FlowTracker Handheld-ADV Expanded Description

Offering laboratory precision in a practical and easy-to-use design, the FlowTracker Handheld ADV (Acoustic Doppler Velocimeter) goes where no current meter has gone before. Capable of measuring velocities from 0.001 m/s (0.003 ft/s) to 4 m/s (13 ft/s), and in water as shallow as 2 cm (1 inch), the FlowTracker simply outperforms every other hand-held current meter. Designed with the field user in mind, the FlowTracker easily attaches to top-setting wading rods and features an automatic discharge computation program that is based on USGS/ISO methods. The FlowTracker is delivered “ready-to-go” from the factory, so gone are the days of spin tests and other complicated instrument calibrations.

With a built-in recorder, battery, and RS-232 interface, the FlowTracker is flexible enough to be used either by the keypad display or interfaced to an external data logger or personal computer.

FlowTracker Technology

SonTek’s ADV technology has been well established for many years as the preferred sensor for high-resolution, 3D water velocity measurements. This same technology has been incorporated into the FlowTracker to provide the same ADV functionality from a simple keypad/LCD interface, allowing rapid data collection and analysis in many natural stream and open channel environments.

The FlowTracker collects a burst of data at user-selected measurement locations. The burst length is adjustable, allowing you to record mean velocity over a defined averaging period. A simple, menu-driven interface prompts you to enter your data collection parameters.

The FlowTracker uses acoustic Doppler technology to measure 2D or 3D flow in a small sampling volume located a fixed distance (10 cm) from the probe. Sound generated by the transmitter bounces off suspended particles in the water. This reflected sound returns to the receivers, is averaged together by the processor, and results in water velocity measurements that are recorded at a rate of once per second.

FlowTracker Wading Rod Kit

Designed specifically for the FlowTracker, the SonTek/YSI two-section wading rod kit offers superior quality in construction and material as well as features to improve the discharge measurement process. The popular top-setting wading rod design enables users to easily position the FlowTracker’s ADV sensor to the proper measurement depth. Available in both English and Metric versions, the two-piece design is easy to assemble with less risk of damage during transport or shipment.

The complete kit includes:

- Rugged, hard plastic case (with wheels) fitting the FlowTracker (2D or 2D/3D), Quick Start Guide, and the Wading Rod. Deluxe two-section SonTek/YSI wading rod featuring superior construction and numbering on both sides.
- Two-piece rod design is easy to assemble and transport.
- Keypad mount and sensor offset bracket.
- Built-in leveling bubble facilitates vertical positioning for more consistent measurements.
- Extra room for customer-supplied accessories such as tag lines, tent stakes, etc.
- Available in English (4 ft) and Metric (1.2 m) versions.

Note: This case can hold FlowTrackers with the 5 m cable option, but only wading rods of 4 ft or 1.2 m length.