

# DATA SHEET MUC.EASYPLUS

Version 1 Page 1/3

### 1. Product

MUC.easy<sup>plus</sup>, Order Nr. 500361



## 2. Application

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

# 3. Interfaces

### M-Bus

Compliant to EN 13757-2/-3/-7 (all M-Bus meters are compatible), max. 80 unit loads (UL), baud rate: max. 19200 bps, screw terminals, primary, normal and reversed secondary search (wildcard search), automatic and direct creation of meters, transparent mode

#### wM-Bus

Compliant to EN 13757-4/-3/-7 and OMS (modes: S, T, C, C/T), SMA connector for external antenna, frequency: 868 MHz, 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

#### **RS-485**

Compliant to EIA-485, up to 32 remote units, screw terminals, directly supported protocols: Modbus RTU, EN 62056-21, SML, transparent mode

#### Modbus

Readout of meters via Modbus TCP (using the Ethernet interface, compliant to IEC 61158) or Modbus RTU (using RS-485)

#### **S**0

Compliant to EN 62053-31, number: 3, screw terminals

### **Digital output**

24 VDC, 50 mA, number: 1, screw terminals

### 4. LED indicators

3 LEDs signalling power supply, status, activity

### 5. Software functions

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

As indicated for the firmware in the manal, 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 SHEET MUC.EASYPLUS

Version 1 Page 2/3

#### 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:  $72 \times 91 \times 61 \text{ mm}$  (W × H × D, without antenna socket), 4 modules wide
- Installation: DIN rail 35 mm (IEC 60715), arbitrary orientation
- Mass: 210 g

### 8. Power supply

- 90..260 VAC, 50..60 Hz, screw terminals
- Power consumption: 2 W (idle state), max. 10 W
- Peak inrush-current: <40 A
- Galvanic isolation of interfaces and mains:  $>\!\!3~\text{kV}$

### 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
- 2014/35/EU Low Voltage Directive
- 2011/65/EU RoHS Directive (incl. amendment 2015/863)
- 1907/2006/EC REACH Regulation (Annex XVII April 28 2020)
- Overvoltage category III (EN 60664-1)
- Protection class II (IEC 61140)
- Degree of protection IP20 (IEC 60529)

### 11. Scope of delivery

- MUC.easy<sup>plus</sup>
- 1 antenna for wM-Bus
- Quick Start Guide (print, in the packaging)
- Individual packaging with solvimus logo
- Dimensions:  $150 \times 77 \times 140 \text{ mm} (W \times H \times D)$

### 12. Contact

solvimus GmbH Ratsteichstr. 5 98693 Ilmenau Germany Phone: +49 3677 7613060 E-Mail: info@solvimus.de www.solvimus.de



# DATA SHEET MUC.EASYPLUS

Version 1 Page 3/3

#### Sales:

Phone: +49 3677 7613066 E-Mail: sales@solvimus.de

#### Support:

Phone: +49 3677 7613065 E-Mail: 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.

The solvimus GmbH works according to the principle of continuous improvement. The information given in this document is subject to change without prior notice and is provided without assertion, warranty or guarantee, including as to accuracy, completeness or fitness for a particular purpose. The statements in this document are not to be construed as a guarantee or assertion. This document is protected under copyright law.

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