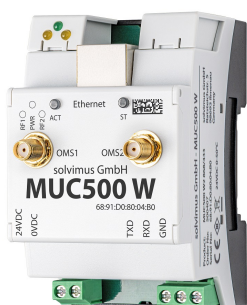




## 1. Product

- MUC500 W1, Order Nr. 500406
- MUC500 W2, Order Nr. 500407



## 2. Application

Data concentrator for readout of meters and data transmission to distant meter data management systems via Ethernet.

## 3. Interfaces

### wM-Bus

Compliant to EN 13757-4/-3/-7 and OMS (modes: S, T, C, C/T), SMA connector for external antenna(s), frequency(-ies):

- 868 MHz (MUC500 W1, Order Nr. 500406)
- 868 MHz and 433 MHz (MUC500 W2, Order Nr. 500407)
- or frequency upon request

Listen mode (automatic creation of meters), transparent mode, handling of keys, decryption of meters

### Ethernet

Compliant to IEEE 802.3, 10/100-Base-TX, RJ45 connector incl. status LEDs, Auto-MDIX

### Modbus

Readout of meters via Modbus TCP, compliant to IEC 61158, using the Ethernet interface

## RS-232

Compliant to ANSI EIA/TIA-232-F-1997, screw terminals

## 4. LED indicators

2 status LEDs and 3 LEDs signalling power supply and reception on the wM-Bus

## 5. Software functions

The user interface of the software is available only in English.

As indicated for the firmware in the manual, update of the firmware via Ethernet incl. integrity check and authentication

## Configuration

- Complete configuration via browser: HTTP and HTTPS
- Creation of the meter list
- Mass deployment with Netdiscover via HTTP and HTTPS
- Unequal readout intervals for meters
- Multi Channel Reporting with 10 independent Report instances
- Usage of OBIS-Codes
- Integrated OpenVPN client
- Extensive management of user access rights
- Export and import of the configuration including certificate and key files
- Update via the web page or Netdiscover
- Print page for error analysis and documentation
- Extensive logging function

## Data transmission to servers:

- TCP (unencrypted)
- TLS (encrypted)
- SMTP (encrypted and unencrypted)
- FTP (encrypted and unencrypted)



- MQTT (encrypted and unencrypted)
- Local file storage (local file)
- User-specific scripts, for instance with usage of cURL

#### Data transmission to clients:

- Modbus TCP<sup>1</sup>
- BACnet/IP<sup>1</sup>

#### File formats:

CSV (various variants), XML (various variants), JSON, user-specific formats (by transformation language XSLT)

## 6. Processing unit

The processing unit is a microprocessor system:

- CPU: ARM9 architecture, 454 MHz clock frequency
- Memory: 128 MB RAM, 4 GB internal eMMC Flash
- Operating system: Linux
- Integrated RTC: backed-up for up to 7 days

## 7. General properties

- Dimensions: 54 × 90 × 60 mm (W × H × D, without antenna socket), 3 modules wide
- Installation: DIN rail 35 mm (IEC 60715), arbitrary orientation
- Mass: 140 g

## 8. Power supply

- 12..36 VDC, screw terminals
- Power consumption: 2W (idle state), max. 3 W
- Peak inrush-current: approx. 4 A

## 9. Environmental conditions

- Operation: 0..50°C (daily average)
- Transport and storage: -20..70°C (short-time)
- Air humidity: 0..95 %, non-condensing

## 10. Conformity and safety

- 2014/30/EU EMC Directive
- 2014/53/EU Radio Equipment Directive
- 2011/65/EU RoHS Directive (incl. amendment 2015/863)
- 1907/2006/EC REACH Regulation (Annex XVII April 28 2020)
- Overvoltage protection (transient)
- Protection class III (IEC 61140)
- Degree of protection IP20 (IEC 60529)

## 11. Scope of delivery

- MUC500 W1 (Order Nr. 500406) resp. MUC500 W2 (Order Nr. 500407)
- 1 antenna for wM-Bus for MUC500 W1 (Order Nr. 500406) resp. 2 antennas for wM-Bus for MUC500 W2 (Order Nr. 500407)
- Quick Start Guide (print, in the packaging)
- Individual packaging with solvimus logo
- Dimensions: 150 × 77 × 140 mm (W × H × D)

## 12. Contact

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98693 Ilmenau  
Germany  
Phone: +49 3677 7613060  
E-Mail: info@solvimus.de  
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#### Sales:

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# SOLVIMUS

METERING SOLUTIONS

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## DATA SHEET MUC500 W

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Version 1

Page 3/3

### Support:

Phone: +49 3677 7613065

E-Mail: [support@solvimus.de](mailto:support@solvimus.de)

Further contacts can be found on our website at:  
<https://www.solvimus.de/en/company/solvimus/>

A comprehensive description of the device is provided in the manual that can be accessed via the Help button on the configuration website of the device and can be downloaded free of charge and without registration from our homepage:

<https://www.solvimus.de/en/products/downloads-2/>

Our Quick Start Guide is also available upon request.

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<sup>1</sup> Separate licence can be acquired.

