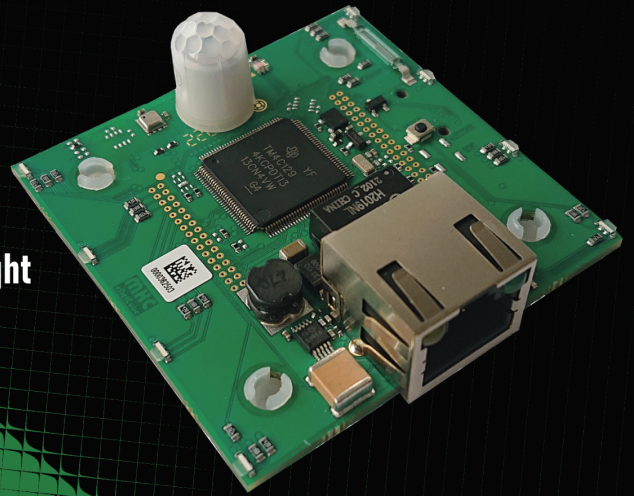


## eNetMini 2105-1

- HTTP, JSON, REST API, MQTT Client
- Magnetic Switch, Motion Detector
- Sensors for Pressure, Humidity, Temperature and Light
- Standalone, no cloud registration required
- Power supply directly via the network (PoE)



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 supply of the device via 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 optionally 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](http://www.enetmini.com)

## 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] <sup>1</sup> | 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] <sup>1</sup>                         | ± 1                  |             |
| Relative accuracy [hPa]                                      | ± 0.12               |             |
| PIR Motion Sensor                                            |                      |             |
| Aperture angle [°]                                           | ± 45                 |             |
| Maximal distance [m]                                         | 5                    |             |

<sup>1</sup>Calibration of sensors possible on request



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The image shows the MKC aNet Vario module, a white rectangular device. On the top surface, there are four green RJ45 ports labeled ETH0, ETH1, ETH2, and ETH3. The front panel features the MKC aNet Vario logo, a green status LED, and several status LEDs labeled LED0, LED1, LED2, and PWM. It also has three USB ports labeled USB0, USB1, and USB2, and a microSD card slot. The bottom right corner of the front panel is labeled ETH0 / PoE.

CONTROLLER  
LINUX  
NODE RED

A close-up photograph of a black MKC Ethernet module. The module has a standard RJ45 port with yellow, green, and blue pins visible. Below the port is a small circular LED indicator. A white label on the side contains the following information:  
MKC  
Richard J. Mitchell  
Customer Support  
Product: MKC-ETH-01-01  
Part No.: 77-101-01  
Rev: 1.0

develop

# assemble



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