



LTE Telemetrylogger 255EB

Self-sufficient Datalogger with 4G / 3G / 2G cellular data transmission for the connection of water level- and water quality probes

- 1 year battery lifetime at hourly data transmission and measurement every minute
- 10 years battery lifetime at daily data transmission and measurement every 10 minutes

- Efficient long-term monitoring of groundwater and surface water measuring sites
- Ultra low power datalogger combined with extra long- life batteries guarantee the longest operation without changing batteries.
- NO desiccants, NO changing of drying cartridges when using vented pressure sensors
- Monitoring and alarm management for intelligent long term operation with power safe mode





Reliable and future-proof

The LTE Telemetrylogger 255EB records and transmits the data of the connected measuring probes absolutely reliable. The data are sent to a selectable FTP webserver by using the LTE 4G cellular network. In case of no available 4G network, the Telemetrylogger uses the integrated fallback to the 2G/ 3G network. The measured values and status information can easily be observed, analysed and shared with colleagues, teams or consortiums by using the cloud solution HT Analytics.

Continuous transmitted operating parameters like battery status or cellular signal supply important information for the operating conditions. Thus enables to check the measuring sites online to avoid data gaps. The LTE Telemetrylogger is maintenance-free. Means, there is no exchange of drying cartridges necessary. After a while, depends on the set transmission intervals, battery exchange can be easily done directly at site.

By using the optional alarm management, the user will be supported by extra SMS- / Email- messages and a status file on the FTP server when preset limit values are exceeded or in case of low battery.



Antenna detachable for connection of an external antenna

„To know that the data will be measured and transmitted reliable means fewer checks at site and more time for other important tasks.“

The best solution for any application

Depending on the demands, HT's LTE Telemetrylogger 255EB can be equipped with the following sensors- and HT probes:

„There are various possibilities; the operation remains simple and intuitive.“

Parameters:

- Water level
- Water temperature
- Conductivity
- pH
- ORP
- Dissolved Oxygen
- Turbidity

The parameters are available as single sensors or multiprobes



Flexible power supply – the standard version is equipped with commercially available alkaline batteries. This enables a lifetime of about 4 years with daily data transmission and set 10 minutes measuring interval. By using Lithium-batteries, the lifetime of the batteries can be raised enormously. With one battery- set this Telemetrylogger can transmit in hourly interval for 1 year by using a 1 Minute measuring interval.

In cause of its small size, the LTE Telemetrylogger 255EB can be fit directly in groundwater monitoring wells from 2 inch. Due to the high quality and materials from stainless steel, this unit is well equipped for long-term use in rough conditions.



Technical specifications

Description	LTE Telemetrylogger 255EB
Cellular standards	2G, 3G and 4G LTE
Supported 4G-LTE standards	LTE Cat-1 and Cat-4
4G LTE Frequencies	B1(2100MHz); B3(1800 MHz); B7(2600 MHz); B20(800 MHz); B28(700 MHz);

Electrical data

Measuring probe connection	1 input channel for the connection of one HT measuring probe
Memory	4 MB flash memory (non-volatile) for up to 190,000 records
Measuring interval	adjustable from 1 second to 99 days
Transmission interval	adjustable from 10 minutes to 99 days
Clock accuracy	<5 minutes / year; adjusted at every data transmission by clock server
Operating interface	RS 232; approachable via serial and USB-interface as well as by Bluetooth connection when using HT's Bluetooth- stick

Remote data transmission

Transmission protocol	Standard: FTP, optional with SSL- encryption (FTPS)
File formats	ASCII and Excel standard; ZRXP; csv, MIS; Labdüs; and many more Individual formats configurable by adjustments in our software department
Alarm management (optional)	2 limits definable for every parameter Possibility for automatic switching of measuring and transmission interval Alarm message at low battery Alarm message via SMS / eMail, and alarm file on the webserver

Power supply	3 x Alkali / Size D for about 4 years at daily data transmission and 10 minutes measuring interval Option: 3x Lithium / Size D for 1 year at <u>hourly</u> data transmission and 1 minute measuring interval respectively 10 years at daily data transmission
Antenna	Rod antenna, detachable by the user for connection of an external antenna, for example from a well cap.

Mechanical data

Measurements (Ø x L)	Ø 49 mm x 490 mm / suitable for 2 inch groundwater observation wells or bigger
Material	Stainless steel housing AISI 316

Environmental conditions

Operating temperature	-25 °C to +70 °C
Protection class	IP 68; permanent seal until 1m water column No drying cartridges or silica gel necessary