



High-accuracy data acquisition + usability + connectivity = **dydaqlog**. Our **dydaqlog** datalogger unites the advantages of flexible adjustable sensor inputs, accurate and reliable data recording with simple, intuitive setup and operation, as well as seamless connectivity to industrial cloud solutions. The measured data are available anytime, anywhere in the Industrial Internet of Things IIoT.

Features

- Compact and robust aluminium enclosure - splash water protected
- 16 analog inputs, 24-bit resolution, max. 10 Hz sampling rate per channel
- All analog inputs can be configured independently
- Direct connection of thermocouples, PT50/100/500/1000, strain gauges
- WLAN/LAN interface for configuration and data transfer
- Powerful ARM[®] processor with integrated webserver
- Convenient web interface for configuration and data display

Analog Inputs

The **dydaqlog** datalogger provides 16 differential analog inputs with 24-bit resolution and 10 Hz sampling rate. Every channel can be configured individual for direct connection of thermocouples, RTDs or strain gauges in bridge circuit. External Sensors and I/O-Modules can be connected via MQTT protocol.

Processor and Firmware

Inside the **dydaqlog** datalogger a powerful ARM[®] processor handles the preparation and processing of the measured data. The measuring channels can be calculated online or monitored for threshold values (limits). Alarms trigger actions like switching digital outputs or sending e-mails. In addition to the internal storage, the

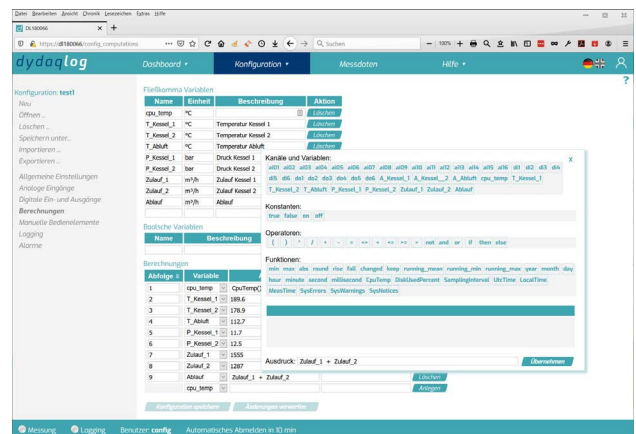
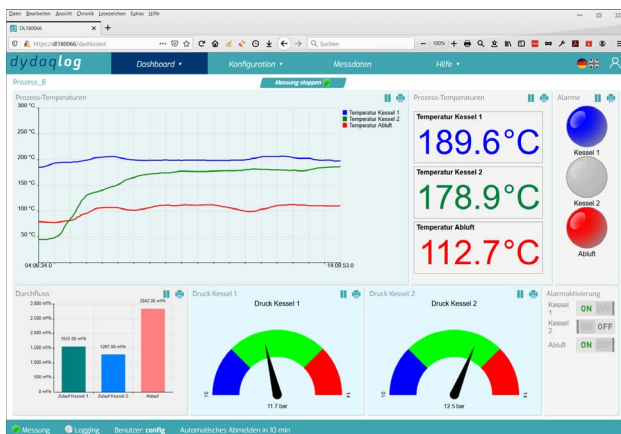
measurement data can also be transmitted directly to a higher-level server or into a data cloud.

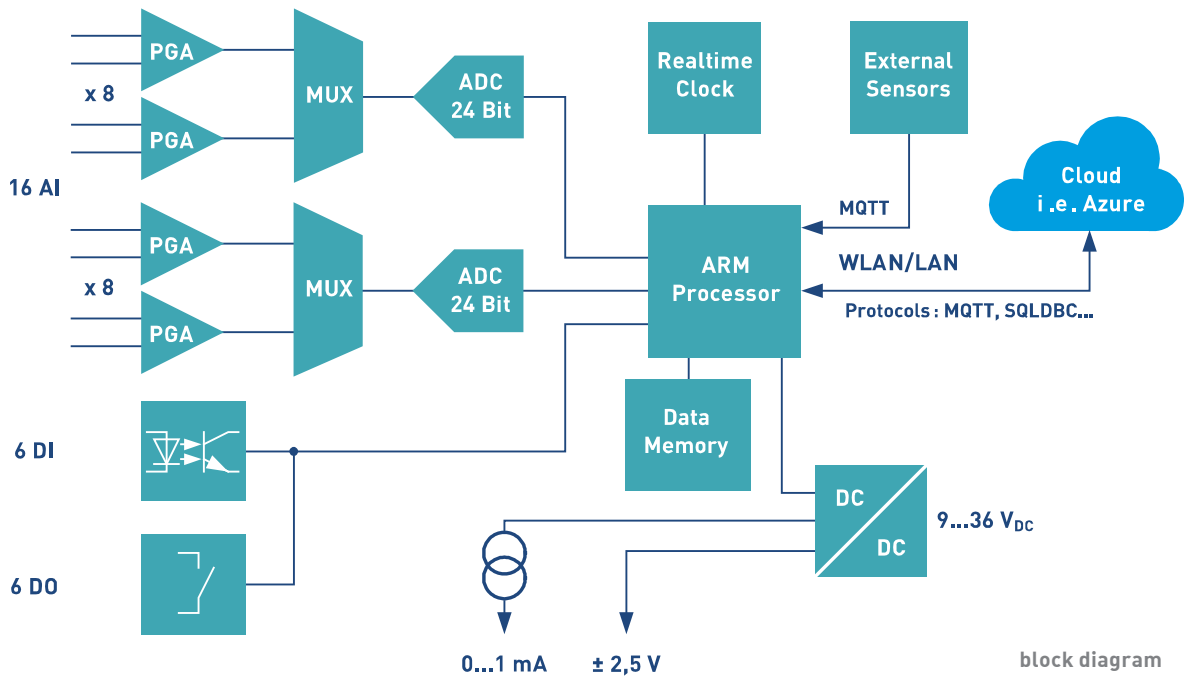
Connectivity

The communication with **dydaqlog** takes place via WLAN or LAN. For data transfer into a cloud the MQTT protocol is supported. For initial operation the datalogger starts as WLAN hotspot. After connecting with a notebook, smartphone or tablet the further configuration can be done via a webbrowser.

Webinterface / Mobile App

Each **dydaqlog** is not just a datalogger, it is a powerful web server at the same time. All functions can be set up and managed in a browser via the modern web interface. Measurement data can easily be represented online or offline.





block diagram

Specifications

• Analog Inputs	
Channels	16 differential
A/D Converter	Sigma-Delta
Resolution	24-bit
Sampling Rate (max.) per Channel	10 Hz
Input Ranges	± 10 / 5 / 3 / 1,6 V
	± 800 / 400 / 200 / 100 mV
	± 20 mA / 0 ~ 20 mA
Input Resistor	1 MΩ
Input Coupling	DC
Sensor Connection	Thermocouples Type B, E, J, K, N, R, S, T
	PT50 / 100 / 500 / 1000
	Resistors
	Resistive Bridge Transducer
• External Inputs	
	Connection of external Sensors and I/O-Modules via MQTT or Modbus
• Digital Inputs	
Channels	6 opto coupled
Level	TTL, L: ≤ 0,8 V / H: ≥ 2,4 V (max. 24 V)
• Digital Outputs	
Channels	6 elektronic Relays
Switching Power	40 V max. @ 1 A

• Processor	
Type	ARM® Microprocessor
• Data Memory	
Type	MicroSD Card internal
Size	1 G Samples
• Host Interface	
Type	WLAN, LAN
Cellular radio (optional)	Configuration and handling via webinterface, Transmission of Messages, E-Mails, Data transmission via MQTT, FTP
• General	
Unit Power	10 ~ 36 V _{DC}
Operating Temperature	0 to +50 °C
Enclosure	Aluminium, all around IP65
Dimensions (W x H x D)	211 x 70 x 208,5 mm

Order Information

Part Number	Description
DL-V-002-A1	dydaqlog IloT Datalogger with 16 analog in, 6 digital in, 6 digital out
Shipment	dydaqlog IloT Datalogger WLAN antenna, Power Supply
DL-V-Z001-A1	Outdoor-Case (Polypropylen)
DL-V-Z003-A1	DIN-Rail Mounting Set
DL-V-S0-001	Software Extension Definition of own Sensor Types
DL-V-S0-002	Software Extension Data Import via MQTT



gbm
 gbm mbH · Lehmkuhlenweg 16 · 41065 Mönchengladbach · Germany
 Phone +49 (0) 2161.30899.0 · Fax +49 (0) 2161.30899.1
 Sales: sales@gbm.de · Support: support@gbm.de · www.gbm.de