

# 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-Mini-CTD

Water level, temperature, conductivity and salinity SDI-12 sensor

## LevelLine-Mini-CTD



The LevelLine-Mini-CTD adds conductivity and salinity measurements to the small SDI-12 ready sensor. Like the standard LevelLine-Mini, the CTD version is housed in a titanium body making it suitable for deployment in both fresh and salt waters. It also features the same titanium connector as the larger LevelLine loggers. The connector allows the unit to be connected to your PC or to the GPS LevelLine Meter to calibrate the conductivity sensor.

The LevelLine-Mini-CTD is available in both absolute and gauge versions. If your chosen datalogger / telemetry device includes a built-in air pressure sensor, we recommend the absolute version as the logging device can utilise the air pressure reading for compensation. If an air pressure sensor is unavailable then the gauge version is best suited for telemetric logging.

Gauge sensors require vented cables and desiccant cartridges to remove any moisture from the vent to prevent blocking and inaccurate compensation.

### LevelLine-CTD & LevelLine-Mini-CTD

## Mechanical Specification

	LevelLine-CTD	LevelLine-Mini-CTD
Dimensions (L x Dia)	260 x 22 mm	146 x 22mm
Material	Titanium	Titanium
Memory and battery	Yes	No
Output options	SDI-12, Modbus, Proprietary	SDI-12, Modbus, Proprietary



# 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