

Leveline

Water Level • Temperature • Conductivity • Salinity
Full range now in titanium



 **AQUAREAD**
water monitoring instruments

Leveline® - Community Trade Mark Registration No. 011713823

Leveline-CTD® - Community Trade Mark Registration No. 0161873380

LevelLine-CTD

Water level and temperature logger that incorporates a 4 ring conductivity sensor

One of the questions raised when monitoring water level is, “what is causing the changes that I am recording?” Monitoring the conductivity can give an indication of the source of the water causing the water level to change. This is particularly useful in salt water intrusion studies in coastal regions.



LevelLine-CTD with nose cone fitted

LevelLine-CTD

The LevelLine-CTD incorporates our tried and tested 4 ring conductivity sensor under the extended nose cone. It includes many of the great features of the original LevelLine such as the titanium body, huge 500,000 data point memory and an internal lithium battery. The built-in conductivity sensor allows the device to calculate salinity automatically.



Corrosion Resistant
Rugged titanium body for corrosion resistance

4 Ring stainless steel conductivity
Measures conductivity which can be output as either absolute, corrected to 20°C or corrected to 25°C.
Also calculates salinity value

Extended nose cone
Nose cone offers protection and is an integral part of the conductivity sensor

High Accuracy

Highly accurate pressure and temperature sensors
Various depth ratings available up to 100m

The LevelLine-CTD is available in both absolute and gauge versions depending on your requirements. In addition to the conductivity measurement, the device also calculates the water's salinity in real time.

The conductivity sensor on the device requires occasional calibration, this can be performed within the LevelLink software or by using the GPS LevelLine Meter. Choose your own single point concentration for calibration, its quick and simple.

Specifications

		LevelLine-CTD	LevelLine-Mini-CTD
GENERAL	Temperature ranges	Operational: -20-80° C (-4-176° F) Storage: -40-80° C (-40-176° F) Compensated: -20-80° C (-4-176° F)	Operational: -20-80° C (-4-176° F) Storage: -40-80° C (-40-176° F) Compensated: -20-80° C (-4-176° F)
	Diameter	22mm	22mm
	Length	260mm	146mm
	Weight	250g	210g
	Materials	Titanium body, Delrin nose cone	Titanium body, Delrin nose cone
	Output options	Modbus/RS485, SDI-12, Aquaread proprietary	Modbus/RS485, SDI-12, Aquaread proprietary
	Battery type & life	3.6V lithium; up to 10 years (see note 1)	N/A
	External power	6 - 24 VDC	6 - 24 VDC
MEMORY	Size	8.0 MB	N/A
	Data records	500,000	N/A
	Log types	Linear, Event & User-Selectable Schedule with Future Start, Future Stop, Deploy Start and Real Time View	N/A
	Fastest logging rate & Modbus rate	1 per second	1 per second
	Fastest SDI-12 output rate	1 per second	1 per second
	Real-time clock	Accurate to 1 second/24-hr period (± 6 minutes/year)	N/A
SENSOR	Type / Material	Piezoresistive; ceramic	Piezoresistive; ceramic
	Range (Gauge & Absolute)	10.0M (32.8 ft) 50.0M (164 ft), 20.0M (65.6 ft), 100M (326 ft)	10.0M (32.8 ft) 50.0M (164 ft), 20.0M (65.6 ft), 100M (326 ft)
	Maximum pressure	Max 2x range, Burst 2.5x range	Max 2x range, Burst 2.5x range
	Accuracy @ 15° C (note 2)	±0.05% FS	±0.05% FS
	Accuracy (FS) (note 3)	±0.1% FS	±0.1% FS
	Resolution	0.002% FS or 1mm whichever is greater	0.002% FS or 1mm whichever is greater
	Units of measure	Pressure: mbar (psi, kPa, bar, mbar, mmHg, inHg, cmH2O, inH2O, Level: in, ft, mm, cm and m available in LevelLink	Pressure: mbar (psi, kPa, bar, mbar, mmHg, inHg, cmH2O, inH2O, Level: in, ft, mm, cm and m available in LevelLink
Electrical Conductivity	Range	0 - 200mS/cm (0 - 200,000µS/cm)	0 - 200mS/cm (0 - 200,000µS/cm)
	Resolution	1µS	1µS
	Accuracy	± 1% reading or ±1µS whichever is greater (see note 5)	± 1% reading or ±1µS whichever is greater (see note 5)
Salinity (note 4)	Range	0 - 70 PSU / 0 - 70 ppt (g/Kg)	0 - 70 PSU / 0 - 70 ppt (g/Kg)
	Resolution	0.01PSU / 0.01 ppt	0.01PSU / 0.01 ppt
	Accuracy	±1% reading or ± 0.1 unit if greater	±1% reading or ± 0.1 unit if greater
Temperature sensor	Accuracy & resolution	±0.1° C; 0.01° C	±0.1° C; 0.01° C
	Units of measure	Celsius (fahrenheit available in LevelLink)	Celsius (fahrenheit available in LevelLink)
Warranty	Standard	2 years	2 years
	Extended	Options Available	Options Available

Notes: 1) Dependent on logging rate. 2) Across factory-calibrated pressure range at a constant temperature. 3) Across factory-calibrated pressure and temperature ranges. 4) Readings calculated from EC and temperature values. 5) At the calibration point at 25°C