![In-Situ — YOUR EYES IN THE FIELD]

VuLink Data Logger and Telemetry

ThermoFisher
SCIENTIFIC

VULINK IS A GLOBAL CELLULAR AND SATELLITE TELEMETRY DEVICE THAT WILL CHANGE THE WAY YOU THINK ABOUT REMOTE MONITORING. OUR TURNKEY SOLUTION IS EASY TO SET UP, WORKS FROM ANYWHERE, AND DELIVERS LONG-LASTING POWER. SO, YOU NEVER HAVE TO WORRY ABOUT YOUR EQUIPMENT OR YOUR DATA.

ONE-PRESS SETUP
- VuLink autodetects any In-Situ device with one button press or scheduled report. Icons indicate battery life, instrument connection, network connection and HydroVu connection.

EXPANDED COVERAGE
- VuLink is truly global, offering cellular coverage across multiple networks. Future proof your system for decades with 4G LTE Category M1/NB-IoT technology, while ensuring backwards compatibility with quad-band 2G coverage.
- VuLink is also the first in-well Iridium satellite device featuring customized data compression and low power usage to lengthen battery replacement cycles.

FREE GLOBAL CELLULAR DATA
- VuLink offers free cellular data for life, right out of the box, no set up required. See back for details.

EXTENDED LIFE
- VuLink offers two-to-five times the battery life of similar devices. M1 and NB-IoT offer extraordinary power savings. And at faster reporting rates, VuLink offers exponential savings – more than two years of battery life at 15-minute reporting intervals. Widely available alkaline batteries and lithium batteries.
- Say good-bye to custom, expensive batteries – VuLink uses off-the-shelf alkaline and lithium D cell batteries.
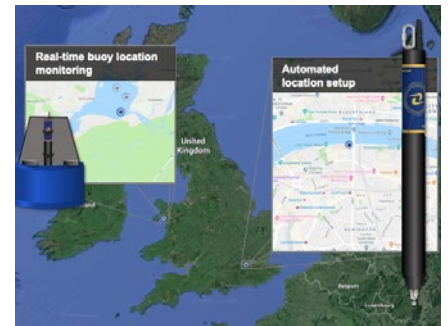
Applications:
- **CONTINUOUS GROUNDWATER MONITORING**
- **REMOTE SURFACE WATER MONITORING**
- **RIVER GAUGING**
- **SALT WATER INTRUSION MONITORING**
- **STORMWATER MONITORING**
- **REMEDIATION**
- **WASTE MANAGEMENT**
- **IRRIGATION**
- **MINING WATER MANAGEMENT**
- **INDUSTRIAL AND MUNICIPAL**

www.in-situ.com

CALL OR CLICK TO PURCHASE OR RENT
1-800-446-7488 (toll-free in U.S.A. and Canada)
1-970-498-1500 (U.S.A. and international)

ELECTRICAL	CELLULAR	SATELLITE
BATTERY	3 x D cell (1.5V - 3.6V, Alkaline/Li-SOCl2 [Thionyl Chloride]/LMO recommended)	
OPERATION TIME (24-hour reporting)	Under Evaluation	Under Evaluation
OPERATION TIME (15-minute reporting)	Under Evaluation	Under Evaluation
CLOCK ACCURACY	Less than 1 minute drift per year with ability to synchronize to network provided time for accuracy less than 1 second accuracy	

NETWORK COMMUNICATION	CELLULAR	SATELLITE
NETWORK TYPE	4G LTE Category M1/NB-IoT with 2G fallback	Iridium Short Burst Data
BANDS	**LTE Global -** B1(2100), B2(1900), B3(1800), B4(AWS1700), B5(850), B8(900), B12(700), B13(700), B18(800), B19(800), B20(800), B26(850), B28(700) **Verizon -** B4(AWS1700), B13(700) 2G Quadband - B2(1900), B3(1800), B5(850), B8(900)	N/A
PROTOCOLS	HTTPS (HydroVu), FTP, SFTP, FTPS, SMS (alarms)	HydroVu
DATA PROVIDER	Built-in free* global roaming (see Network List Addendum for details: In-Situ.com/VuLinkNetworks)	Iridium Short Burst Data
ANTENNA	SMA-M connector	
GPS	Up to 3m accuracy, built-in antenna	
FILE FORMAT (non-HydroVu)	CSV	N/A
REMOTE SETUP	Supported	

MECHANICAL	CELLULAR	SATELLITE
DIAMETER	1.85 in / 47 mm	
LENGTH	19.1 in / 485 mm	
WEIGHT	2.2 lbs / 1.0 kg (with included alkaline batteries and carabiner, excluding antenna)	
MATERIALS	Ryton (housing), Acetal (battery cover), Titanium (backend, eyebolt), 316 Stainless Steel (carabiner), Silicone (keypad cover), Brass (SMA antenna connector), Polycarbonate (label)	
STORAGE TEMPERATURE	-20C to 60C	
OPERATING TEMPERATURE	-20C to 50C (Li-SOCl2/LMO), 5C - 40C (Alkaline)	
INGRESS PROTECTION	Device: IP68 System: Up to IP68 per antenna specification	

INSTRUMENT COMMUNICATION	CELLULAR	SATELLITE
PROTOCOLS	Modbus over RS-485, SDI-12, Pulse low/high frequencies (max 40 khz)	
CONNECTORS	1 In-Situ Twistlock (supports multiple instruments via Rugged Cable Splitter or Load-bearing Universal Adaptor)	
SIMULTANEOUS CONNECTIONS	Up to 8 instruments	
VENTING	Built-in on all models, no desiccant required	
BAROMETRIC COMPENSATION	Built-in on all models for automatic compensation of level readings	
BAROMETER ACCURACY	+/- 1 hPa	
ALARMS	Configurable based on instrument readings and device parameters, second reading/reporting schedule available when in alarm state	
POWER	Max 100mA provided to connected instruments	

SETUP	CELLULAR	SATELLITE
WIRELESS SETUP	Supported via Bluetooth Low Energy	
LOGGING RATE	1 minute to 7 days	
TRANSMISSION RATE	1 minute to 7 days	
MEMORY	512 MB (on-board)	

Continuous GPS – HydroVu uses VuLink's GPS to automatically locate and mark devices on maps, syncing devices and locations, increasing data quality, and making it easier to track free-floating buoys.

Encrypted Connections – VuLink with HydroVu offers SSL encryption of your data, and VuLink can password protect all local connections to prevent backdoor access.

Free Global Cellular Data – VuLink and HydroVu offer free data up to 1 transmission for 24 data points per day. Additional plans can be purchased at Hydrovu.com. No more worrying about provisioning SIM cards and checking multiple systems for data usage. VuLink works with all LTE networks that support LTE-M1/NB-IoT. For a complete list visit in-situ.com/VuLinkNetworks.

Expanded Connectivity – VuLink also can read pulse inputs, arbitrary Modbus registers and SDI-12 inputs, all configured in VuSitu. And the device's new Load-Bearing Universal Adaptor can connect to anything.

CE FC ♻

Authorised distributor