



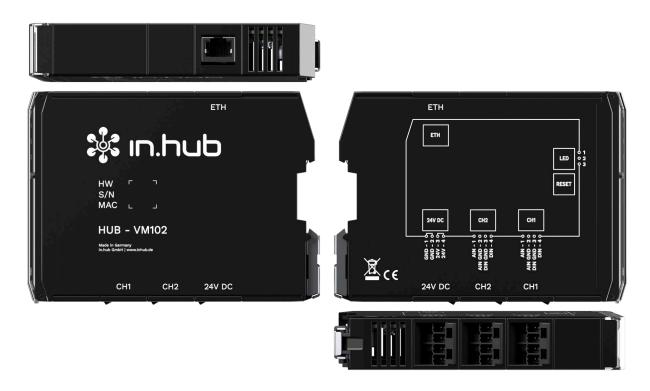
# **HUB-VM102**

# Technical data sheet

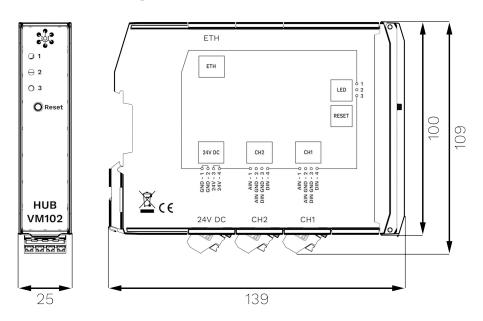
Document version 1.1 | Released on: 25. April 2025

#### Views of the HUB-VM102

#### **Device views**



### Schematic diagram



Dimensions of the HUB-VM102 in mm

## **Technical data**

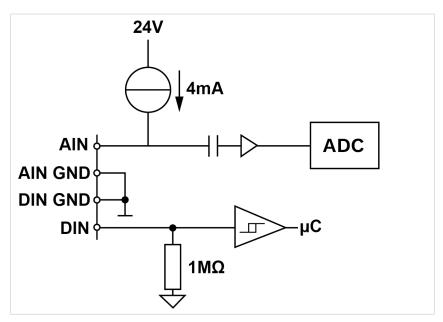
Data	
Power supply	24 V DC ± 10 %
Current consumption	~130 mA
Microcontroller	166 MHz, 32 Bit ARM Cortex M7
Storage	16 MB
Data interfaces	Ethernet: 100 Mbit/s
	3× status LEDs
	Backplane bus
Connections for peripheral devices	2× analogue input for IEPE vibration and acoustic sensors
	2× digital input (max. 30 V and max. 10 kHz)
Protocols	MQTT client
	Modbus TCP/IP server
Housing	Plastic (polyamide), black, flammability class UL 94 V0
Protection class	IP20
Dimensions	139 mm × 100 mm × 25 mm
Weight	142 g

Ambient conditions	
Temperature range	Storage: -40°C to 85°C
	Operation: 0°C to 50°C
Humidity	Storage: 10% to 95% RH, non-condensing
	Operation: 20% to 90% RH, non-condensing
Operating altitude	Max. 2,000 m above sea level

## Specification of the CH1 and CH2 interface

Digital input DIN	
Switching threshold	between 1 V and 12 V (2.5 V default)   0.5 V hysteresis
Input resistance	1 ΜΩ
Bandwidth	10 kHz
Permissible input voltage range	-3 to 30 V

Analogue input AIN		
Function	Connection for IEPE-compliant sensors for vibration monitoring	
Connection	One IEPE sensor per channel; data can be recorded synchronously	
Power supply for IEPE sensors	~4 mA and monitoring of the IEPE voltage	
Maximum AC input level	6 V <sub>eff</sub>	
IEPE channel bandwidth	0.5 Hz to 10 kHz	
ADC sampling frequency	48 kHz	
ADC resolution	24 bit	



Circuit diagram of the CH interface (CH1 and CH2 are identical)

## **Backplane bus specification**

Backplane bus	
Voltage on the backplane bus	Voltage of the power supply unit minus 0.5 V
	Switchable in the signals of the master gateway
Communication	Modbus RTU
Max. number of additional modules	3
on one master gateway	

This document is available in electronic form in the download portal of in.hub. Printed versions or copies not explicitly provided by in hub are deemed uncontrolled

The original language of this document is German.

Made in Germany

Service & Support: service@inhub.de | https://community.inhub.de/

in.hub Download portal: https://download.inhub.de/



in.hub GmbH Technologie-Campus 1 DE-09126 Chemnitz

+49 371 335 655 00 info@inhub.de