



# SOLVIMUS

METERING SOLUTIONS

## DATA SHEET MUC.ONE W

Version 1

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### 1. Product

MUC.one W, Art. No. 500382



### 2. Application

Data concentrator for readout of meters and data transmission to distant meter data management systems via NB-IoT (narrowband mobile radio communication).

### 3. Interfaces

#### wM-Bus

Compliant to EN 13757-4/-3/-7 and OMS (modes: S, T, C, C/T), max. 3 logical meters, internal antenna, frequency: 868 MHz or 433 MHz or 169 MHz, Listen mode (automatic addition of meters), transparent mode, handling of keys, decryption of meters

#### NB-IoT (WAN)

Mobile radio: NB-IoT modem, LTE Cat-NB, internal antenna, card holder for micro SIM card, bands: LTE B1, B3, B5, B8, B20, B28

#### WLAN (WIFI)

Compliant to IEEE 802.11 b/g/n, centre frequency depending on channel: 2412-2484 MHz, internal antenna, function as access point

### 4. LED indicators

One LED each for status and accessibility of the access point

### 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 incl. integrity check and authentication

#### Configuration

- Complete configuration via browser
- Creation of the meter list
- Mass deployment with Netdiscover via HTTP
- Unequal readout intervals for meters
- Reporting with selected formats and protocols
- Usage of OBIS codes
- 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)
- HTTP POST (encrypted and unencrypted)
- MQTT (encrypted and unencrypted)

#### File formats:

CSV (various variants), XML-8, JSON



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### 6. Processing unit

The processing unit is a microprocessor system:

- CPU: 32 bit LX7, up to 240 MHz clock frequency
- Memory: 320 kB RAM, 4 MB Flash
- Operating system: FreeRTOS

### 7. General properties

- Dimensions: 80 x 113 x 60 mm (W x H x D, without cable entry)
- Installation: wall mounting, arbitrary orientation
- Mass: 290 g

### 8. Power supply

- 90..260 VAC, 50..60 Hz, spring terminal
- Power consumption: 1 W (idle state), max. 3 W
- Peak inrush-current: <40 A
- Galvanic isolation of interfaces and mains: >3 kV

### 9. Environmental conditions

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

### 10. Conformity and safety

- 2014/53/EU Radio Equipment Directive
- 2011/65/EU RoHS Directive (incl. amendment 2015/863)
- Overvoltage category II (EN 60664-1)
- Protection class II (IEC 61140)
- Degree of protection IP67 (IEC 60529)
- Recommended backup fuse for circuit protection: circuit breaker 6 A or 10 A, tripping characteristic B

### 11. Scope of delivery

- MUC.one W
- Individual packaging

### 12. Contact

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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 downloaded free of charge and without registration from our homepage:  
<https://www.solvimus.de/en/products/downloads-2/>.

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