

# FlowTracker®

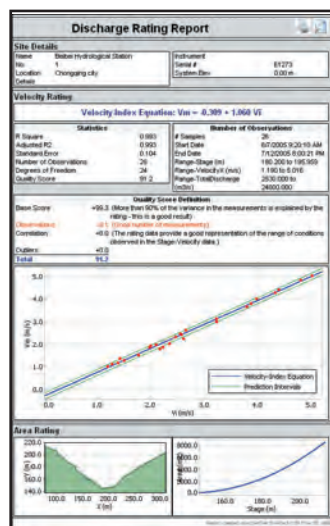
No other wading discharge device on the market comes with more useful options and accessories, making the FlowTracker a complete, turn-key solution.



The SonTek Deluxe wading rod, featuring a sturdy grip and bubble level



Rugged case provided with optional top-setting rod



FlowPack Velocity Indexing report software

## Standard Features

- Low-profile 2-D ADV water velocity sensor on 2m flexible cable (measure in depths down to 2cm (1 inch))
- Automatic discharge computation protocols (ISO/USGS mid-section, mean-section, and Japanese)
- Handheld keypad interface with real-time display
- Velocity methods: ISO, USGS, under ice, Krepis, 5-point, and multipoint
- Languages supported: English, Spanish, German, Italian, and French
- Recorder space: up to 64 discharge measurements or over 150,000 individual velocity samples
- Data Set Documentation: up to 20 values of time-stamped user comments including gauge height and rated flow
- QA/QC: automated data review and discharge uncertainty calculations
- Communication protocol: RS232
- Software: Windows software with diagnostic beam-check, recorder access, data visualization and customizable reports
- Compatible with FlowPack Velocity Indexing software
- Temperature sensor
- Hard plastic case



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SonTek/YSI, founded in 1992 and advancing environmental science in over 100 countries, manufactures affordable, reliable acoustic Doppler instrumentation for water velocity measurement in oceans, rivers, lakes, harbors, estuaries, and laboratories. Headquarters are located in San Diego, California. Additional information can be found at [www.sontek.com](http://www.sontek.com). SonTek/YSI is an employee-owned company.

SonTek, ADV and FlowTracker are trademarks of YSI Inc., Yellow Springs, OH, USA. The FlowTracker is made in the USA. Lit. code S01-05-0411

## Optional Features

- 2-D/3-D ADV side-looking probe
- 5m flexible cable
- Deluxe SonTek two piece, top-setting wading rod kit (1.2m/4ft or 2.4m/8ft) including case and mounting brackets
- Wading rod mounting bracket for controller/keypad
- Offset mounting bracket for ADV probe

## Specifications

- Velocity range:  $\pm 0.001$  to 4.0 m/s ( $\pm 0.003$  to 13 ft/s)
- Velocity resolution: 0.0001 m/s
- Velocity accuracy:  $\pm 1\%$  of measured velocity,  $\pm 0.25$  cm/s
- Sampling volume location: 10 cm from center transducer
- Power supply: 8 AA batteries
- Typical battery life: 25+ hours continuous operation (alkaline batteries)
- Weight: 1.8 kg/4.0 lbs
- Probe width: 130 mm (5.1 inches)
- Handheld controller/keypad: temporarily submersible to 1m
- Operating temperature:  $-20^{\circ}$  to  $50^{\circ}$  C
- Storage temperature:  $-20^{\circ}$  to  $50^{\circ}$  C

## SmartQC

SmartQC is a built-in quality control feature that gives you the

added assurance your FlowTracker data is correct. With each measurement, data is compared to a variety of adaptive QC criteria to ensure the best measurement possible.

SmartQC is our exclusive promise your SonTek/YSI system is performing at optimum standards and that your data is precise, reliable and exceeds your service expectations.

# FlowTracker®

Handheld ADV®



FEATURING  
**SmartQC**

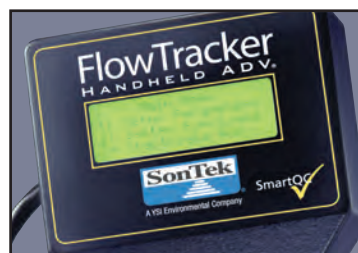


### Portable. Precise. Practical.

Designed with the field user in mind, this handheld ADV<sup>®</sup> (Acoustic Doppler Velocimeter) measures 2D or 3D currents, attaches easily to wading rods, and features an automatic discharge computation using a variety of international methods, including ISO and USGS standards. At the end of the data run, just press a button and the FlowTracker calculates the discharge for you!

The FlowTracker is the ideal solution if you're looking for:

- Help in challenging outdoor conditions
- A way to avoid recurring calibration/maintenance
- Tough equipment that doesn't break down all the time
- Unmatched performance in shallow water and low flows
- An easy-to-use interface
- Fewer steps to follow
- Built-in quality checks (SmartQC) so you know your data is right.



The handy FlowTracker keypad is custom-designed for both discharge measurements and general purpose water velocity. Featuring provisions for starting edges, multiple channels, and even ice covered water, it is ready for any environmental situation. In addition, the FlowTracker's intelligent algorithm automatically prompts you for the proper measurement method based on your previous measurement stations.

### FlowTracker Software Speaks Your Language

The FlowTracker comes with user-friendly, data analysis software that helps you produce attractive, customizable and professional reports in minutes. FlowTracker software also supports several languages, making it an ideal solution for international applications.



Example of FlowTracker discharge software and reports

### FlowTracker in the Field

With rugged construction for any climate and a backlit display easily read during both day and night, the FlowTracker goes wherever you need it to go.

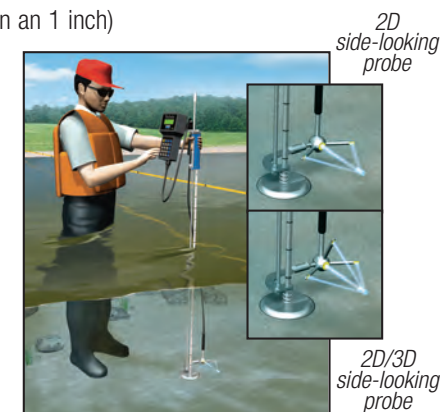
- Natural Streams
- Irrigation Canals
- Mining Channels
- Water Treatment
- Weirs/Flumes
- Storm Water
- Open Channels
- Lakes



### The FlowTracker Advantage

It doesn't matter if you are new to acoustic Doppler technology, or an old familiar friend, the FlowTracker provides unparalleled benefits you will only find with SonTek/YSI systems. Here is some of what sets the FlowTracker apart.

- Multi-language instrument and software (English, Spanish, French, Italian, and German)
- Proven velocity precision - accurate to as low as 0.001 m/s (0.003 ft/s) and up to 4.0 m/s (13 ft/s)
- Automatic discharge calculation - International techniques, including ISO and USGS standards
- Record changing gauge heights and rated flows, with comments in each measurement
- Automatic discharge uncertainty calculation to ISO standard. **A FlowTracker First!**
- Measure velocities in water as shallow as 2 cm (less than an 1 inch)
- Keypad interface with real-time velocity and flow display
- Automatic quality control for accurate data collection
- Two or three dimensional velocity measurement
- Recorded data is shielded from power loss
- Lightweight, rugged, and waterproof
- No calibration required - ever!
- Built-in temperature sensor



Example of typical stance and technique when using the FlowTracker



River Discharge and Flow



Spot Current Sampling



Irrigation Canals