# xylem





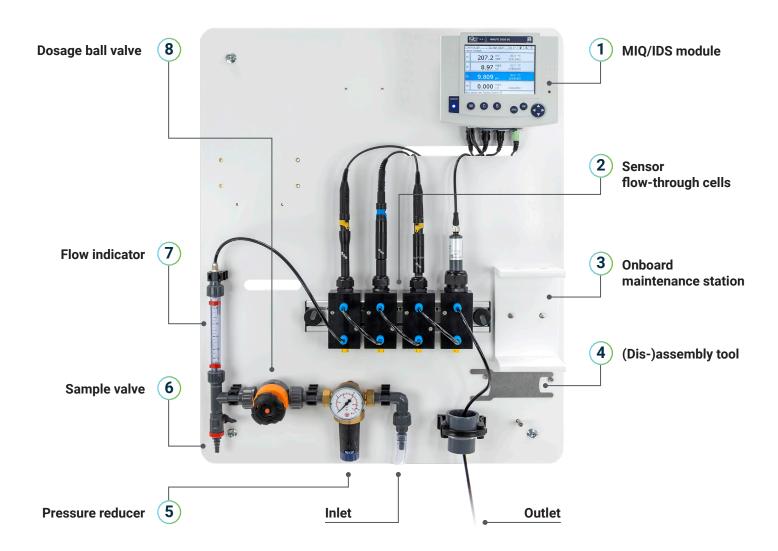
## **YSI Water Monitoring Panel**

Preconfigured panels for measuring pH, ORP, conductivity, free chlorine, total chlorine, DO, and temperature



# Multiparameter water panel for monitoring and control

The YSI Water Monitoring Panel (WMP) is a fully integrated, compact solution for the precise measurement of pH, ORP, conductivity, chlorine, and dissolved oxygen. The WMP is designed to deliver accurate and reliable data for water quality monitoring in municipal water treatment, aquaculture, commercial, and industrial applications.



Leveraging YSI's Intelligent Digital Sensor (IDS) technology and seamless integration with the IQ SensorNet platform, the WMP delivers real-time data acquisition, modular scability, and dependable performance—raising the standard for water process monitoring.



With an innovative low-flow design, the WMP uses only one-third of the sample flow required by leading competitors' panels, making it more efficient, cost-effective, and sustainable.



Equipped with a built-in maintenance station for easier calibrations, cleanings, and consumable exchanges—enhancing convenience and reducing downtime.



## Customize your monitoring system

Features a flexible measuring system and modular flow cells, ensuring quick and easy addition or removal of components to suit your needs.



The panel integrates with YSI IQ SensorNet, unlocking its capabilities and providing digital outputs for seamless connection to your facility's data acquisition and control systems.

### Components

- The MIQ/IDS module enables effortless connection of IDS sensors to all IQ SensorNet controllers for a fully integrated monitoring system.
- The opaque design of the sensor flow-through cells prevent interference from light and algae growth, ensuring consistently accurate measurements.
- Users can quickly perform sensor maintenance and calibration directly on the panel with the **onboard** maintenance station for efficient upkeep.
- The (dis-)assembly tool (a universal tool for flow-through cells) is included, making routine maintenance simple and hassle-free.

- The **pressure reducer** can be preset to 1.5 bar to deliver the proper flow rate for accurate sensor performance.
- Reference measurements can be taken at the sample valve without disrupting ongoing panel monitoring.
- Use the flow indicator to ensure that the flow rate remains within the optimal range for reliable results and peace of mind.
- Water flow can be easily regulated using the dosage ball valve directly on the panel for precise process control.

# Intelligent integration of two advanced YSI technologies



By integrating the YSI IQ SensorNet system with the YSI Intelligent Digital Sensors (IDS) platform, the WMP delivers a robust and efficient water quality management solution. The MIQ/IDS module enables seamless connection of IDS sensors to the IQ SensorNet system, ensuring effortless installation, simplified maintenance, and smooth day-to-day operation.

### IQ SensorNet system

IQ SensorNet's modular design allows for easy system expansion as monitoring needs evolve. Its adaptable architecture supports scalable solutions, efficient upgrades, and reliable performance—making it ideal for dynamic water quality management across diverse applications.



#### MIQ/TC 2020 3G

A high-performance operating terminal with a large display for monitoring up to 20 parameters. Features a portable design with a USB interface and can be connected to any module.



#### DIQ/S 282/284

A flexible system accommodating 1 to 4 sensors, offering a customizable solution for various monitoring requirements.

### 10 SensorNet modules



MIQ/IDS1

**480031Y**Connection for one IDS sensor.



MIQ/IDS2

**480032Y**Connection for two IDS sensors.



MIQ/IDS4

**480034Y**Connection for four IDS sensors.

### Sensor parameters

**IDS sensors** offer effortless installation through automatic recognition by the IQ SensorNet controller and can be easily calibrated directly on the Water Monitoring Panel.

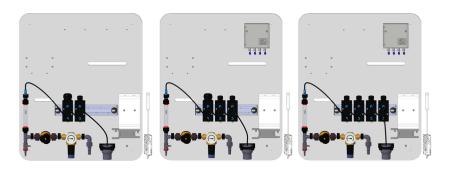
Chlorine sensors using the amperometric method are available for both free and total chlorine measurement, with ranges of 0-2 mg/L or 0-20 mg/L for free chlorine and 0-2 mg/L for total chlorine.



## Ordering and technical information

# Discover our innovative Water Monitoring Panel





There are nine different configurations of the YSI Water Monitoring Panel, available with different numbers of flow cells and with or without MIQ modules.

#### **General technical data (extract)**

Certifications	ETL, cETL (conforms with relevant UL and Canadian standards), CE
Electromagnetic compatibility	EN 61326-1, Class A; FCC Class A, EMC for indispensable operation
Integrated overvoltage protection	According to EN 61326-1, enhanced overvoltage protection for the entire system, implemented in each component
Outputs	Analog and digital outputs available with additional IQ SensorNet modules
Communication protocols	0/4-20 mA, EtherNet/IP, Modbus TCP/IP, Modbus RTU, Profibus, Profinet
Electrical supply	IQ SensorNet 100-240 VAC, 50/60 HZ
Display/Controller	IQ SensorNet 2020 3G, 282, or 284 controller
USB interface	USB-A
Data logger	Data memory for up to 525,600 data sets
Flow rate	3 to 15 gal/h (11 to 60 L/h)
Pressure	0 to 87 psi (0 to 6 bar) at inlet, 0 to 21 psi (1.5 bar) after pressure reducer
Material	Panel: PVC rigid foam  Modules: PC 20% GF (Polycarbonate with 20% fiberglass)  Flow-through cells/piping: PVC  Tubing: PU
Dimensions (HxWxD)	Approx. 33.5 x 27.6 x 0.5 in. (850 x 700 x 13 mm)
Weight	22 lbs (10kg)
Warranty	Panel: 1 year; Controller and Module: 3 years

See the YSI Water Monitoring Panel in action.

Scan to watch a video, or find the latest information on our website at <a href="mailto:ysi.com/wmp">ysi.com/wmp</a>.



#### Panel ordering guide

Components	Options	Item	number			
Water Monitoring Panel	With pressure reducer, valve, tap, and flow indicator on the panel	8C-0				
Sensors	No chlorine sensor		0			
(max. 4 sensors in total)	Free chlorine or total chlorine sensor*		1			
	Number of IDS parameters			0		
				1		
				2		
				3		
				4		
MIQ modules	None				0	
	MIQ/IDS2				2	
	MIQ/IDS4				4	
Your order number	Not every combination is available. Sensors and IQ SensorNet components must be ordered separately.	8C-0				0Y

<sup>\*</sup>Chlorine sensor uses 1 IDS connection

#### **Water Monitoring Panel configurations**

#### Order no.

Water Monitor	ing i and configurations	Order no.
DW/P 00-00-2	Water Monitoring Panel: with pressure reducer, sample tap, flow indicator, two IDS flow cells, and MIQ/IDS 2-channel module	8C-00220Y
DW/P 00-00-3	Water Monitoring Panel: with pressure reducer, sample tap, flow indicator, three IDS flow cells, and MIQ/IDS 4-channel module	8C-00340Y
DW/P 00-00-4	Water Monitoring Panel: with pressure reducer, sample tap, flow indicator, four IDS flow cells, and MIQ/IDS 4-channel module	8C-00440Y
DW/P 00-CI-1	Water Monitoring Panel: with pressure reducer, sample tap, flow indicator, one chlorine flow cell, one IDS flow cell, and MIQ/IDS 2-channel module	8C-01120Y
DW/P 00-CI-2	Water Monitoring Panel: with pressure reducer, sample tap, flow indicator, one chlorine flow cell, two IDS flow cells, and MIQ/IDS 4-channel module	8C-01240Y
DW/P 00-CI-3	Water Monitoring Panel: with pressure reducer, sample tap, flow indicator, one chlorine flow cell, three IDS flow cells, and MIQ/IDS 4-channel module	8C-01340Y
DW/PB 00-00-0	Water Monitoring Panel: with pressure reducer, sample tap, and flow indicator. No flow cells or modules included.	8C-00000Y
DW/PB 00-00-2	Water Monitoring Panel: with pressure reducer, sample tap, flow indicator, and two IDS flow cells. No modules included.	8C-00200Y
DW/PB 00-CI-1	Water Monitoring Panel: with pressure reducer, sample tap, flow indicator, one chlorine flow cell, and one IDS flow cell. No modules included.	8C-01100Y

#### Flow-through cells & replacement kits

#### Order no.

D 17	Flow-through cell D 17 for IDS sensors	401990Y
D 19	Flow-through cell D 19 for chlorine sensors	401991Y
MS DWP	Mounting rail for fastening flow cells	904001Y
FS DWP	Fork wrench for the sensor screw connections on the flow cells	904030Y
AS/4-2	Hose set with 4 short and 3 long hoses for the flow-through cells D 17 and D 19	904015Y
AS/CON	Hose connections for the flow cells	904020Y
KT/D 17	Spare parts for the flow cell D 17	904023Y
KT/D 19	Spare parts for the flow cell D 19	904024Y

## Ordering and technical information

# Find the right sensors and modules for your panel variant.

Our selection of sensors for measuring 8 different parameters on the Water Monitoring Panel. You can select up to a maximum of 4 parameters for your panel.



#### **Technical data sensors**

Sensor		Measuring range	Accuracy	Resolution
4140(W)	pН	0.000 to 14.000 pH	pH: ± 0.004; (IDS measurement electronics) U [mV]: ± 0.2	0.001 pH; 0.1 mV
4310(W)	Conductivity Salinity TDS	0.0 to 2000 mS/cm 0.0 to 70.0 0 to 199.9 g/L	T [°C]: $\pm$ 0.1 $\pm$ 0.5 % from measured value; T [°C]: $\pm$ 0.1	Cond. up to 0.1 µS/cm or until 0.01 mS/cm Salinity 0.1 TDS up to 1 mg/L or until 0.01 g/L
4320(W)	Conductivity	0.01 to 199.9 μS/cm	± 0.5 % from measured value	Up to 0.01 µS/cm
FDO 4410(W)	DO	0.00 to 20.00 mg/L 0.0 to 200.00 %	± 1.5 %	0.01 mg/L 0.1 %
4220(W)	ORP	-1250.0 to +1250.0 mV	U [mV]: ± 0.2 T [°C]: ± 0.1	0.1 mV
FCML 412 M12-2 FCML 412 M12-20 TCML 412 N		0.005 to 2.000 mg/L 0.05 to 20.00 mg/L 0.05 20.00 mg/L	< 1 % up to 2 mg/L < 1 % up to 16 mg/L < 2 %	0.001 mg/L 0.01 mg/L 0.001 mg/L

Water Monitoring Panel sensors		
4140	pH electrode with gel electrolyte, glass shaft, three ceramic junctions, and integrated temperature sensor, 3 junctions, 1.5 m integral cable	103743Y
4140W	pH electrode with gel electrolyte, glass shaft, three ceramic junctions, and integrated temperature sensor, 3 junctions, detachable cable not included	103764Y
4220W	SensoLyt® pressure resistant ORP electrode, detachable cable not included	103749Y
FCML 412 M12-2	Chlorine sensor based on the amperometric principle, 0-2 mg/L, Water Monitoring Panel	201189Y
FCML 412 M12-20	Chlorine sensor based on the amperometric principle, 0-20 mg/L, Water Monitoring Panel	201194Y
TCML 412 M12-2	Chlorine sensor based on the amperometric principle, 0-2 mg/L, pH range 4-12, Water Monioring Panel	201197Y
4310	IDS 4310 conductivity probe, epoxy body, cell constant K = 0.475, 1.5 meter cable	301710Y
4310W	IDS 4310 conductivity probe, epoxy body, cell constant K = 0.475, detachable cable not included	301716Y
4320	IDS 4320 conductivity probe, stainless steel body, cell constant K = 0.1, flow cell included; for ultrapure water applications, cannot be calibrated by the user, 1.5 meter cable	301720Y
4320W	IDS 4320 conductivity probe, stainless steel body, cell constant K = 0.1, flow cell included; for ultrapure water applications, cannot be calibrated by the user, detachable cable not included	301722Y
FDO 4410	IDS 4410 fluorescent dissolved oxygen (FDO) probe, 1.5 meter cable	201300Y
FDO 4410W	IDS 4410 fluorescent dissolved oxygen (FDO) probe, detachable cable not included	201306Y

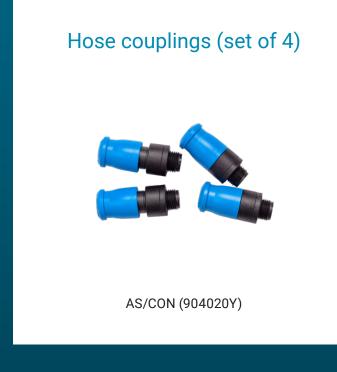
Water Monitoring Panel cables		Order no.
IDS Cable 1.5	Detachable cable 1.5 meters, for water monitoring panel sensors	903850Y
IDS Cable 6	Detachable cable 6 meters, for water monitoring panel sensors	903852Y
IDS Cable 10	Detachable cable 10 meters, for water monitoring panel sensors	903853Y
IDS Cable 20	Detachable cable 20 meters, for water monitoring panel sensors	903855Y
ADA CI/IDS	Detachable cable 1.5 meter, with proprietary adapter for connecting chlorine sensors	108155Y

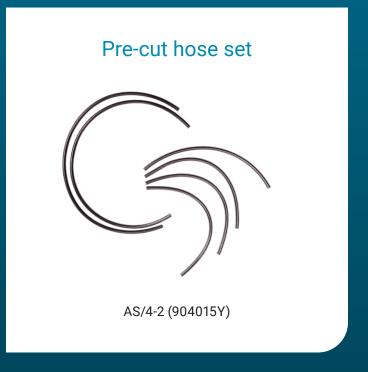
Water Monitoring P	anel modules	Order
		no.
MIQ/TC 2020 3G	System 2020 3G terminal/controller only. Used as redundant controller. Complete with USB interface. No Modules Included.	470020Y
MIQ/TC 2020 3G-H3	System 2020 3G - 20 channel terminal/controller with 3 current outputs, 3 relay outputs, power supply 100-240 VAC, and USB interface. 5 available IQ SensorNet connections.	470022Y
MIQ/TC 2020 3G-H3 C6	System 2020 3G - 20 channel terminal/controller with 6 current outputs, power supply 100-240 VAC, and USB interface. 5 available IQ SensorNet connections	470024Y
MIQ/TC 2020 3G-MC3	System 2020 3G - 20 channel terminal/controller, MIQ/MC3 controller with Ethernet interface (Modbus TCP, Ethernet/IP, PROFINET), MIQ/PS wide range power supply. 5 available IQ SensorNet connections.	470026Y
DIQ/S 282-CR3	System 282 - IQ SensorNet controller, operate up to 2 sensors, 3 current output, 3 relays, power supply 100-240 VAC. 1 available IQ SensorNet connection.	472110Y
DIQ/S 284-CR6	System 284 - IQ SensorNet controller, operate up to 4 sensors, 6 current output, 6 relays, power supply 100-240 VAC. 3 IQ SensorNet connections.	472130Y
MIQ/IDS1	IDS module for integrating Intelligent Digital Sensors (IDS) into the IQ SensorNet network, 1 IDS connection, 2 IQ SensorNet connections	480031Y
MIQ/IDS2	IDS module for integrating Intelligent Digital Sensors (IDS) into the IQ SensorNet network, 2 IDS connections, 2 IQ SensorNet connections	480032Y
MIQ/IDS4	IDS module for integrating Intelligent Digital Sensors (IDS) into the IQ SensorNet network, 4 IDS connections, 0 IQ SensorNet connections	480034Y
MIQ/PS	Power supply module, 100-240 VAC, 18 Watts. 3 IQ SensorNet connections.	480004Y
MIQ/24V	Power supply module, 24V AC/DC. 3 IQ SensorNet connections.	480006Y
MIQ/R6	Relay module with 6 relays. 2 IQ SensorNet connections.	480013Y
MIQ/CR3	Output module, 3 analog and 3 relay ouputs. 2 IQ SensorNet connections.	480014Y
MIQ/C6	Output module, 6 analog outputs. 2 IQ SensorNet connections.	480015Y
MIQ/IC2	Input module with 2 analog inputs, for adding other equipment to IQ system. 2 IQ SensorNet connections.	480016Y
MIQ/MC3	Module IQ/microcontroller for system 2020 3G, 2 free IQ SensorNet connections, in module housing, with automatic barometric pressure compensation, USB interface (IP67), Ethernet RJ45 interface (IP67)	471020Y

# Flow-through cells and replacement kits



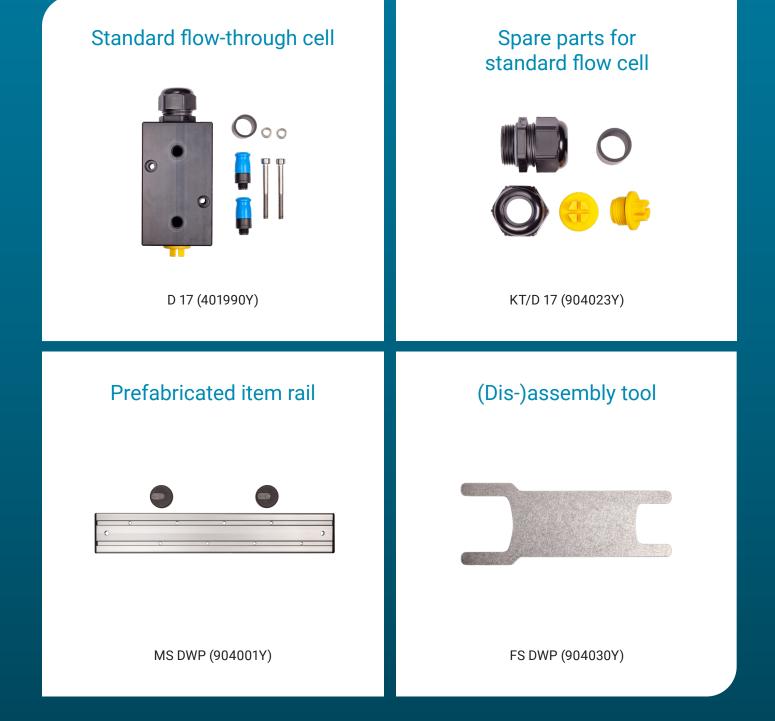






### Looking to expand your panel or modify its configuration?

All panel components are available separately, giving you the flexibility to adapt your setup as your monitoring needs evolve.



# Monitor critical water quality parameters in these applications



### **Drinking water**

Real-time data, customizable alarms, and low-flow efficiency enable early issue detection, optimize treatment processes, and guarantee high-quality drinking water.

### Water reuse

Continuous monitoring ensures reclaimed water meets safety standards, supporting sustainability and resource conservation.



### Aquaculture & aquatic habitats

The system ensures optimal water quality for fish health and tracks key parameters to support habitat sustainability.

#### Commercial & industrial

The WMP offers real-time monitoring for cooling towers, well water, beverage production, and pools, enhancing efficiency and safety while supporting sustainability.



**Learn more** ysi.com/wmp

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