

# dydaqmeas®



“Data Aquisition - accurate,  
universal and web-based”

dydaqtec®  
MESSTECHNIK

# Data Aquisition - universal and web-based

Data aquisition - accurate, universal and web-based = **dydaqmeas®**.

Our **dydaqmeas** data aquisition system combines the advantages of flexible, adjustable measurement inputs, precise and fast data acquisition with comfortable, intuitive setup and operation via web interface and seamless connection to industrial cloud solutions. The measured data is available anytime and anywhere in the IIoT.

## Measurement Inputs

The **dydaqmeas** data aquisition system has 8 differential analog inputs with 24-bit resolution and up to 256kHz sampling rate. The inputs for measuring voltages, currents or the direct connection of IEPE sensors can be configured per channel. Two of the 6 digital inputs can be used as counter inputs and three more as a quadrature decoder input.

## CPU and Firmware

Inside the **dydaqmeas** data aquisition system, a powerful ARM® CPU edits and processes the measured data. For example the measurement channels can be saved, can be offset against each other online, subjected to a FFT calculation or monitored for threshold values. Alarms trigger actions such as switching digital outputs or sending e-mails.

## Connectivity

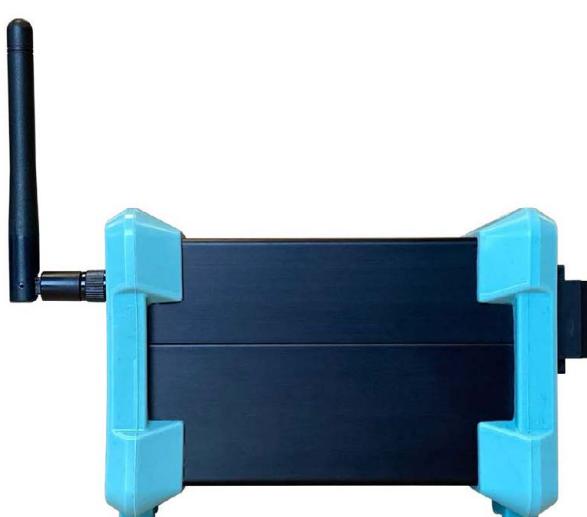
The **dydaqmeas** can communicate via WLAN or LAN. The MQTT protocol is supported for data transmission of individual values to a cloud. Larger amounts of data can be transferred, for example, via the FTP protocol. Optionally, data or messages can be sent via a cellular-interface.

## Webinterface / Mobile App

Each **dydaqmeas** data aquisition system is also a powerful edge computer with an integrated web server. All functions can be set up and managed via the modern web interface in a browser. The measured data can be displayed on individually designed dashboards in a web browser worldwide.



**dydaqmeas** with 8 analogue inputs, digital I/O and a powerful ARM®CPU



dydaqmeas

dydaqmeas

Konfiguration: test1

Analoge Eingänge

	Name	Beschreibung	Modus	Bereich	Skalierung
<input checked="" type="checkbox"/>	ai01	Temperatur Kessel 1	Thermoelement Typ J	-210 ... +1200 °C	<input checked="" type="checkbox"/> Schaltbild
<input checked="" type="checkbox"/>	ai02	Temperatur Kessel 2	Thermoelement Typ J	-210 ... +1200 °C	<input checked="" type="checkbox"/> Schaltbild
<input checked="" type="checkbox"/>	ai03	Temperatur Ablauf	Thermoelement Typ J	-210 ... +1200 °C	<input checked="" type="checkbox"/> Schaltbild
<input checked="" type="checkbox"/>	ai04	Analog Input Channel 4	Spannung (V)	-10 ... +10 V	<input checked="" type="checkbox"/> Bearbeiten <input checked="" type="checkbox"/> Schaltbild
<input checked="" type="checkbox"/>	ai05	Analog Input Channel 5	Spannung (V)	-10 ... +10 V	<input checked="" type="checkbox"/> Bearbeiten <input checked="" type="checkbox"/> Schaltbild
<input checked="" type="checkbox"/>	ai06	Analog Input Channel 6	Strom		
<input checked="" type="checkbox"/>	ai07	Analog Input Channel 7	Strom		
<input checked="" type="checkbox"/>	ai08	Analog Input Channel 8	Spannung (V)		
<input checked="" type="checkbox"/>	ai09	Analog Input Channel 9	Spannung (V)		
<input checked="" type="checkbox"/>	ai10	Analog Input Channel 10	Spannung (V)		
<input checked="" type="checkbox"/>	ai11	Analog Input Channel 11	Thermoelement		
<input checked="" type="checkbox"/>	ai12	Analog Input Channel 12	Thermoelement		
<input checked="" type="checkbox"/>	ai13	Analog Input Channel 13	Thermoelement		
<input checked="" type="checkbox"/>	ai14	Analog Input Channel 14	Spannung (V)		
<input checked="" type="checkbox"/>	ai15	Analog Input Channel 15	Spannung (V)		
<input checked="" type="checkbox"/>	ai16	Analog Input Channel 16	Spannung (V)		

Konfiguration speichern Änderungen verwerfen

Sie haben Änderungen an der Konfiguration vorgenommen.

Messung Logging Benutzer: config Automatisches Abmelden

dydaqmeas

dydaqmeas

F1 F2 F3 F4 F5 F6 F7 F8 F9 F10 F11 F12 F13 F14 F15 F16

Messung stoppen

Analoge Eingänge

ai01 ai02

Volmeter

Generator 3.61 V Prüfsignal -2.34 V

System

batterie 100.00 % Kondensator 96.07 %

CPU Health

CPU Temp 47.70 °C

FFT

0 Hz 1000 Hz 2000 Hz 3000 Hz 4000 Hz 5000 Hz 6000 Hz 7000 Hz 8000 Hz 9000 Hz 10000 Hz

Messung Logging Benutzer: config Automatisches Abmelden in 10 min

USB Speicher auswerfen 100 %

Comfortable and intuitive configuration of the measuring application in the web browser.

Design and assignment of different dashboards for any number of users - accessible from anywhere in the world.

## Features at a Glance

- Intelligent, web-based data aquisition system
- 8 analog inputs, 24-bit resolution, max. 256 kHz sampling rate per channel
- All analog inputs can be configured independently from each other
- Direct connection of voltage, current and IEPE sensors
- WLAN/LAN interface for configuration and data transmission
- Powerful ARM® CPU with integrated web server
- Various mathematical functions for online processing of measured data
- Comfortable web interface for configuration and data display

# Specifications

## Analog Inputs

Number	8 differential
A/D-Converter	Sigma-Delta
Resolution	24 Bit
Sampling rate (max.) per channel	256 kHz
Sum sampling rate (max.)	800 kHz
Input impedance	0,9 MΩ
Coupling	AC/DC per channel adjustable
Oversupply protection	± 42 V
Input voltage range	± 10 / 1 V
Input current range	± 20 / 0~20 mA
Sensor supply	24 V switchable for each channel
Sensor connection	IEPE sensors switchable 4 mA current source
Galvanic isolation	Behind A/D converters between analog and digital part
Connection terminals	Phoenix terminal block (6-pin) + SMB socket

## Digital Inputs

Number	6
Level	TTL, L: .0,8 V / H: .2,4 V (max. 40 V )
Additional functions	2 digital inputs can be used as t counter inputs Measurement modes: frequency, period, pulse width Input Frequency: 1Hz~1MHz  3 digital inputs can be used as 1 quadrature encoder Operating mode: 4 times Input signal: max. 30,000 rpm with an encoder with 1000 increments

## Digital Outputs

Number	2 Electronic relays
Switching voltage	40 V max. @ 1 A

## CPU

Type	Quad-Core ARM-Cortex-A72 with 1,5 GHz frequency
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## Data Storage

Type	eMMC
Size	1 GSamples expandable via USB stick

## Host-/Data-Interface

Type	WLAN, LAN optional GPRS, G4/LTE
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## General

Power supply	10 ~ 36 V <sub>DC</sub>
Operating temperature	0 to +40 °C
Housing	Aluminum
Dimensions (W x H x D)	182 x 95 x 146 mm

## Order Information

Article No.	Description
DM-V-002-A1	<b>dydaqmeas</b> data aquisition system with 8 analogue inputs, 6 digital inputs, 2 digital outputs
Scope of delivery	<b>dydaqmeas</b> data aquisition system, WLAN antenna, power supply
DL-V-Z001-A1	Outdoor-Case made of polyp- ropylene