

SoundWater Orcas

Smart flowmeter.
Smart phone.
Smart idea.



Markets

Water, Irrigation, Building Services, Food & Beverage

The next level in portable transit time ultrasonic flow measurement is here.

Meet Orcas.

Now you can 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 sensor 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. And Bluetooth replaces the wires.

So you'll get your job done more quickly, every time.

Features

- Portable, accurate, versatile
- Quick, easy setup
- Installed on outside of pipe – non-invasive, no break in piping, no production down time
- Covers pipe sizes ranging in diameter from 1" to 20"
- iOS & Android compatible
- Uses Bluetooth 4.0 (BT LE) – no wires
- Built-in data logging
- Reusable location settings
- Measures a wide range of fluids

Certifications

FCC

The Orcas portable transit time ultrasonic flow metering solution.

What is Orcas?

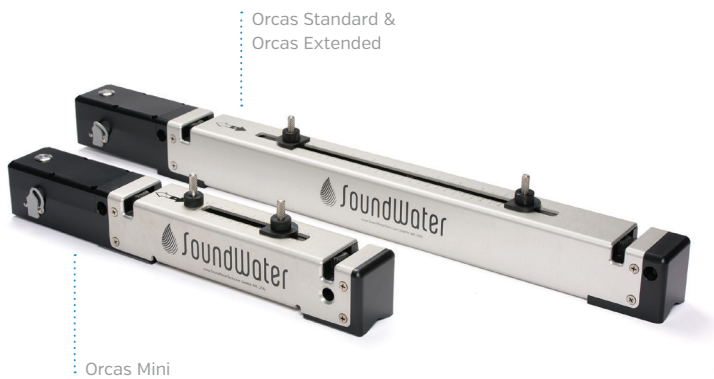
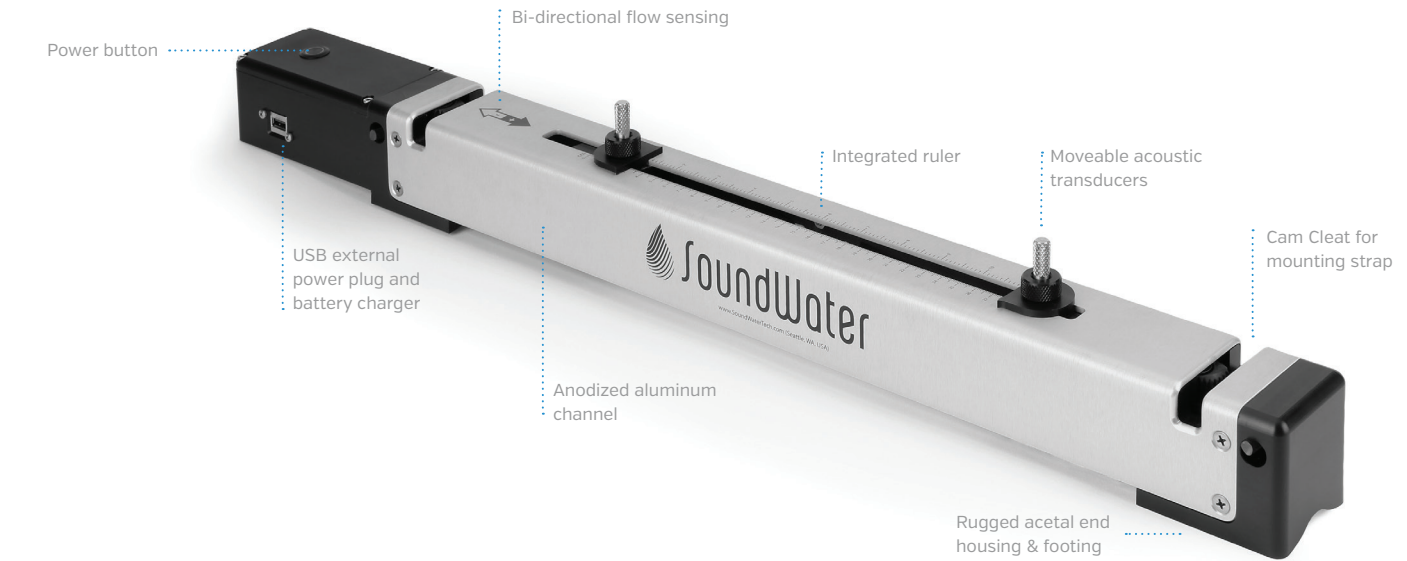
The Orcas Flowmeter solution starts with the Orcas App [downloadable from the app stores] and works on both iOS and Android devices. The companion Orcas Sensor, is a compact, clamp-on ultrasonic transducer device that wirelessly transmits flow measurements.

Orcas is highly portable. With Orcas, just bring the rechargeable clamp-on sensor in its lightweight, weatherproof case, along with a tablet or smartphone

[iOS™ or Android™]. Bluetooth connectivity replaces wires, and the Orcas app guides you through your application setup.

Parameters all set! Now the convenient Cam Cleat lets you mount the sensor 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 Orcas app, ready for reuse.

Got it! Now simply release the cleats, then take the compact sensor on to your next location.



The Orcas family of sensors.

Orcas Mini

Ideal for pipes ranging in size from 1" to 4.5".

Orcas Short or Standard

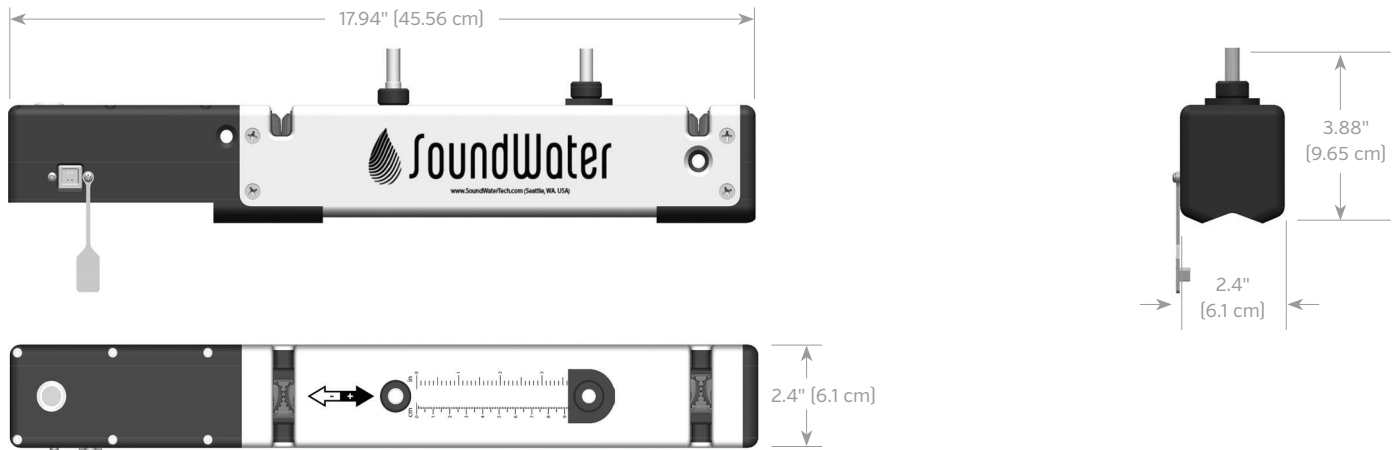
Ideal for pipes ranging in size from 2" to 12".

Orcas Extended

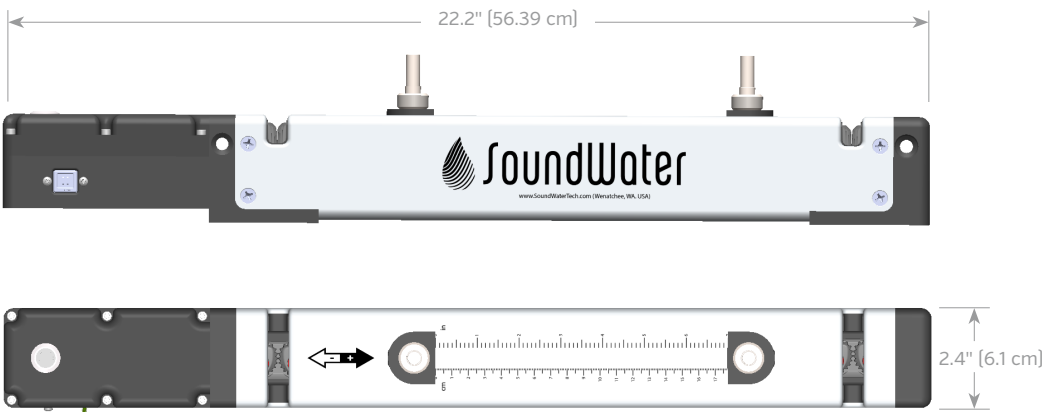
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Dimensions

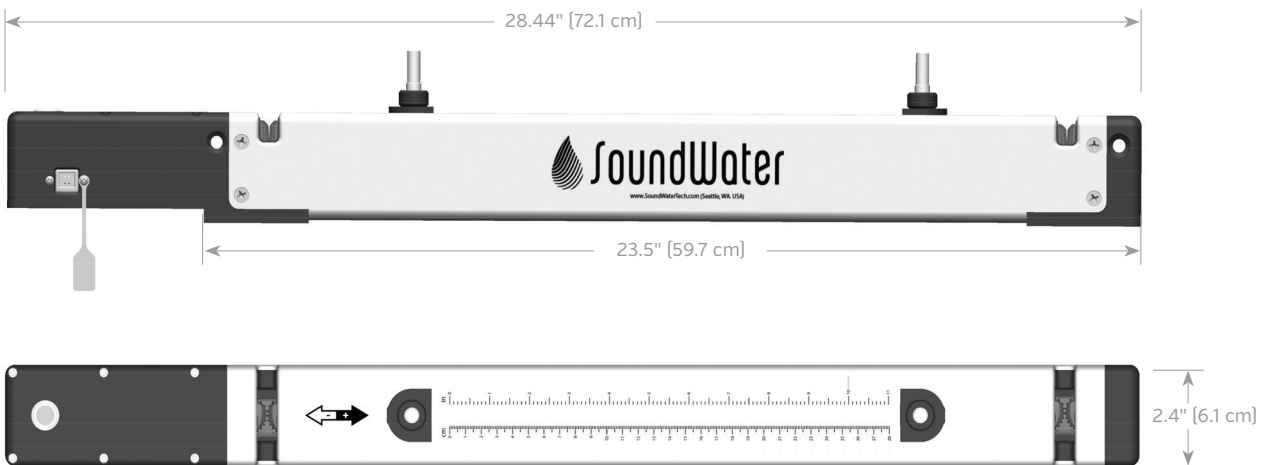
Orcas Mini



Orcas Short



Orcas Standard and Orcas Extended



Orcas Features

✓ Portable

The clamp-on ultrasonic sensor design mounts onto the outside of your pipe and senses through the pipe wall. It may be installed in seconds, and is the only piece of hardware you transport.

Wireless Bluetooth connection sends readings to the Orcas app on your mobile device. Works with any BLE-enabled (Bluetooth Low Energy) iPhone™ mobile digital device, iPod Touch™ mobile digital device or Android™ mobile device.

The durable Orcas carrying case protects your equipment even in extreme conditions.

✓ Efficient

All-in-one clamp-on ultrasonic design mounts on the outside of your pipe—and with no wires to untangle or connect.

The intuitive Orcas app guides you through setup with pre-loaded libraries for pipes and liquids—so you get it right the first time.

Our Cam Cleat mounting system is the fastest available. Install the sensor in seconds.

✓ Accurate

Orcas is typically accurate within 1.0 to 2.0 percent (depending upon the application and pipe size), with a wide operating range and no pressure drop.

✓ Versatile

Bi-directional readings improve accuracy.

Metric or English units of measure.

High-power transducer design enables continued operation even in difficult applications.

✓ Intuitive

Orcas App displays transducer spacing, and the integrated ruler on the Orcas Sensor makes setting it a snap.

Setup information for any location can be saved and re-used for later readings.

Flow rate and volume are presented clearly on your device's display.

✓ Easy to Own

Always up-to-date. The Orcas app and sensor firmware are automatically updated with new features as they are introduced.

Highly affordable. With all its advantages, Orcas is priced competitively with comparable (but bulkier) devices.

Extended battery life. Orcas works for up to 12+ hours between charges. Recharge it with any USB connection.

App Features

Interactive smart phone/
tablet control app
—iOS or Android

- ✓ Save location information
- ✓ Handy built-in pipe specifications
—or add your own
- ✓ Drag and drop output selection



- ✓ English or metric units
- ✓ Easy-to-use data logging
- ✓ Select liner and liquid types
—or define your own



Orcas Specifications

Installation	Installs on pipe from 1" to 20" nominal diameter depending on hardware selection 15 pipe diameters upstream; 5 diameters downstream required for optimal performance (typical) Maximum diameter depends upon pipe material (20" for plastic, 18" for metal)																				
Pipe Materials	Metal: Steel, Stainless Steel, Copper, Brass, Aluminum Plastic: PVC, HDPE, PIP																				
Flow Range	Bi-directional; 0.1 ft/s to 20 ft/s (0.03 m/s to 6 m/s)																				
Performance	±1.0% to 2.0% accuracy typical (for pipe sizes >1.5") ±2.0% to 3.0% accuracy typical (for pipe sizes <1.5") 0.5% repeatability *Under standard conditions, assuming fully developed and symmetrical flow profile (typically taken on a straight run of 15 diameters upstream and 5 diameters downstream; flow rate above 3 ft/s or 1m/s; non-aerated liquids). If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.																				
Display	Flow measurements display on SoundWater Technology's Orcas™ App (iOS or Android) Mobile devices connect wirelessly to Orcas™ with Bluetooth 4.0 (BT LE) Metric and English units																				
Data Logger	Store up to 14 days of flow data																				
Software	Save and recall site setup information Mobile device App for iPhone, iPad, iPod touch and Android devices (*For Android devices, Samsung recommended)																				
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Power	Rechargeable battery (12+ hours), or USB-powered continuous operation (5 volts)** 0.5W Max (100 mAmp max current; when discharging); 9W Max (1.5 Amp max current, when charging) 5 "AA" NiMH 6V pack with thermistor **Use only the charger provided with the Flowmeter. Battery holds charge for 5 months when not in use. **Charger compatible with 110/220VAC 50/60 Hz.																				
Power Adapter	For recharging battery - must use the 12W USB power adapter supplied with the Orcas																				
Environmental	Ambient and flow temperatures -20° to 150° F (-20° to 65° C) Optional high temperature option -20° to 212° F (-20° to 100° C) IP65 splash proof Weather resistant																				
Materials	Body: Anodized aluminum channel, acetal end housings and feet Mounting Straps: EPDM																				
Manufacture	SoundWater Technologies, United States																				

*Specifications subject to change.

Markets

- Water
- Water Parks
- Irrigation
- Building Services
- Chemical
- Food & Beverage
- Energy
- Oil & Gas

Benefits

- Install in 30 seconds
- Portable
- Non-invasive
- Low-installation cost
- Accurate
- Flow Verification
- Fast!

Applications

- Irrigation Water
- Condenser Water
- Municipal Water
- Process Water
- Potable Water
- Ground Water
- Pump Verification
- Water Treatment
- Food & Beverage
- Well Monitoring
- HVAC & Energy
- System Audits
- Check System Meters
- Leak detection
- Ultrapure Water Measurement
- Clean in place evaluation
- Fire System testing

Ordering Orcas Portable Ultrasonic Flowmeter Kits, Parts, & Accessories

Contact your local supplier to order your Portable Orcas Ultrasonic Flow Metering solution.

Flowmeter Kits

Our Portable Orcas Ultrasonic Flowmeter kits include:

- USB Cable
- USB power adapter kit
- 4 oz. Coupling gel
- Mounting straps
- Carrying case

PART NUMBER	DESCRIPTION
2138	Orcas Mini Flowmeter Kit: 1"– 4.5" pipe diameters
3278	Orcas Short Flowmeter Kit: 2"– 12" pipe diameters
8894	Orcas Standard Flowmeter Kit: 2"– 12" pipe diameters
2433	Orcas Extended Flowmeter Kit: 2"– 20" pipe diameters (steel, stainless steel, plastic, or iron pipes only)



Shown: Orcas Standard & Orcas Extended Kit

Parts & Accessories

PART NUMBER	DESCRIPTION
3065	Mounting Straps: 2x75", 190cm
0875	Carrying Case
9755	USB 2.0 Cable; A Male/B Male
6726	USB Power Adapter; 5W; CE
5900	SoundSafe Coupling Gel [12 oz.]

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)

MODEL: SWT ORCAS-01