

# MWM-529

## Electromagnetic Smart Water Meter



### Overview

The MWM-529 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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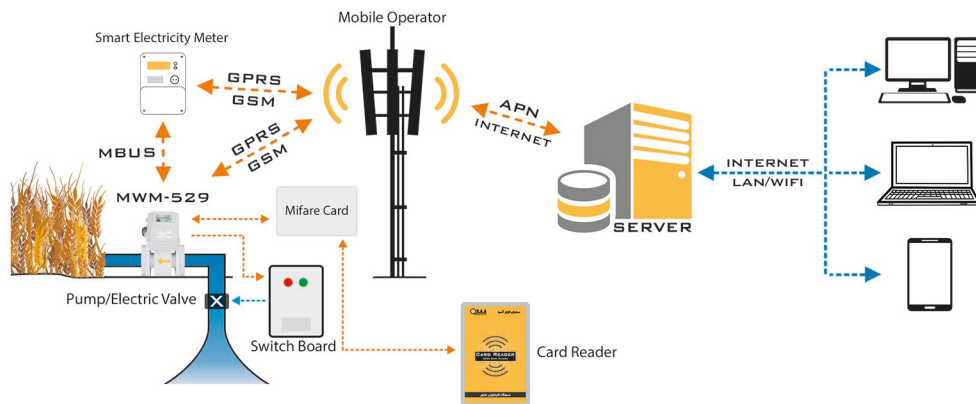
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## Specifications

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

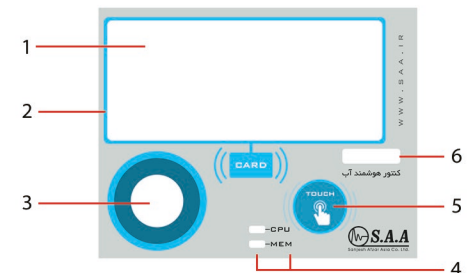
Events Record	Ability to record and send all kinds of alarms and system events and detect manipulations
Consumption Profiles	Ability to record shared consumption profiles (DB and volume) with time intervals of 30, 60, 90 and 120 minutes
Recordable and measureable parameters	Moment DB in liters per second 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 <sup>3</sup> , L
Reverse Flow	Volume	m <sup>3</sup> , 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-529	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-529	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-529-M1-S3-PN16-L2-E2-N2-F1-VH-IO5