



**SIEMENS**

*Ingenuity for life*



Cost-efficient solutions  
for water consumption

Siemens Process Instrumentation

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## Benefits

Water metering is essential for the irrigation industry. As governments turn increasing attention towards the environment and how to protect valuable natural resources, new legislation targets water consumption in order to secure a reliable supply of water in the future.

For the irrigation industry, keeping a close eye on water consumption is more important than ever. It is necessary for several reasons, such as custody transfer, leakage protection, distribution purposes and much more.

As a dependable partner in the irrigation industry, Siemens has developed a broad range of instrumentation for precise measurements of flow, level and pressure.

By using Siemens instrumentation solutions, you can easily optimize the daily management of the irrigation cycle or district water supply. Efficient and reliable metering has the potential to provide cost benefits as processes are optimized and water use and waste are reduced.

- **Reliable.** Siemens instruments are truly fit-and-forget solutions for long term reliable measurement of our valuable water resource.
- **Single supplier.** With multiple technologies and solutions that meet all the needs of the irrigation industry, Siemens is a one-stop-shop for metering instrumentation.
- **Low total cost of ownership.** An investment in process instrumentation from Siemens pays off in the long run, as each meter is designed for longevity, precision and reliability.
- **Interface options.** Siemens meters have easy-to-use interface options that allow connection to third party GSM and satellite solutions.
- **Low flow metering.** Unlike mechanical meters that typically measure very low flow inaccurately or not at all; electronic meters from Siemens can easily handle such flow rates.
- **Siemens has global presence.** With offices and production spread around the world, we provide local sales and services close to where you are.

# Water management made easy



## **SITRANS F M MAG 8000**

Battery or mains powered electromagnetic flowmeter. Specially engineered for stand-alone applications, including revenue metering and irrigation.

## **SITRANS F M MAG 5100 W**

Electromagnetic pulsed sensor for all water and wastewater applications. Increased low flow accuracy for water leakage detection.

## **SITRANS FS230**

Clamp-on ultrasonic flow meter is suitable for virtually any liquid application, equipped with high accuracy of 0.5 to 1% of flow rate required to run your processes at peak efficiency.

## **SITRANS FST020**

Basic but versatile clamp-on ultrasonic flowmeter. Compact design for easy installation. Available in single or dual channel configurations.

## **SITRANS Probe LU**

2-wire loop powered ultrasonic transmitter for level, volume and flow monitoring of liquids in open channels.

## **HydroRanger 200**

Ultrasonic level controller for up to six pumps. Provides control, differential control and open channel flow monitoring.

## **SITRANS LUT440**

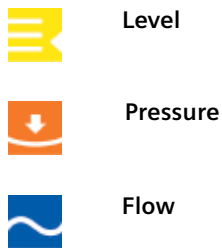
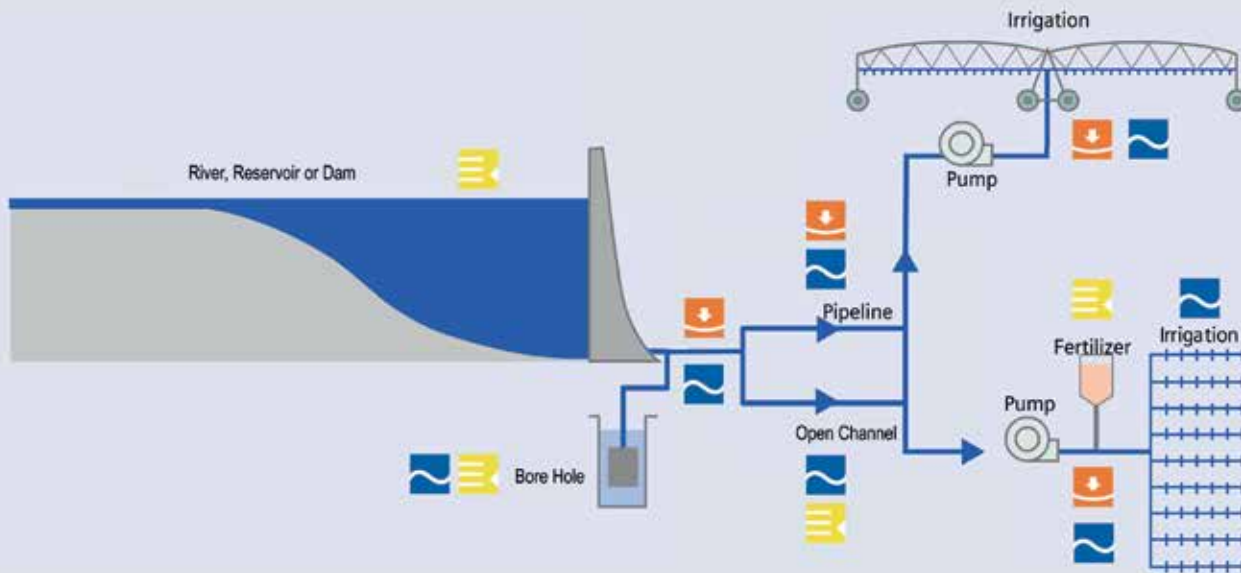
High accuracy open channel monitor, which also provides a full suite of advanced level, volume and pump controls and data logging.

## **SITRANS P200**

Is a compact, fixed range transmitter for measuring pressure with accurate monitoring of feed pump and pressure pump control.

# One supplier is all you need

*Designed for ease of use and lifelong reliability an investment in Siemens instrumentation equipment is an investment in the future.*



As legislation constantly targets water consumption and the protection of valuable natural resources, knowing how much water is consumed is imperative for the district water and irrigation industries.

Efficient metering demand reliable products that do not get in the way of daily business. Customers want solutions that are easy to install and use.

Whether a need exists at the reservoir, field, or residential level, Siemens has an efficient and reliable solution that ensures precise metering with direct impact on your bottom line.

With our complete range of instrumentation devices including electromagnetic flow, ultrasonic flow, open channel flow, ultrasonic level and pressure technologies, Siemens has an answer for all of your irrigation needs.

Regardless of pipe type or size and the number of devices, we offer instruments for a wide range of applications, projects and installations throughout your irrigation network, including:

- large intake pipes
- distribution pipes
- individual pumps
- pumping stations
- on-farm metering

Contact your local sales office to see the difference Siemens instrumentation equipment makes.

## Ultrasonic Level and Pressure



Product name	SITRANS Probe LU	HydroRanger 200	SITRANS LUT440	SITRANS P200
Product category	Ultrasonic level	Ultrasonic level and open channel flow	Ultrasonic level and open channel flow	Pressure
Sensor Size	2" NPT and 2" BSPT	Transducer dependent	Transducer dependent	½" FNPT
Accuracy	± 0.15% of range	±0.25 of range	±1 mm plus 0.17 of measured range	Typically ±0.25%
Power Supply	24 V DC	12-30 V DC 100-230 V AC	10-32 V DC 100-230 V AC	10-36 V DC
Enclosure Rating	IP67 (NEMA 6) IP68 (NEMA 6)	IP54 (NEMA 3) panel version IP65 (NEMA 4X) wall version	IP65 (NEMA 4X)Wall mount	IP65 (NEMA 4X)
Data Output	HART, 4-20 mA PROFIBUS PA	Up to 6 relays 4-20 mA Modbus RTU	3 Relays 4-20 mA Hart	2 wire, 4 to 20 mA 3 wire, 0 to 10 volts
Sensor Pipe Material	PVDF ETFE	Kynar	Kynar	316 stainless steel ceramic diaphragm
Approvals	Intrinsically safe Non-incendive General purpose	General purpose, CSA, FM, UL, CSA Class I, Div. 2	CSA, FM, UL CSA Class I, Div. 2	n/a

## Flow



Product name	SITRANS F M MAG 8000	SITRANS F M MAG 5100 W	SITRANS FS230	SITRANS FST020
Product category	Electromagnetic	Electromagnetic	Ultrasonic clamp-on	Ultrasonic clamp-on
Sensor Size	1" to 24"	1" to 48"	¼" to 394"	¼"to 360"
Accuracy	±0.4% of flow rate	±0.25% of flow rate	±0.5 to 1% of flow rate	±0.5-1% of flow rate
Power Supply	Mains powered Battery powered	12-24 V AC/DC 115-230 V AC	24 to 90 V DC, 100 to 240 V AC (universal power supply)	9 -36 V DC 100-240 V AC
Enclosure Rating	IP68 (NEMA 6P)	IP67 (NEMA 4X/6) IP68 (NEMA 6P)	IP66/67 (NEMA 4X)	IP65 (NEMA 4)
Data Output	2 pulse MODBUS RTU	1 current 1 digital 1 relay	2 temperature	2 current 1-2 relays (optional)
Sensor Pipe Material	Steel Concrete PVC	Steel Concrete PVC	All materials	All materials
Approvals	All water approvals OIML R49 MI-001	All water approvals OIML R49 MI-001	FM, FMc, ATEX, IECEx	UL ULc

Siemens Industry, Inc.  
Process Industries and Drives  
100 Technology Drive  
Alpharetta, GA 30005  
1-800-365-8766  
info.us@siemens.com

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