

MIVO CONNECT

SMART DATA GATEWAY

MIVO Connect Smart Data Gateway collects data from up to 2000 meters or sensors. The data is collected using internal or external interfaces which include M-Bus, M-Bus over IP or Modbus RTU/TCP.

The collected data can be communicated to one or more user defined services, these include cloud-based services and local building management systems.

To prevent data loss in case of network or power failures the device contains local storage. The device also features router functionality and a user friendly web interface to simplify the administration and troubleshooting process.

The built in expansion bus provides an easily expandable and future proof solution.

Modern web interface for easy installation, configuration, and troubleshooting

In the web interface you can read data, check connections, and retrieve historical data.

Flexible scheduled reports for one or more external systems

Each scheduled export is entirely individual and can be configured with different meters, delivery formats, data resolution and reporting intervals. The intelligent data collection engine optimizes data in the most efficient way.

Built-in M-Bus decoding for easy integration

MIVO Connect Smart Data Gateway has a complete M-Bus decoder that has been tested for many years in operation with most meter manufacturers on the market. When delivering data to higher-level systems, meter readings can be normalized to the desired unit and scaling, simplifying integration.

Delivery of meter readings via standardized transport protocols

The device supports the most common transport protocols: HTTP(S), FTP(S), MQTT, and has predefined report formats and is regularly expanded with new formats.



Easy integration with local control systems

The Device can integrate with DUCs (Data Utilization Center) via M-Bus over IP, ModBus RTU, and ModBus TCP. The built-in web interface makes it easy to configure and generate Modbus mappings and associated Excel documentation.

Internal storage safeguards against data loss

The internal storage protects against data loss in case of internet connection issues or potential data loss in higherlevel systems.

Expandable, upgradeable and future-proof

MIVO Connect Smart Data Gateway features a smart modular system, allowing the device to be expanded with new physical interfaces or software functions as future needs arise.



MIVO

TECHNICAL SPECIFICATION

Mechanics

| | |
|------------------------|------------------------------------|
| Dimensions (w x h x d) | 70 x 85 x 57 mm (4 DIN-modules) |
| Montage | 35mm DIN |
| Weight | 200g |
| Protection class | IP20 |

Environmental

| | |
|-------------------------|---------------------------|
| Storage temperature | -25 to +55 C |
| Operating temperature | -25 to +55 C |
| Operating humidity | 5 till 90% Non-Condensing |
| Max. operating altitude | 2000m |
| Pollution degree | 2 |
| Operating environment | Indoors |

Power

| | |
|-------------------------|--|
| Input voltage | 230 VAC ($\pm 10\%$), 50Hz |
| Power consumption (max) | <5W (20W) |
| Overvoltage category | CAT 3 (OVC III) |
| Connection terminals | Spring loaded terminals 0.75 - 1.5mm ² |

Ethernet - 2st (WAN / LAN)

| | |
|----------------------|------------|
| Connection | RJ45 |
| Speed | 10/100MBit |
| Router functionality | Yes |

LTE *

| | |
|------------|----------------|
| Typ | LTE Cat-M |
| SIM | Mini-SIM (2FF) |
| Connection | SMA |

M-Bus Master

| | |
|------------------------|--------------------|
| Standard | EN 13757 |
| Speed | 300/2400/9600 Baud |
| Nominal voltage | 30V |
| Maximum output current | 85mA |
| Unit loads | 32** |
| Maximum cable length | 1000m |
| Electrical isolation | 1500V |

RS485 (Modbus RTU)

| | |
|-------------------------|--|
| Type | Non-isolated |
| Speed | 9600 to 115200 Baud |
| Termination | None |
| Biasing | Weak (1kOhm) |
| Maximum number of nodes | 10 ** |
| Maximum Cable Length | 30m |
| Connection | Spring Loaded Terminals (0.75 - 1.5 mm ²) |

Other Connections

| | |
|-----------------------|-----------|
| Expansion bus | MIVO-Link |
| USB Connection Front | USB-C |
| USB Connection Bottom | USB-A |

Other

| | |
|---------------------------|--|
| Maximum Number of Sensors | 2000 |
| Collecting Period | 1min - 24h |
| Storage Examples ** | |
| | - 100 sensors, hourly values -> 20 years |
| | - 1000 sensors, hourly values -> 2 years |
| | - 2000 sensors, hourly values -> 1 year |

Approvals

| | |
|-------------|----------------------------|
| EMC | EN 61000-6-2, EN 61000-6-3 |
| RED | EN 301489-1, EN 301489-7 |
| Safety | EN 62368-1 (OVC III) |
| Environment | RoHS, WEEE |

* Optional

** Can be increased with expansion modules.

