



The compact Datalogger for serial Data Acquisition

- Touch display
- Ethernet interface
- WEB server
- MODBUS RTU
- Data storing up to one year

DATALOGGER DLU

COMPACT WITH SERIAL DATA ACQUISITION

The datalogger records measuring values via two serial interfaces RS485/422, and via integrated analogue and digital input channels. The serial interfaces are designed for the connection of sensors with MODBUS-RTU interface, and for sensors with THIES data protocol. It is possible to connect up to 32 devices to one bus. The analogue inputs serve for connecting a humidity temperature sensor with PT100, and voltage output, and up to three sensors with voltage output 0 ... 10 V. The digital inputs support the direct connection of a wind direction transmitter with synchronous-serial output, and two precipitation meters with pulse output.

There is a pixel touch display 320 x 240 available for diagnosis and startup. It serves for displaying instantaneous and archival values. Simple parametrizations can be carried out.

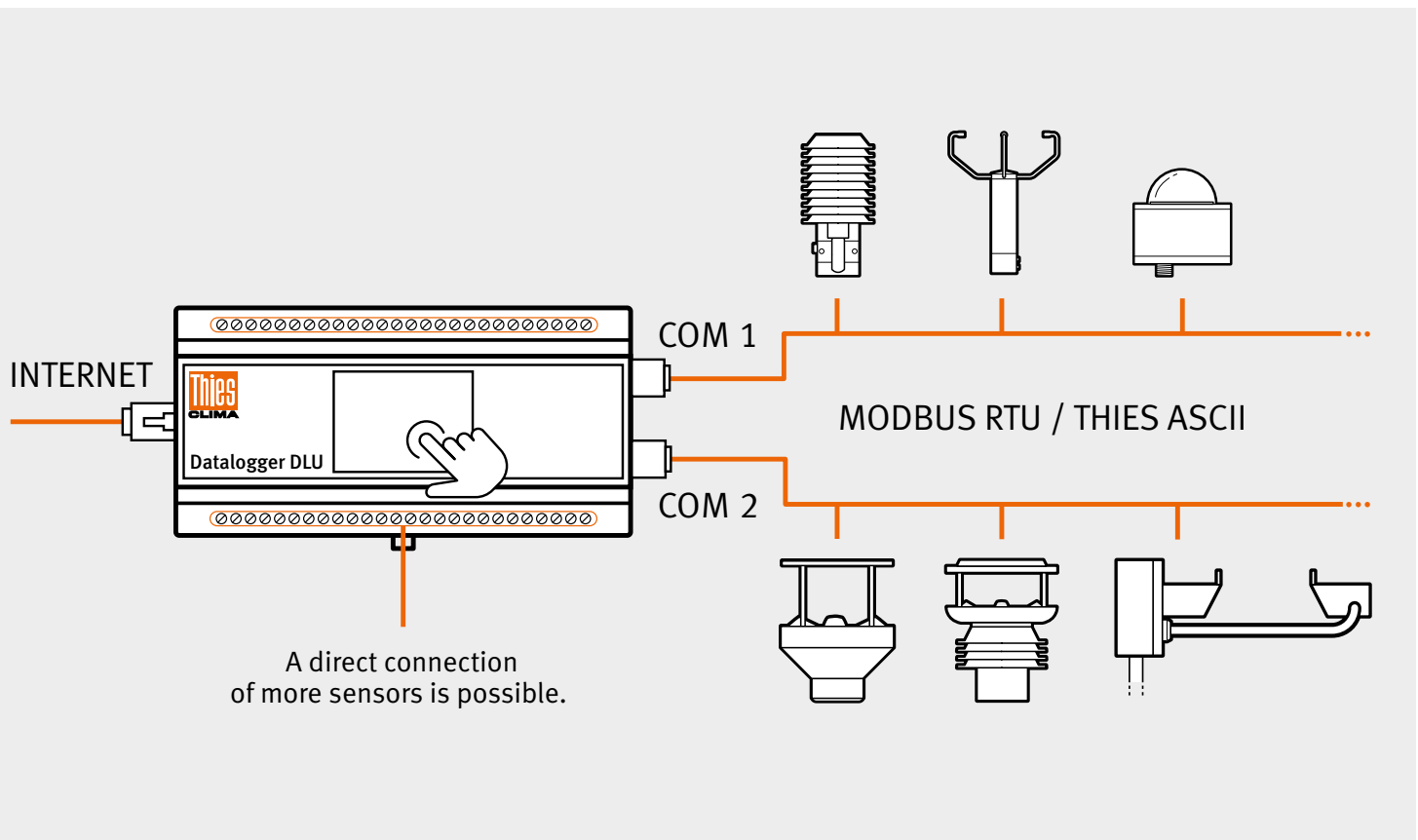
The data query occurs via Ethernet, via one of the two interfaces RS485/422, or via an optionally available WLAN module for the USB port. All interfaces support the data query in ASCII format. The data can be enquired via Ethernet and WLAN additionally in binary format and FTP.

An internal WEB server serves for displaying the instantaneous and archival values, and for configuration. The configuration can be carried out in addition also „offline“ via Windows tool.

The datalogger DLU is designed for indoor installation. Outdoor application requires an additional cover housing with respective degree of protection

Request detail information for your planning.





The internal WEB server displays the instantaneous measuring values clearly-arranged as text and as diagram. The measuring values are, device-specifically, prepared by the WEB server and optimally displayed, depending if the data query comes from PC, tablet and smartphone. A simple data visualization is, thus, possible without additional software.

The datalogger supports also the display of stored measuring values, and different setting options, such as the change of scaling.

Our well-proven MEVIS program is available for PC-supported data query.



DATALOGGER DLU

TECHNICAL DATA

Order-No.: 9.1711.10.010

Power Supply	
Supply	24 V AC (18.5 ... 27.6 V AC), 50 / 60 Hz, 0.5 A (max. 2 A), 24 V DC (18.0 ... 36.0 V DC), 0.5 A (max. 2 A)
Accumulator	12 V DC, 7 Ah
Solar panel	nominal voltage 15 ... 18 V (max. 23.5 V offload voltage), max. 20 W
Mean power supply	min. 1.7 mA (display off, power save mode active) max. 32 mA (display on, max. pulse frequency)

Ambient Conditions	
Operating temperature	-30 ... +70 °C
Storing temperature	-30 ... +80 °C
Humidity	max. 100 % rel. h., non-condensing

Analogue Measurement	
A / D converter	16 bit resolution with differential inputs and 50 / 60 Hz suppression
Accuracy	±0.1% of measuring span of sensors, without long-term drift ±0.1 °C
Channels	1 x supply voltage / battery voltage (0 ... 15V) 1 x battery power (±4 A) 1 x temperature PT100 (-40 ... 70 °C) 1 x rel. h. (0 ... 1 V correspond to 0 ... 100 % rel. h.) 3 x analogue inputs (0 ... 10 V or 0 ... 20 mA)

Digital Measurement (In- / output)	
Channels	2 x pulse inputs (e.g. Reed contact precipitation bucket) 2 x Thies serial synchronous for wind direction sensors
COM1	Potential-free interface RS485: • half / full-duplex mode, switchable via SW • connection of serial sensors possible • command interpreter available • baud rates 1200 ... 230400 baud • framing settable (8N1, 8E1, 801, 851, 8M1)
COM2	Interface RS485: • termination (120 Ω) switchable via SW • connection of serial sensors possible • command interpreter available • baud rate 1200 ... 230400 baud • framing settable (8N1, 8E1, 801, 851, 8M1)

Outputs	2 potential-free, electronic switch contacts with power limiting Power limiting: typ. 0.2 A max. Voltage at open contact: 50 V DC, 35 V AC
Measuring cycle	1, 2, 3, 4, 5, 6, 10, 12, 15, 20, 30 s 1, 2, 3, 4, 5, 6, 10, 12, 15, 20, 30, 60 min.
Storing cycle	1, 5, 10, 15, 20 30 s 1, 2, 3, 4, 5, 6, 10, 12, 15, 20, 30, 60 min.
Time basis	real time clock with automatic leap year detection. accuracy of clock settable (+2.8 ... -2.8 min. / day)
Storing capacity	firmware: 1 MB (flash, update via USB- or SD-card) data: 64 MB (flash) configuration: 64 KB (flash)
Number of data records	depending on configuration example: 276192 data records (14 channels)
Storing time	depending on configuration Example: 191.8 days (14 channels, storing cycle 1 min.)

Data output	
USB	USB 2.0 full speed device
COM1	RS485 half- or full duplex (potential-free)
COM2	RS485 half- or full duplex
Ethernet	Telnet / FTP / HTTP
Memory card	SD card formatted by FAT16 / FAT32 / ExFAT, compatible to Microsoft® Windows® and MS-DOS®

General	
Operation	At the instrument: • 2.4 " color display with touch display Via remote control: • via COM1, COM2, Ethernet or USB
LCD display	2.4 " color display (320 x 240 pixel)
Mounting	Snap-in mounting 35 mm standard track DIN EN 60 715, TH35
Connection	32 terminals, Ø max. 2.5 mm ²
Housing	Synthetic material
Protection	IP 20
Dimensions	157 x 86 x 58.5 mm (9 TE)

Please contact us for your system requirements. We advise you gladly.



ADOLF THIES GMBH & CO KG
 Meteorology and Environmental Technology
 Box 3536 + 3541 · 37025 Göttingen · Germany
 Phone +49 551 79001-0 · Fax +49 551 79001-65
 info@thiesclima.com

www.thiesclima.com

