Hydrolab HL4

Next generation multiparameter platform

The Hydrolab HL4 is the next generation multiparameter water quality instrument from OTT Hydromet. Its reliability, ease-of-use, and metadata produce water quality data you can trust.

Know the instrument is working correctly and troubleshoot quickly with the self-monitoring system that reports the status of the instrument, shows the user where potential problems are, and gives assistance on how to solve issues. Streamline calibration tasks with user-scheduled calibration intervals that indicate when calibration is due, guided and semi-automated calibration routines that lead the user through the calibration process, and a check calibration procedure that can be used to avoid a complete calibration. Produce valid, scientifically defensible conclusions with sensor status that is saved with every line of data and calibration reports that store information about previous calibrations.

The Hydrolab HL4 connects to rugged deployment cables and the Surveyor HL for attended monitoring applications that require equipment designed for field use. The Surveyor HL is a lightweight, compact, fully IP67 handheld with a full-color screen that is visible in bright sunlight. For unattended continuous monitoring applications, the Hydrolab HL4 has on-board data logging and dedicated communications modules that are used for easy integration with external data loggers and telemetry systems.

Qualitative
Hydrology

Hydrolab HL4 – Data you can trust

Applications

Water quality measurement in:

— Freshwater rivers and streams, lakes and reservoirs, and groundwater wells
— Salt or brackish water bays, estuaries, and near-coastal areas
— Attended monitoring, continuous unattended and real-time monitoring

Features

— Self-monitoring system reports the status of the instrument, flags the data, and shows the user where the problem is with assistance on how to solve the issue
— User-scheduled calibration and maintenance intervals indicate when they are due
— Guided and semi-automated calibration routines lead the user through the calibration process
— Calibration results are stored with date and time, calibration type, user identification, and user notes
— Check Calibration process allows the user to verify calibration and store the results
— Calibration reports contain information about previous calibrations and calibration checks
— Sensor status is saved with every line of data and is contained in the log file
— Dedicated communications modules allow easy integration with data loggers and telemetry systems
— Compatible with the Surveyor HL – a fully IP67 handheld designed for field use with a full-color screen that is visible in direct sunlight

Specifications

HL4 Sonde

Diameter
4.44 cm (1.75 in.) without rubber bumpers

Length
51.43 cm (20.25 in.) to 77.787 cm (30.625 in.) depending on configuration

Weight
2.2 kg (5 lb) with internal battery pack and storage/calibration cup

Depth rating
200 meters (656 ft) Deployment cable or mooring cap must be installed. Some sensors cannot be used at 200 m (656 ft).

Communications
Hydrolab communications modules: USB, SDI-12, RS232, RS485, or TTY. A USB Communications Module is included with a sonde. Others are sold separately.

User interface
Hydrolab Operating Software on Microsoft Windows OS (Windos XP with Service Pack 3 or later)

Power requirements
- External: 6–24 VDC (12 VDC nominal applied to the communications module. 12 VDC: 250 mW average, 19 W peak
- Internal (optional): Internal alkaline D-cell battery, non-rechargeable.

Logging
4 GB of internal memory; 1 second interval minimum. Sufficient memory to keep 5 years of continuous measurements with a 15 minute logging interval

Sensors
Temperature sensor plus 4 additional universal sensor ports and optional depth

Operating temperature
–5 to 50 °C (23 to 122 °F), non-freezing
Operating outside this temperature range may result in mechanical damage or faulty electronic performance.

Surveyor HL Handheld

Graphical display
- Color, LCD 3.5" QVGA
- Transflective (readable in direct sunlight)

Power supply
- Lithium-ion rechargeable
- Battery life: up to 10 hours continuosly on (20 °C)

IP-Rating
- Handheld meter: IP67

Buoyancy
Positively buoyant in water

Dimensions
- L x W x H: 21.8 cm x 9.4 cm x 5.3 cm (8.6 in. x 3.7 in. x 2.1 in.)
- Weight: 0.68 kg (1.5 lbs)

Operating temperature
–5 to 50 °C (23 to 122 °F)

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