

## PORTABLE TEMPERATURE / RH DATA LOGGERS WITH OLED DISPLAY

### DLT-10, DLT-11

The Portable **DLT-10 & DLT-11 Data Logger** is a compact electronic device equipped with a soldered battery, an OLED display, and a USB interface. This Data Logger is designed to measure and record temperature and humidity readings in its internal memory. It serves as a valuable tool for monitoring temperature and relative humidity in various applications, including cold supply chains, remote unattended locations, vehicles, warehouses, and freezers.

The Portable DLT-10 & DLT-11 Data Logger features a humidity and temperature sensor manufactured in Switzerland. This sensor is securely enclosed within the device's case. Additionally, the design allows users to connect up to two external temperature probes via the USB-A connector. Powering the logger is accomplished using a single, replaceable lithium battery. This battery boasts an extended lifespan, making it suitable for long-term use in various applications. The actual battery life depends on specific usage conditions and recording intervals. Users can simply connect the device to computer's USB port and use the user-friendly LoggerSoft Software. This software enables easy configuration of the logger's settings and facilitates the download of stored data. The recorded data can be transferred to a computer in either CSV or PDF formats, allowing for convenient analysis and reporting.

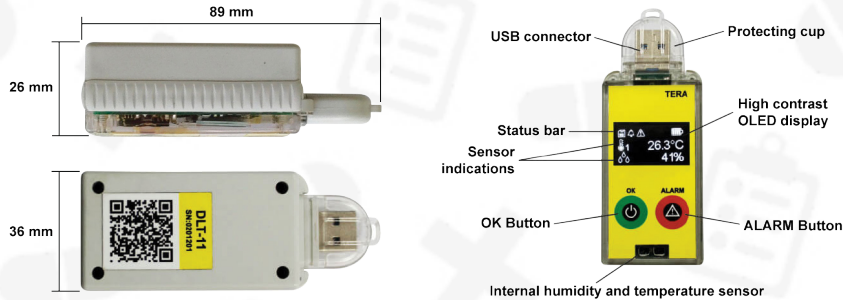
#### Key Features

- Air/product temperature and air relative humidity measurement
- Data logging in a user-defined mode
- Alarm logging
- Data logger plugs directly into computer's USB for easy setup and data download
- Compatible with standard Windows applications
- Displaying modes, alarms and current sensor readings on the high-contrast OLED display
- Flexible user configuration mode using special Loggersoft software



#### Design features

Data logger is made from polycarbonate case with a standard USB connector, high-contrast OLED display and two control buttons. Logger is also supplied with a magnetic mount.



#### TECHNICAL SPECIFICATIONS

Model	DLT-10	DLT-10-Pt <sup>1</sup>	DLT-10-2Pt <sup>1</sup>	DLT-10-TC <sup>1</sup>	DLT-10-AT	DLT-10-2AT	DLT-11	DLT-11-Pt <sup>1</sup>	DLT-11-2Pt <sup>1</sup>
<b>Logger Specifications</b>									
Q-ty of Measuring Channels	1	2	3	2	2	2	2	3	4
Available channel configurations <sup>2</sup>	IT	IT + ET	IT + 2 ET	IT + ET	IT + 4-20 mA	2 x 4-20 mA	IHT	IHT + ET	IHT + 2 ET
Indication	OLED 0.96', resolution is 128x64 pixels, display by pressing a button								
Logging Interval	From 1 minute to 1 hour								
Battery Type	1 battery (½ AA 3,6 V 1Ah 14250)								
Battery Lifespan (by regular conditions)	Over 5 years								
Memory (readings)	2 621 440 (RH & Temp)								
<b>Specifications of Internal Temperature Sensor</b>									
Sensor Curve	TMP116								
Operating Temperature Range, °C	-30...60								
Accuracy, °C	0,5								
Response Time, sec	180								
<b>Specifications of Internal Humidity and Temperature Sensor</b>									
Sensor Curve	SHT31								
Operating Humidity / Temperature Range	-30...60 °C / 0...100%								
Humidity / Temperature accuracy	0,5 °C / 3% <sup>3</sup>								
Response Time, sec	180								
<b>Specifications of External Temperature Probe</b>									
Sensor Curve	Pt1000		XA (K)		4-20 mA		Pt1000		
Operating Temperature Range, °C	-50...100, -50...250, -50...500, -100...100		-40...250, 0...500, 0...850, 0...1250		Set by the logger		-50...100, -50...250, -50...500, -100...100		
Accuracy, °C	± (0,4 + 0,002 x  T  <sup>4</sup> )		± 2,5 (до 375 °C) or ± 0,0075 x T (over 375 °C) **		0,5 %		± (0,4 + 0,002 x  T  <sup>4</sup> )		
Connection	USB3		By USB cable				USB3		

<sup>1</sup> - External temperature probe is supplied separately

<sup>2</sup> - ET - external temperature probe, IT - internal temperature sensor, IHT - internal RH and temperature sensor






<sup>3</sup> - relative humidity accuracy is 3% (10...90%), ≥ 4% (0...10% and 90...100%)

<sup>4</sup> - T - operating temperature range

## Settings

Logger settings are customized by the LoggerSoft software, that allows the user to change logger settings, read and store data. LoggerSoft is available to [DOWNLOAD FOR FREE HERE](#).







### CONTROLLING THE CURRENT LOGGER STATE BY OK & ALARMS BUTTONS

Buttons	Action	Description
	Quick press <b>OK</b> (less 1 sec)	Displays main window
	Two quick press <b>OK</b> (a pause between pressing is up to .5 sec)	Displays ALARM window
	Long press <b>OK</b> (5 sec)	Displays service inform window
	Long simultaneous press <b>OK &amp; ALARM</b> (5 sec)	Turning on archiving (first press)
	Quick press <b>OK</b> , then long press <b>ALARM</b>	Turning ON / OFF (all the following presses)





## Status

The main window (pic. 3) has a status bar, that contains the following icons:

-  Archiving is in progress
-  ALARM is ON
-  ALARM is present
-  Archiving / ALARM launch delay (after archiving launch)
-  Archiving launch in certain time
-  Manual archivation launch

Regardless operation mode it also indicates battery charge  in status bar. When battery charge less than 12%, the icon turns into .

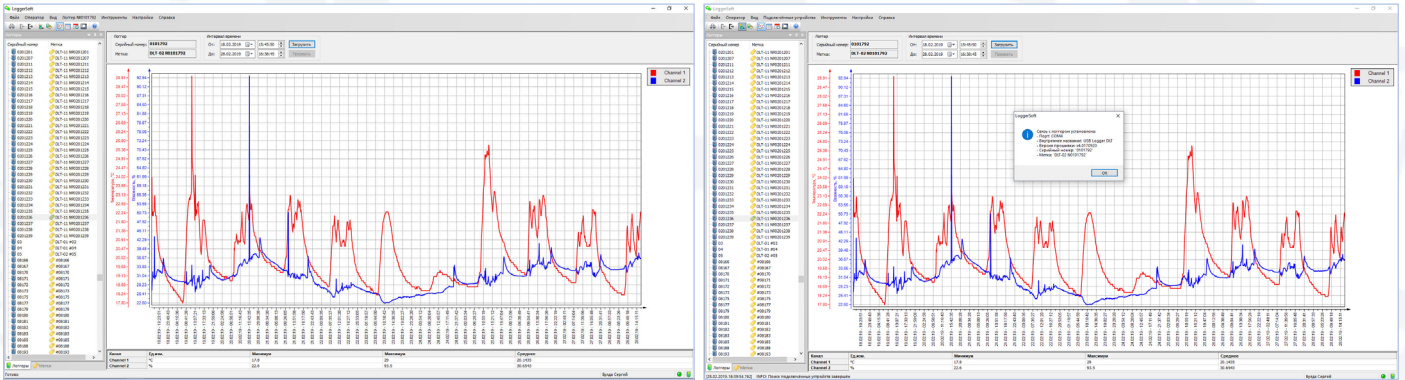
Bellow of the status bar it indicates measurement of the available channels.

-  Temperature channel
-  Relative humidity channel

## PC connection

The logger can be connected to PC with one of two modes:

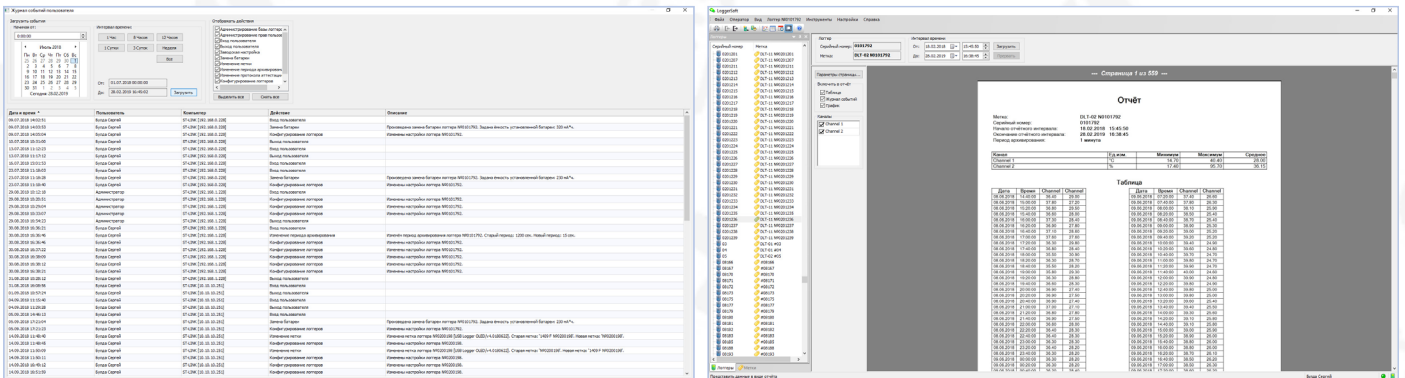
- **FLASH MEMORY** mode generates a report as a PDF or CSV file, that may be saved to PC. Report time generating is approximately 30 seconds.
- **COM-PORT** mode allows the user to customize logger's settings, view and store data, using LoggerSoft software. For COM-PORT mode it requires to press OK button during 5 seconds after PC connection.



LoggerSoft is the software used to operate Data Loggers powered by TERA Ukraine. This software offers a range of functionalities, including the ability to customize logger settings, access event logs and archives, view and analyze data, and generate reports. All data collected by the logger is stored in a database and can be easily accessed and analyzed at any time.

One of the notable features of LoggerSoft is its flexible system for managing user access rights, which allows for different permission levels for staff members. It also supports operation within a local network, enabling simultaneous access to data for multiple users. LoggerSoft is optimized to run on Windows 10.

You can [download the software for free here](#).



## Key Features

- Reading and saving logger's settings
- Reading data saved in the logger's memory
- Viewing archives for specific time periods
- Automatic or manual graphic scaling for each axis
- Viewing humidity and temperature measurements in table or graphic format
- Printing graphics, tables, and reports
- Accessing and viewing the logger's event log
- Accessing and viewing the user's event log
- Setting the archive period
- Configuring humidity and temperature ranges for alarm triggers
- Selecting the data recording mode: **CYCLICAL** or **UNTIL MEMORY FILL**.
- Choosing the report format: CSV or PDF
- Setting options for archiving launch:
  - Immediate after pressing the button
  - With a delay after pressing the button
  - Immediate after configuration
  - With a delay after configuration
  - At a specific time
- Precomputing the remaining time of the logger's operation until the battery needs to be changed
- Local network support for multiple users
- Searching for connected loggers
- Viewing and setting information related to the metrological attestation of the connected logger

The system requirements for LoggerSoft software are as follows:

- CPU: 1 GHz or faster
- Memory: 512 MB RAM or more
- Free space for program files: 50 MB or more
- Free space for the database: 4 GB or more

