



MWM-525

Electromagnetic Smart Water Meter

Overview

The MWM-525 smart meter has an electromagnetic measurement mechanism designed to monitor water extraction from water sources and to suit their environmental conditions. In addition to accurately measuring the level of ground and underground water flows, this meter is able to record and store all events and information related to the process of water extraction within specified times. This meter is capable of transmitting its information to remote meter reading software by communicating with or independently of the smart power meter and by connecting directly to the mobile telecommunication network and using the data platform and get the necessary settings from the software.

Advantages

- ▶ Full management of water consumption
- ▶ Remote reading capability through communication with smart power meter

Features

- ▶ Resistant to climate change
- ▶ Accurate operation in all types of weather conditions
- ▶ Ability to add a solenoid valve to cut and plug water
- ▶ Optional port for adjusting and discharging data locally
- ▶ Display of Solar Time and Date
- ▶ Featured with remote meter reading software
- ▶ Container configuration software to adjust locally
- ▶ No mechanical moving parts
- ▶ Ability to measure the direction of water flow
- ▶ Ability to detect empty pipe.
- ▶ Features MIFARE card reader system and storage on the card
- ▶ Ability to recharge the amount of water required by a subscriber to the card
- ▶ Output port for disconnecting and connecting agricultural water well pump
- ▶ Receive commands and update software remotely



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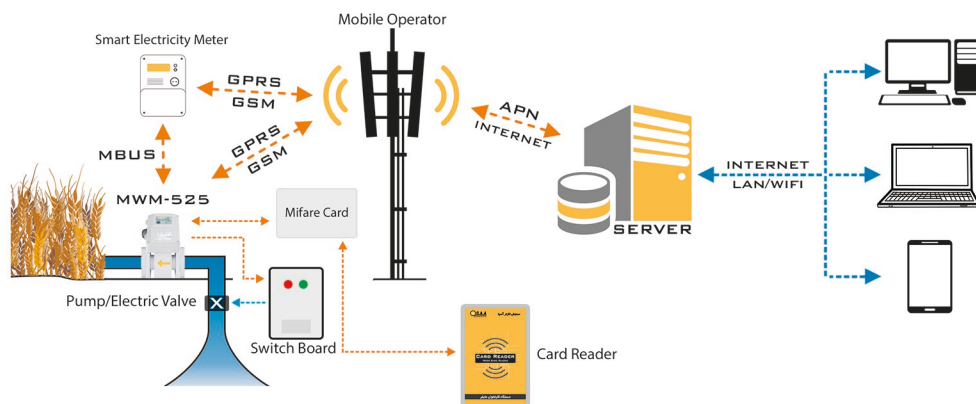
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Specifications

| | |
|---------------------|---|
| Power supply | 110-265 V AC / 46~65 Hz |
| | Battery with 2 years lifetime |
| Connections | Optical Probe (IEC 62056-21 standard) |
| | M-BUS |
| | RS485 |
| | 4-20 mA |
| Accuracy | 2% |
| Protection degree | IP67 |
| Connection type | Flange |
| Material | Body Carbon Steel, Stainless Steel (AISI 304, AISI 316) |
| | Electrodes AISI 316L |
| | Liner EPDM, Hard Rubber, PTFE |
| | Flange Carbon Steel/ DIN2576, DIN2577, DIN2578, ANSI |
| Available diameters | 1 ~ 56 inch |
| Temperature rating | Storage -50 ~ +70 °C |
| | Ambient -40 ~ +65 °C |
| Pressure | up to PN25 |
| Measurement range | -10 ~ +10 m/s |

System Architecture



Capabilities

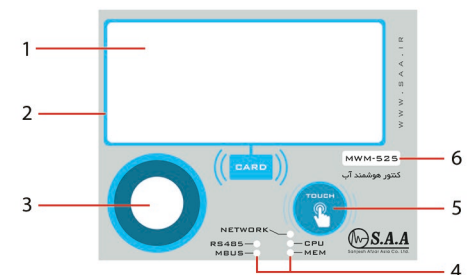
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|---------------------------------------|---|
| Events Record | Ability to record and send all kinds of alarms and system events and detect manipulations |
| Consumption Profiles | Ability to record shared consumption profiles (DB and volume) with time intervals of 30, 60, 90 and 120 minutes |
| Recordable and measureable parameters | Moment DB in liters per second Maximum DB in liters per second Operating volume in cubic meters up to two decimal places Total volume used in cubic meters up to two decimal places Total remaining volume in cubic meters Duration of pump operation hours Display optical port status Ability to display OBIS codes Displays the status of power outages or connections Show reverse flow Water Consumption Volume Mark Indicator of manipulation of the meter Ability to display GSM network antenna |

Reports

| | | |
|-------------------------|----------------------------------|--------------------|
| Passing Flow | Volume | m ³ , L |
| Reverse Flow | Volume | m ³ , L |
| Maximum readable number | 8 numerical and 2 decimal digits | min |

Panel

- 1 LCD
- 2 Mifare card location
- 3 Optical probe port
- 4 Diagnostic LEDs
- 5 Touch Button
- 6 Device Model



Standards

| | |
|----------------------------|----------------------|
| Water Meter Approvals | ISO 16399 / OIML R49 |
| Electromagnetic Capability | EN 61326-1 : 2006 |
| Low Voltage Directive | EN 61010 : 2001 |

Ordering

| MWM-525 | Code | Description |
|--------------------|-------|-------------------------|
| Mounting Type | M1 | Integrated mount |
| | M2 | Remote mount |
| Size | S1 | 1", DN25 |
| | S11/2 | 1½", DN40 |
| | S2 | 2", DN50 |
| | S3 | 3", DN80 |
| | S4 | 4", DN100 |
| | S5 | 5", DN125 |
| | S6 | 6", DN150 |
| | S8 | 8", DN200 |
| | S10 | 10", DN250 |
| | S12 | 12", DN300 |
| | S14 | 14", DN350 |
| | S16 | 16", DN400 |
| | S18 | 18", DN450 |
| | S20 | 20", DN500 |
| | S24 | 24", DN600 |
| | S40 | 40", DN1000 |
| | S48 | 48", DN1200 |
| | S56 | 56", DN1400 |
| | SN | Other Sizes* |
| Operation Pressure | PN10 | Flange UNI2277, DIN2576 |
| | PN16 | Flange UNI2278, DIN2577 |
| | PN25 | Flange UNI6083, DIN2578 |

Ordering

| MWM-525 | Code | Description |
|----------------------|------|--------------------|
| Operation Pressure | PNA | ANSI |
| | PNO | Other Flange Type* |
| Liner Material | L1 | EPDM |
| | L2 | Hard Rubber |
| | L3 | PTFE |
| | L4 | PFA |
| | L5 | Other Material* |
| Electrodes Material | E1 | SS: 316L |
| | E2 | Alloy C |
| | E3 | Gold/Platinum |
| | E4 | Tantalum |
| | E5 | Platinum/Rhodium |
| | E6 | Other Material* |
| Number of Electrodes | N2 | Two |
| | N3 | Three |
| | N4 | Four |
| End Flange | F1 | DIN flange |
| | F2 | ASME flange |
| Voltage | VH | 110/220 V AC |
| | VL | 24V DC |
| Output; Input | IO1 | 4-20 mA |
| | IO2 | Modbus RS485 |
| | IO3 | Mbus RS-485 |
| | IO4 | Ethernet |
| | IO5 | Pulse output |
| | IO6 | Relay |

* Customer Order

Sample Ordering Code: MWM-525-M1-S3-PN16-L2-E2-N2-F1-VH-IO5