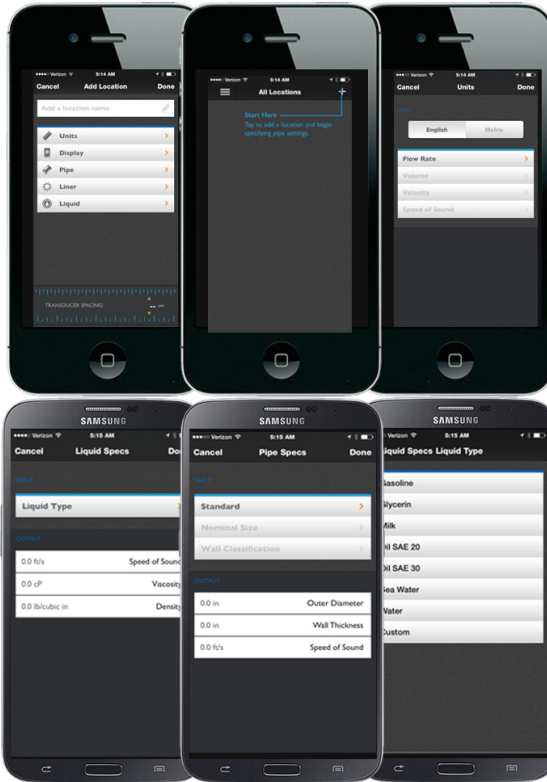
## Meter Features



## App Features



**Interactive smart phone/tablet control app—iOS or Android**



- Handy built-in pipe specifications—or add your own
- Save location information
- Drag and drop output selection
- English or metric units
- Select liner and liquid types—or define your own.
- Easy-to-use data logging

## Specifications\*

<b>Pipe Size</b>	2" to 20"	
<b>Pressure Drop</b>	Zero	
<b>Materials</b>	<b>Body</b>	Anodized aluminum channel, acetal end housings and feet
	<b>Mounting Straps</b>	EPDM
<b>Temperature</b>	<b>Ambient &amp; Fluid</b>	-20° to 150° F (-29° to 65° C)
<b>Display</b>	English and metric units provided on app	
<b>Flow Operation Range</b>	Bidirectional; 0.1 ft/s to 20 ft/s (0.03 m/s to 6 m/s)	
<b>Turndown</b>	200:1	
<b>Accuracy</b>	1% to 2% of reading (typical)	
<b>Repeatability</b>	0.5%	
<b>Output Signal</b>	Wireless Bluetooth 4.0 (BLE) connectivity to iOS <sup>1</sup> or Android <sup>2</sup> device	
<b>Power</b>	Rechargeable battery (up to 12 hours), 1W max, 150mA max current, 5 "AA" NiMH 6V pack with thermistor, 5 month shelf life	
<b>Power Adapter</b>	For recharging battery - must use the 12W USB power adapter supplied with the jWAVE	
<b>Installation</b>	10 pipe diameters upstream, 5 diameters downstream for optimal performance (typical)	
<b>Environmental</b>	IP65	

\*Specifications subject to change • Please consult our website for current data ([www.seametrics.com](http://www.seametrics.com)).

<sup>1</sup>The following iOS devices support Bluetooth 4.0 (BLE): iPhone 4S and later, iPad 3rd generation and later, iPad mini, iPad Air, and iPod Touch 5th generation.

<sup>2</sup>If you have an Android device, check the settings on the device or specifications for the device to be sure it supports Bluetooth 4.0 (BLE).

## Technology

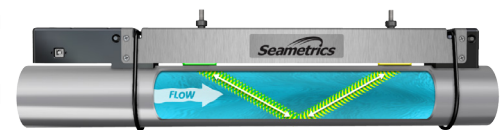
The transit time flow meter operates by alternately transmitting and receiving a burst of sound energy between the two transducers.

The burst is first transmitted in the direction of fluid flow and then against fluid flow.

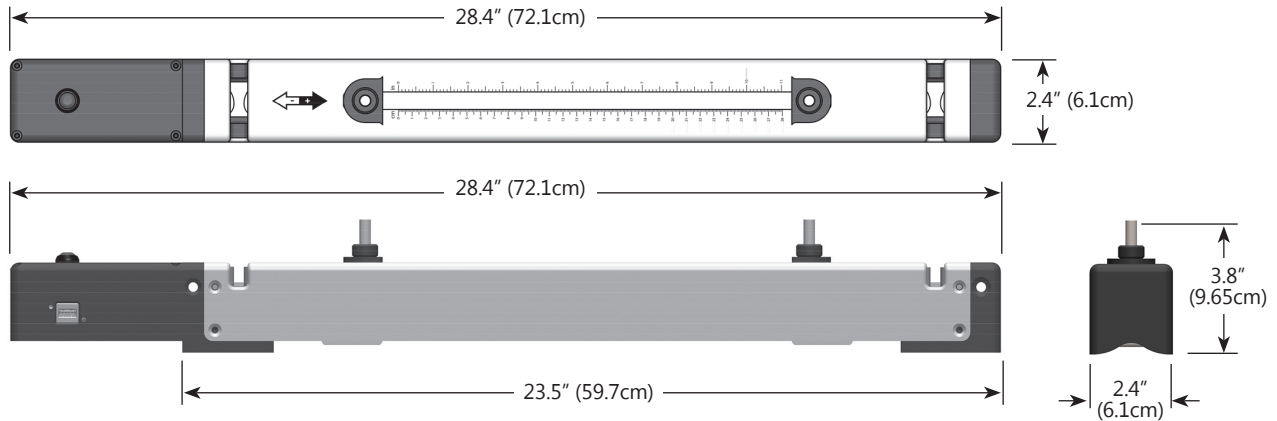
Since sound energy in a moving liquid is carried faster when it travels in the direction of fluid flow (downstream) than it does when it travels against fluid flow (upstream), a differential in the travel times will occur. The sound's travel time is accurately measured in both directions and then used to compute the flow rate.

Sound waves can bounce in many directions as they travel through various materials. The more the sound waves scatter, the fewer actually reach the second transducer. The jWAVE uses sophisticated methods to maximize transducer efficiency, thus allowing the unit to run on very low power. Focusing of the sound wave is also important to ensure it reaches the second transducer without degrading. This is accomplished by accurately spacing the transducers to allow for optimum sound transit between transducers. The jWAVE app computes this spacing based on the pipe size, pipe material, and type of liquid.

Transit time technology works best in clean or mildly dirty water or fluids with minimal turbulence or flow distortion.



## Dimensions



## How to Order

<b>jWAVE</b>	<b>Includes:</b> <ul style="list-style-type: none"> <li>• USB cable</li> <li>• USB power adapter kit</li> <li>• 4oz coupling gel</li> <li>• Mounting straps</li> <li>• Carrying case</li> </ul>
<b>Accessories</b>	<b>103476</b> Mounting Straps <b>103477</b> Carrying Case <b>103478</b> USB Cable <b>103479</b> Coupling Gel (4oz) <b>103480</b> Coupling Gel (12oz) <b>103630</b> USB Power Adapter



### Markets

- Building Services
- Chemical
- Energy Management
- Food
- Petrochemical
- Pharmaceutical
- Power Generation
- Water
- Irrigation

### Applications

- Cooling Water
- Condenser Water
- Water/Glycol solutions
- Municipal Water
- Process Water
- Potable Water
- Diesel & Fuel Oils
- Ground Water
- Semiconductor
- Pump Verification
- Petroleum products
- Water Treatment
- Food & Beverage
- HVAC & Energy System Audits
- Check System Meters
- Leak detection
- Filter Sizing
- Ultrapure Water Measurement
- Clean in place evaluation
- Fire System testing
- Hydraulic System Testing

### Benefits

- Portable
- Non-invasive
- Low-installation cost
- Accurate
- Flow Verification, not calibration
- Temporarily measure flow while repairing or replacing a permanent meter

This device complies with Part 15 of FCC Rules and Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received including interference that may cause undesired operation. Contains FCC ID: XDULE40-S2, Contains IC: 8456A-LE4S2. CAN ICES-1/NMB-1; CAN ICES-3 (B)/NMB-3(B)

