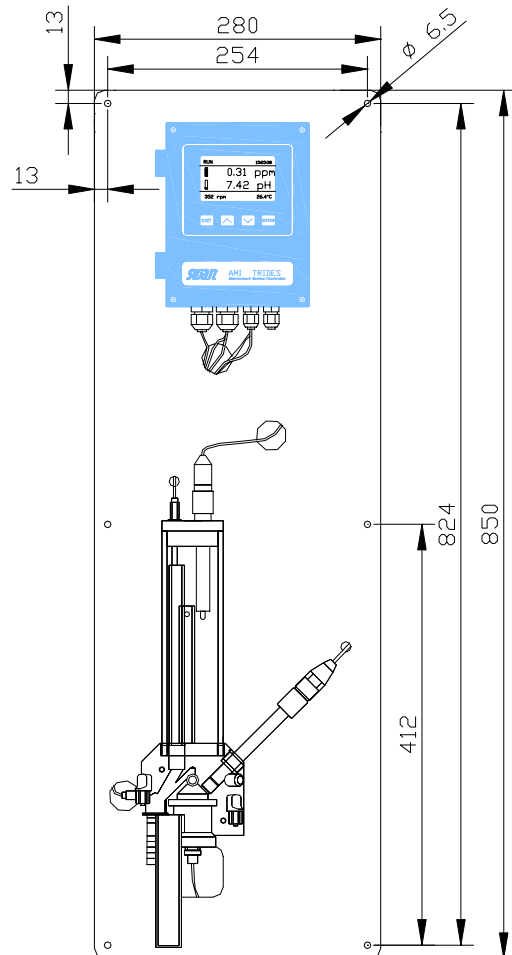


Microprocessor controlled system for the automatic and continuous measurement of disinfectants in potable water and swimming pools

Monitor AMI Trides

- Complete system for monitoring and controlling of disinfectant levels.
- Range 0.00 - 5.00 ppm free chlorine, 0.000 - 1.000 ppm ozone, 0.00 - 2.00 ppm chlorine dioxide, iodine, bromine.
- Transmitter, disinfectant sensor, temperature sensor, flow sensor and flow cell, mounted on PVC panel, factory tested and ready to operate.
- Real-time-pH-compensation of chlorine measurement with integrated pH-meter (optional pH sensor).
- Measuring transmitter in an aluminum case (IP 66) 180 x 140 x 70 mm.
- Large backlit graphic display for the reading of measuring value, flow and operating status. Full text menu driven user interface.
- Easy programming of all parameters by key-pad.
- Sensor: Self-cleaning TRIDES three-electrode-system for measurement of disinfectants.
- Automatic temperature compensation.
- Monitoring of sample flow and sensor cleaning.
- Over voltage protection for in- and outputs.
- Two signal outputs, galvanically separated from sensor input 0/4 - 20 mA for disinfectant or temperature or as continuous control outputs.
- Signal outputs freely scaleable and with simulation mode.
- Potential-free alarm contact as summary alarm indication for programmable alarm values and for instrument faults.
- Two potential-free contacts programmable as limit switch or PID-control.
- Input for potential-free contact, function programmable.



Options:

- pH electrode with cable (order separately).
- Communication interface for transmitter.

Order scheme	Monitor AMI Trides	A-26.11	.	0		
Power supply:	85-265 VAC, 47-63 Hz	1	↑		↑	↑
	24 VDC, direct current	2				
Interface:	None				0	
	Third current signal output 0/4 – 20 mA				1	
	Profibus DP interface				2	
	HyperTerminal interface (logger)				3	
	Modbus interface (required for WebServer)				4	
Model:	Standard					0
	For ozone measurement					1

Technical data

Dimensions: 850 x 280 x 200 mm
Mounting panel: PVC
Weight: 6.0 kg
Electronics housing: Aluminum
Protection degree: IP 66 / NEMA 4X
Ambient temperature: -10 to +50 °C
Limit range of operation: -25 to +65 °C
Storage and transport: -30 to +85 °C
Humidity: 10 to 90 % relative non condensing
Display: backlit LCD, 75 mm x 45 mm
Connectors: screw clamps

Power rating

Voltage: 85 - 265 VAC, 47 - 63 Hz or 24 VDC, isolated, ±15 %
Power consumption: max. 20 VA

Safety features

No data loss after power failure, all data is saved in non-volatile memory.
Over voltage protection of in- and outputs.
Galvanic separation of measuring inputs and signal outputs.

User interface

Continuous display of process value, sample flow, alarm status and time during operation.
Easy operation based on separate menus for "Messages", "Diagnostics", "Maintenance", "Operation" and "Installation". Password protection possible.

1 Alarm relay

One potential free contact.
Max. load: 1A / 250 VAC
Summary alarm indication for programmable alarm values and instrument faults.

2 Relay outputs

Two potential-free contacts programmable as limit switches for measuring values, controllers or timer for system cleaning with automatic hold function.
Max. load: 1A / 250 VAC

2 Signal outputs

Two signal outputs programmable for measured values (freely scaleable, linear or bilinear) or as continuous control output (control parameters programmable).
Current loop: 0/4 ... 20 mA
Max. burden: 510 Ω
Third signal output with same specifications as option.

Control function

Relays or current output programmable for 1 or 2 pulse dosing pumps, solenoid valves or for one motor valve.
Programmable P, PI, PID or PD control parameters.

1 Input

One input for potential-free contact.
Programmable hold or remote off function.

Input for pH sensor

For the real-time-pH-compensation of chlorine measurement.

Monitoring of case temperature

Alarm if the temperature is higher than +65 °C or lower than -25 °C.

Communication interface (option)

RS232 for logger download with HyperTerminal or RS485 with Fieldbus protocol Modbus or Profibus DP.
WebServer connection via Modbus.

Disinfectant measurement

Signal input (galvanically separated) for TRIDES disinfectant sensor.

Accuracy: Measuring range:

Ozone
± 0.005 ppm 0.000 - 1.000 ppm

HOCl, free chlorine
± 0.01 ppm 0.00 - 1.00 ppm
± 0.06 ppm 1.00 - 3.00 ppm
± 0.2 ppm 3.00 - 5.00 ppm

Chlorine dioxide, iodine, bromine
± 0.01 ppm 0.00 - 1.00 ppm
± 0.06 ppm 1.00 - 3.00 ppm

Stability (HOCl): ± 1% from end of interval during 1 month at normal conditions.

Response time:
90 % of change of excessive Cl₂ in 60 seconds after sample entered flow cell.

Automatic temperature compensation.
Min. sample conductivity: 5 µS/cm

pH measurement (option)

Measuring range: pH 2 to pH 12
Resolution: 0.01 pH

Trides flow cell

Flow cell made of acrylic glass with insert for Trides sensor, flow sensor.
Insert for temperature sensor and 3 additional inserts 12 mm for sensors.
Pressure water inlet: 0.15 to 2 bar
Water consumption: approx. 40 l/h
Connection inlet: 6 x 9 mm
Water outlet: atmospheric drain
Connection outlet: 14 x 20 mm (1/2")
Operation temperature: 5 to 45 °C

Connection scheme

