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# Simple, flexible solutions

SITRANS F M MAG 5100 W with MAG 5000/6000

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[siemens.com/sitransfm](http://siemens.com/sitransfm)

# Target industries / applications – MAG 5100W

Dedicated and cost-effective sensor for all water processes



## Clean water

- Potable water delivery
- Irrigation
- Home delivery
- Bulk flow
- Billing
- Raw water
- Leak detection

## Wastewater

- Bulk flow
- Raw water
- Gray water
- Sludge
- Cake

## HVAC & Marine

- Water flow for balancing
- Water flow for chiller loading
- Energy flow for chiller
- Performance monitoring
- Ballast water management

## Top highlights

Perfect choice for water/wastewater industry

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### Feature / Function

- Coned liner design
- Cost-effective solution
- Extensive quick-ship program
- Built-in grounding electrodes
- Widely approved drinking water and custody transfer approvals\*
- Sensor enclosure rated to:
  - ✓ IP 67
  - ✓ IP 68 with submersible kit

### Benefit

- Increased low flow accuracy for leak detection
- Proven 2% accuracy with zero upstream and zero downstream straight runs
- 5 day delivery time on standard product configurations
- No need for external grounding protection
- Approved for drinking water and custody transfer applications
- Suitable for direct burial and constant flooding

\*) Drinking water: NSF61, WRAS, ACS, DVGW W270 Custody transfer: OILM R49, MI-001, PTB K7.2 (Germany)

## Product data – MAG 5000 and 6000

### Guaranteed performance

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	MAG 5000	MAG 6000
Enclosures	IP67 / NEMA 4X or IP20/66 / NEMA 2/4 Polyamide	
Max Measuring Error	0.4% of rate	0.2% of rate
Display	3-line alpha numeric LCD with backlight, 10 languages	
Inputs and Outputs	1 digital input, 1 current output, 1 pulse/frequency output, 1 relay output	
Communication	HART	HART, Profibus PA/DP, Modbus RTU, Foundation Fieldbus
Batch Function	No	Yes
Power Supply	12–24 V AC/DC or 115–230 V AC	
Approvals	FM/CSA Class 1, DIV 2	



# Product data – MAG 5100W

## Guaranteed performance

### SITRANS F M MAG 5100W

Size DN	DN 15-2000 / ½"-78"	
Process temperature	-10...+70 °C / 14...+158 °F	
Flange material	Carbon steel ASTM A 105	
Flange and pressure rating	EN 1092-1 PN10 EN 1092-1 PN16 EN 1092-1 PN40	ANSI B16.5 Class 150 AWWA C-207 Class D AS 4087 PN16
Liner material	EPDM (mainly EU market) NBR Hard Rubber (mainly EU market) Ebonite (mainly non-EU market)	
Electrode material*	Hastelloy C276	
Integrated transmitter choices	MAG 5000, MAG 6000, MAG 6000 I	
Grounding rings	Built-in grounding electrodes to sensor	



\*) PFA: optional grounding electrodes

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# The perfect fit for the environmental industry

SITRANS F M MAG 8000

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Siemens Process Instrumentation



# SITRANS F M MAG 8000

## Advantages

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- Locations without current supply
- No moving parts
- Long battery life up to 10 years
- Sensor design IP68
- Easy to install
- Revenue metering
- High accuracy / repeatability
- Leakage detection
- No pressure drop
- Advanced diagnostic functionalities
- Flexible communications  
(MODBUS RTU, Sensus protocol encoder  
and 3G/UMTS module)



## Built-in flexibility

### Target industries and applications

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#### Potable water treatment

- Influent flow
- Low/high lift pump well
- Elevated water storage
- Network distribution

#### Wastewater/reclamation

- Influent flow
- Raw sewage
- Activated sludge
- Reclaimed water
- Effluent flow

#### HVAC / Energy

- Condenser water
- Cooling tower flow
- Distribution lines
- Penstocks
- Thermal storage and lake storage cooling



# MAG 8000 flexible communication Connecting to every external data memory or RTU

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- ➔ Pulse output (2)
- ➔ Modbus communication for data export



## MAG 8000 wireless communication module (WCM)

- Various sample frequencies
- Sending the measurement data in secured email or FTP protocol
- Basic SMS reporting with TOT 1 values for revenue metering
- Easy configuration via SMS commands
- OPC server for data processing



## MAG8000: Wireless communication module, advantages, usability

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- Battery lifetime calculated for MAG 8000 + 3G/UMTS module
- Typical runtime when transmitting once a day
- Internal battery 3 years
- External battery 7 years
- Separate antenna with 5m cable length
- MAG 8000 WCM is compatible for future updates, e. g. "always-on" transmission and a micro SD card (extended data storage)

