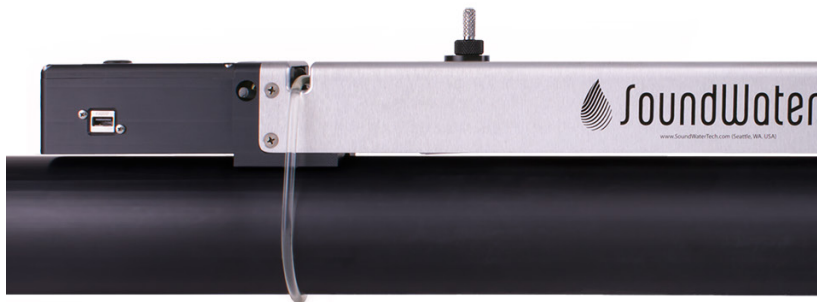


SoundWater Orcas

Smart flow meter.  
Smart phone.  
Smart idea.



## Markets

Building Services, Chemical, Energy Management, Food & Beverage, Petrochemical, Power Generation, Water, Irrigation

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
- iOS & Android compatible
- Bluetooth 4.0 (BT LE) communication – no wires
- Built-in data logging
- Reusable location settings
- Measures a wide range of fluids

## Certifications

CE and FCC

# The Orcas portable transit time ultrasonic flow metering solution.

## What is Orcas?

The Orcas Flow Meter 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.

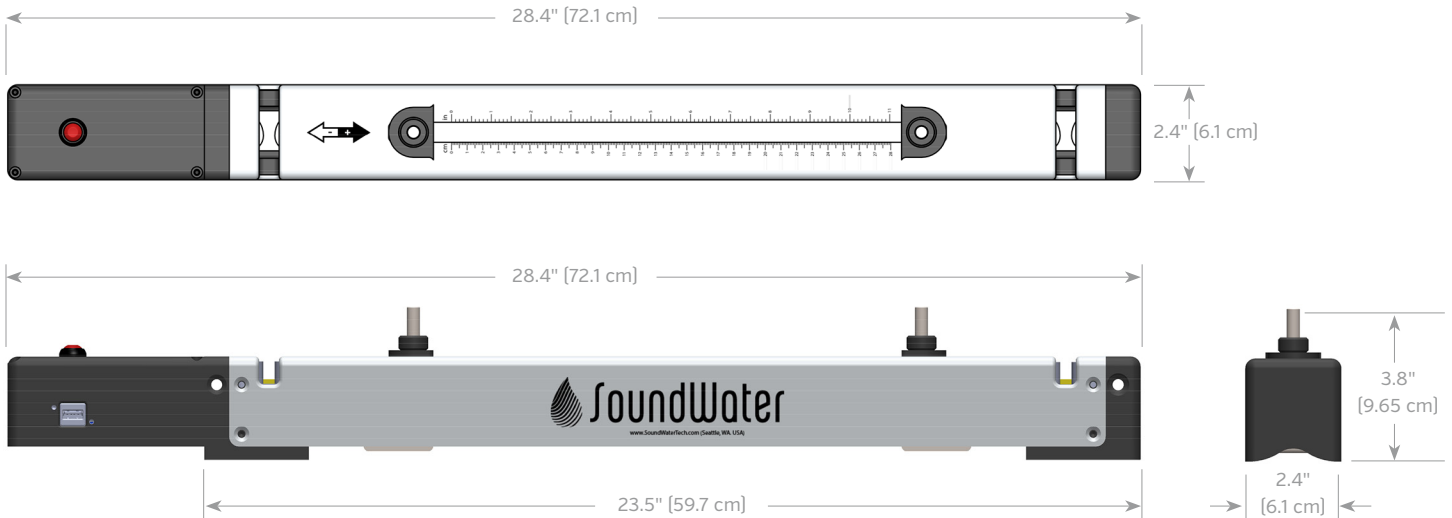
With Orcas, just bring the rechargeable clamp-on sensor in its lightweight, weatherproof case, along with a tablet or smartphone (iOS or Android). Bluetooth connectivity replaces wires, and the Orcas app guides you through your application setup.

**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.



## Dimensions



## 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.

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

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), 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 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\*

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<b>Installation</b>	Installs on pipe from 2" to 20" nominal diameter 15 pipe diameters upstream; 5 diameters downstream required for optimal performance [typical]
<b>Flow Detection Range</b>	Bi-directional; 0.1 ft/s to 20 ft/s [0.03 m/s to 6 m/s]
<b>Performance</b>	±1.0% to 2.0% accuracy typical Zero pressure drop 0.5% repeatability  *Under standard conditions (measurements 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.
<b>Display</b>	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
<b>Software</b>	Save and recall site setup information Mobile device App for iPhone, iPad, iPod touch and Android devices Automatic software updates with cellular or wifi connection
<b>Power</b>	Rechargeable battery (12+) hours, or USB-powered continuous operation (6 volts)* 1W Max (150 mAmp max current) 5 "AA" NiMH 6V pack with thermistor 5 month shelf life  *Use only the charger provided with the Flow Meter.
<b>Power Adapter</b>	For recharging battery - must use the 12W USB power adapter supplied with the Orcas
<b>Turndown</b>	200:1
<b>Environmental</b>	Ambient and flow temperatures -20 to 150F [-20 to 65C] IP65 splash proof Weather resistant Corrosion resistant
<b>Materials</b>	Body: Anodized aluminum channel, acetal end housings and feet Mounting Straps: EPDM
<b>Manufacture</b>	United States

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\*Specifications subject to change.

## Markets

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

## Benefits

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

## 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

## How to Order

### Ordering Information

PART NUMBER	DESCRIPTION
2433 . . . . .	Orcas Flow Meter Kit
8246 . . . . .	Orcas Flow Meter
3874 . . . . .	Orcas Flow Meter Kit with iPod Touch

### Parts & Accessories

PART NUMBER	DESCRIPTION
3065 . . . . .	Cam Cleat Mounting Straps [75", 190cm]
9288 . . . . .	Carrying Case
9755 . . . . .	USB 2.0 Cable; A Male/B Male
5900 . . . . .	SoundSafe Coupling Gel [12 oz.]
0069 . . . . .	SoundSafe Coupling Gel [4 oz.]

### Orcas Flow Meter Kit Includes:

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



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.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes: [1] l'appareil ne doit pas produire de brouillage, et [2] l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

MODEL: SWT ORCAS-01  
Contains FCC ID: XDULE40-S2  
Contains IC: 8456A-LE4S2  
CAN ICES-1/NMB-1  
CAN ICES-3 [B]/NMB-3[B]

REV 10/2016