

Aquatos Web LTX

Secure networking
 TLS transmission, signed firmware, PIN-protected Bluetooth access.

Up to 10 years autonomous
 2x LSH20 in parallel, ultra-low-power, >3M measurements.

LTE-M + Bluetooth 5
 Real-time transmission, browser-based commissioning.

Open standards
 SDI-12 V1.3 · Modbus converter · FME antenna.

DESCRIPTION

The **Aquatos Web LTX** is an intelligent data logger for online monitoring networks in groundwater and surface water applications. With integrated **NB-IoT/LTE-M modem** and BLE 5, the logger automatically transmits continuous measurement values to the web-based Sensormanager portal – with no manual data retrieval, accessible from anywhere.

The logger supports up to **24 SDI-12 channels** (pressure, temperature, conductivity) and stores over **3 million measurements** locally. The stainless steel housing (AISI 316) with epoxy potting and the standard-included **2x LSH20 (parallel)** guarantee over 10 years of trouble-free operation in the field – even at extreme temperatures (–25 °C to +85 °C).

Encrypted data transmission (**TLS-CBC**), PIN-protected Bluetooth access, and regular over-the-network firmware updates make the LTX the secure standard in government monitoring networks. On-site configuration via **Bluetooth-App** in the browser – no additional software required.

APPLICATIONS

- Groundwater measurement and monitoring wells
- Surface water monitoring (rivers, lakes, reservoirs)
- Government monitoring networks and flood warning
- Industrial process control and environmental monitoring
- Scientific measurement campaigns with automated data acquisition
- Decentralized monitoring stations without power supply (battery-powered)



KEY FEATURES

- **Online modem** · NB-IoT/LTE-M + LTE fallback
- **24 SDI-12 channels** V1.3 for all sensor types
- **3 million measurements** local storage + > 30,000 transmissions
- Battery life **over 10 years** (LSH20 standard)
- AISI 316 stainless steel housing with epoxy potting
- **TLS-CBC** end-to-end encryption
- BLE 5 PIN-Schutz authentication
- **Firmware updates** over-the-air via modem
- **Sensormanager integration** · Web portal, maps, alarms

Technical data

Aquat os Web LTX · Data Logger Type1500

PARAMETER	VALUE
Data logger type	Aquat os Web LTX · Type 1500
Storage	3 million measurements (local buffer) + > 30,000 complete transmissions
SDI-12 channels	Maximum 24 sensors SDI-12 V1.3 in parallel
Modem & wireless	NB-IoT + LTE-M (online data transmission) · BLE 5 (local diagnostics)
Antenna	FME connector · external 4G helical or rod antenna
Battery	LSH20 standard · Life > 10 years in measurement operation
Operating temperature	-25 °C to +85 °C
Housing	AISI 316 stainless steel · epoxy potted · compact cylinder
Protection class	IP68 (24 h at 1 m submersion depth)
Data transmission	TLS-encrypted (Logger ↔ Sensor manager server)
Bluetooth access	PIN-protected · lock-out after invalid attempts
Firmware	Encrypted · signed updates · over-the-air (OTA)
Firmware	Signed updates · wireless over-the-air (OTA)
Sensor manager	Online integration · Web portal, maps, data export, alarms
Configuration	Bluetooth-App in browser (Chrome / Edge) · BlueShell (Windows)
Compliance	CE (RED 2014/53/EU, EMC 2014/30/EU) · RoHS-compliant



TLS-encrypted

End-to-end encrypted data transmission



Signed firmware

Encrypted, signed updates only (OTA)



Bluetooth PIN protection

PIN-protected access · lock-out after



MADE IN GERMANY

ADDRESS

TerraTransfer GmbH
Ottostr. 19a
44867 Bochum · Germany

CONTACT

Tel. +49 (0) 2327 83 44 85-1
info@terratransfer.de
terratransfer.de

COMMERCIAL REGISTER

HRB 6778 · AG Bochum
USt-ID DE 209458277
CEO: M. Delker