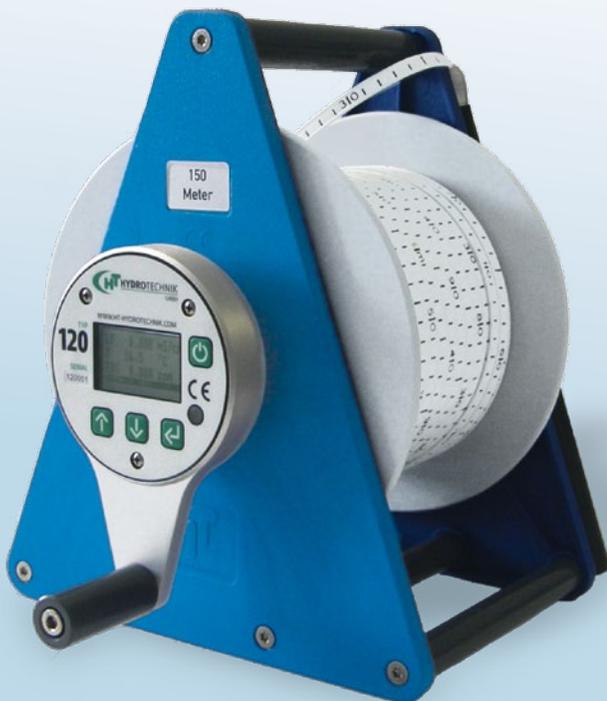


Water Level Meter Type 120-LTC

Water Level (m) · Temperature (°C)
Conductivity (mS/cm) · TDS (ppm)



Description

The Water Level Meter Type 120-LTC is the ideal measuring appliance for the manual measurements of water level, temperature, conductivity and TDS in wells, boreholes, tanks and groundwater observation pipes as well as in lakes or rivers.

Thanks to the small sensor diameter, temperature and conductivity/ TDS can be easily measured from 1 inch observation wells without taking laboratory samples.

In cause of its high-quality processing in a sophisticated operation, this unit offers you extreme robustness, highest operating comfort and absolutely precise measure-

ments even in harsh environmental conditions like rain-fall, heat, coldness or in the tropic climate.

Already in the standard version, a LED and a beeper for water level signalling are integrated. The parameters temperature, conductivity and TDS (Total Dissolved Solids in ppm) are continually displayed after switching on the instrument at a bright display with backlight.

The Water Level Meter Type 120-LTC satisfies according to its premium production and the unique accuracy first-class demands.



Applications

- Acquiring of salt water intrusion in groundwater aquifers in coastal areas
- Check measurements on contaminaton
- Remediaton of contaminated sites
- For measurements during pumping tests of water level, temperature and conductivity
- Acquiring of human induced groundwater contaminaton like road-salt, industrial waste water in the natural water resource
- Especially in small water bodies, the conductivity gives a first indicaton to groundwater intrusion causes by rainfall or sewage water

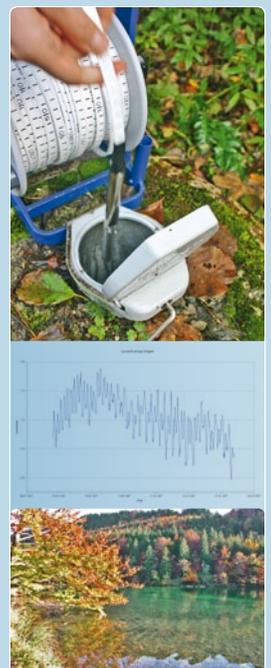
Conductivity and TDS

To determine the electrical conductivity of the water and for accurate comparisons of conductivity values with other measurements, it is essential to measure the temperature as well. The Water Level Meter Type 120-LTC offers 3 different ways to consider the temperature for conductivity measurements:

- Setting an automatic temperature compensation to the reference temperature of 25°C, in this case, the measured values will be automatically extrapolated according to DIN EN 27888.
- Adjusting of an user-defined coefficient in %/ °C for individual liquids or heavily contaminated sites.
- Measurement without temperature compensation, it appears the conductivity at the current temperature.

TDS:

TDS – Total Dissolved Solids – salts – indicates the concentration of total dissolved ions in water and is specified in units ppm (parts per million). TDS is often used as an index in North America and the MENA-region. The parameter TDS is derived with a factor directly from the conductivity value. The Water Level Meter Type 120-LTC offers the possibility to set an individual factor or using a standard factor which is used for salt water intrusion in coastal areas. Additionally, the user is able to hide the TDS to avoid reading errors in documentation if TDS won't be used as a parameter.



2 Versions – according to the length of measuring tape

Type 120-LTC (up to 100 m length of tape)

For the convenience of the operator, the cast aluminium frame with reinforced steel back can be placed on the dip pipe. The electronics and the display are compactly integrated in the cable drum and do not distract when winding.

Available lengths:

15 / 30 / 50 / 60 / 80 / 100 m

Special lengths on request



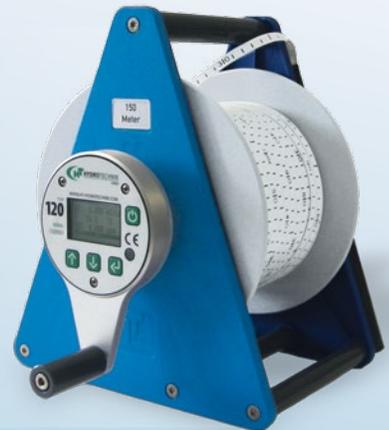
Type 120-LTC (from 120 m length of tape)

For measuring tape lengths from 120m, a stable support triangular frame made from a high-tensile special acrylic resin is used. This offers extreme robustness with minimum weight and always provides easy handling, despite the large tape length. The whole electronics and the display are just as compactly integrated in the handle.

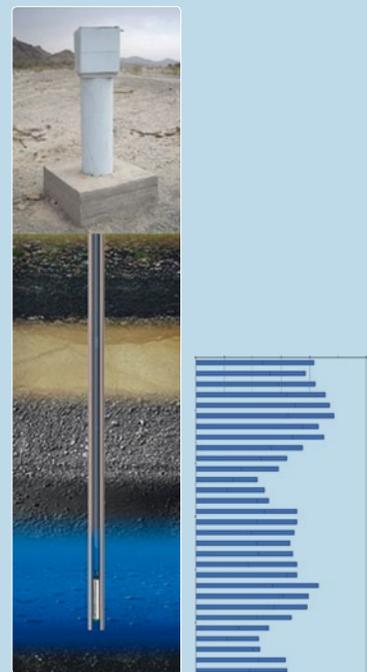
Available lengths:

120 / 150 / 200 / 250 / 300 / 400 / 500 m

Special lengths on request



Conductivity profiling
at the well



Special features

- Adjustable sensitivity of water level detection / fresh water – contaminated or salt water
- Optical and acoustic signal on water contact
- Complete power supply via changeable batteries
- Settings of automatic temperature compensation of the conductivity values
- LCD with backlight for all displayed values
- Compact design in usual robust quality
- Low battery indicator
- Variable measuring tapes
- Low weight



Technical Data	Type 120-LTC Triangle frame	Type 120-LTC
Length of tapes - selectable	120 - 500 m	15 - 100 m
Measuring tape	Bifilar strip made of white polyethylene with 2 stainless steel wires UV-resistant and resistant to contaminated or salt water Metres printed in red; cm divisions and dm figures in black	
Power supply	4 x 1.5 Volts Alkaline / Size C Sufficient for about 180 operating hours	
Measuring range Temperature: Conductivity:	-1°C to +70°C 0 ... 200 mS / cm	
Accuracy Temperature: Conductivity:	< 0.1°C < 0.5% from current value, minimum 2 µS / cm (0.002 mS/cm)	
Operating temperature range	- 20°C to +75°C	
Storage temperature	+5°C to + 30°C / battery- friendly	
Protection class – sensor	IP 68, permanent seal, pressure resistant	
Protection class – frame	IP 64, spray water resistant	
Sensor Dimensions: Material:	Ø 20 x 225 mm Stainless steel 316 Ti	
Accessories		
Protection bag	Adjusted to the respective measuring tape length	
Buffer solution	1.413 mS/cm (25°C) – 500 ml	

Changes in performance features and technical data are permitted.

Manufacturer:

HT Hydrotechnik GmbH

Lab Unlimited
CARL STUART GROUP



Instruments and Monitoring for ground- and surface water