eNetMini-2105-1 Datasheet

The eNetMini-2105-1 provides you with various environmental sensors. It works both stand-alone and integrated into control systems in industry or in the home user area (e.g. openHAB, **Node-RED**).

The eNetMini is a stand-alone part of a whole series, for connecting different sensors and actuators for industrial applications and the home environment. The network interface is used for communication (**HTTP, JSON REST-API, MQTT**) as well as for power sipply of the device vie PoE. The integrated HTTP server enables convenient setting of all systemically relevant parameters.

All software interfaces are based on open protocols. Thus, all devices can be operated directly in your network environment without registration, app or cloud connection. This offers the highest possible protection for your data.

The eNetMini-2105-1 designed as a single-board computer. A housing is optinally available or can be printed yourself. The housing, a 3D model of the board and other material are available on GitHub.

Applications

- Room monitoring
- Air conditioning controllable
- Home automation

You can find more information about our products and services at www.enetmini.com

07/2026

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Sensors

- Magnetic switch
- Ambient light sensor
- Pressure sensor
- Temperature sensor
- Humidity sensor
- PIR Motion Sensor

Communication Interface

- RJ45, LAN Ethernet 10/100MBit
- M2M Kommunikation
- MQTT Client
- HTTP Homepage
- REST JSON-API

Other Interfaces

- 2 RGB-LEDs controllable with PWM

Power supply

- Power over Ethernet IEEE 802.3af
- Cooling via natural convection (no fan)

Technical Data

Dimensions LxWxH [mm]	58.15 x 55 x 19.3	
Ambient temperature [°C]		
-Operation	min: 0	max: 50
-Storage	min: −20	max: 70
Air humidity [% r.H.]	min: 0	max: 90
Power supply		
-Network PoE	IEEE802.3af, Class 0	
-Voltage [V]	min: 18	max: 48
-power consumption [W]	typ: 0.5	max: 3.84
Magnetic Switch		
Magnetic Sensitivity [AT]	min: 10	max: 15
Ambient Light Sensor		
Optical range [lux]	min: 0.01	max: 83,000
Measurement output result (2000 lux input)[lux][1]	min: 1800	max. 2200
Relative accuracy [%]	2	
Linearity (<40 lux) [%]	5	
Linearity (>40 lux) [%]	2	
Temperature Sensor		
Absolute accuracy [°C]	± 1	
Humidity Sensor		
Humidity range [%RH]	min: 0	max: 90
Absolute accuracy [%RH]	± 3	
Pressure Sensor		
Absolute accuracy [hPa][1]	± 1	
Relative accuracy [hPa]	± 0.12	
PIR Motion Sensor		
Aperture angle [°]	± 45	
Maximal distance [m]	5	

[1]Calibration of sensors possible on request

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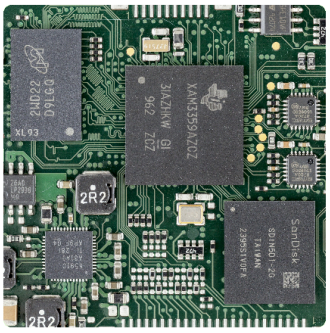
Datasheet

SYSTEMS
DEVICES
PROTOTYPES

HARDWARE
SOFTWARE
DEVELOPMENT



develop

test

assemble

ASSEMBLY
SMD / THT
AOI

COMPETENCE
QUALITY
SERVICE

CONTROLLER
LINUX
NODE RED

EMBEDDED
MODULES
SENSORS

REMOTE IO
REST / MQTT
POE

You can find more information about our products and services at www.mkc-gmbh.com

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