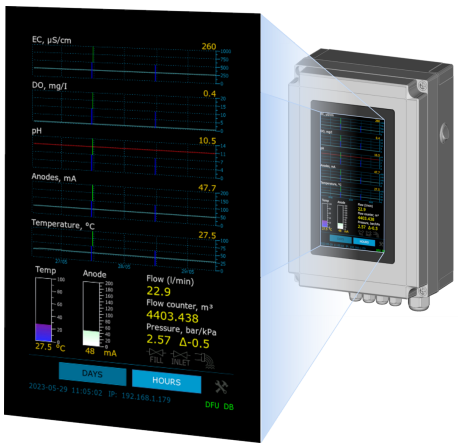
PROTECTOR DIGITAL

DATA SHEET

Protector Digital not only protects your water system but also continuously collects extensive data. This data can be analyzed to understand system behavior and perform preventive maintenance, saving both time and money.

Protector Digital can be connected to a Building Management System (BMS) using one of Protector's built-in protocols or directly to the Internet. In the latter case, it sends data to the IWT Database, where specialists can monitor and analyze it.

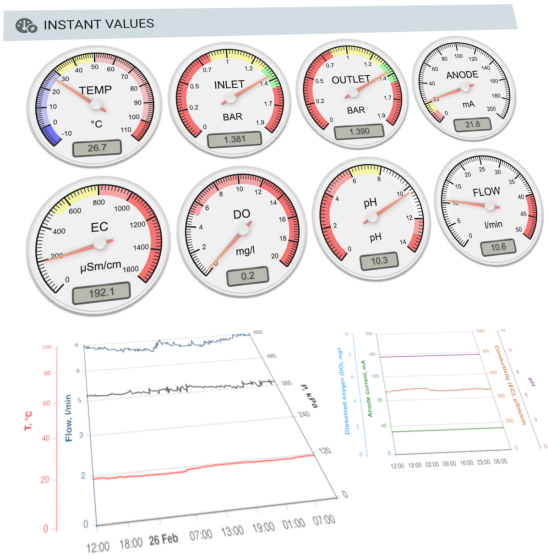
Protector is also equipped with a large touchscreen, allowing users to view data locally without requiring external connections.



SPECIFICATIONS

FUNCTIONS

1. Automatic drain (sludge back flush) (requires drain/inlet valves).
2. Automatic pressure control (requires fill valve).
3. Connection to BMS (Modbus/RTU, Modbus/TCP, 4..20mA)
4. Internal web server (via LAN connection)
5. Cloud database data storage
6. Remote control
7. Remote firmware update
8. Leak detection
9. Alarms by e-mail



MONITORED VALUES

#	Value	Range
1	Water flow	3..100 l/min
2	Flow counter	0..9999 m^3
3	Water temperature	0..110 ºC
4	Electro conductivity (EC)	0..2000 µS/cm
5	Anode current	0..200 mA
6	Pressure	0..10 bar

#	Value	Range
7	Pressure difference	0..100kPa
8	PH	0..14
9	Dissolved oxygen (DO), optional	0..20 mg/l
10	Fill water amount	0..9999 m^3
11	Fill water electro conductivity (EC)	0..2000 µS/cm

COMMUNICATION PORTS AND PROTOCOLS

Port	Protocol	Usage
Ethernet RJ-45	MQTTs to port 8883	The main IoT protocol for transmitting historical and real-time data to the cloud.
Ethernet RJ-45	HTTPS to port 443	A backup protocol for sending data to the cloud. It is used when the MQTT port is blocked.
Ethernet RJ-45	MODBUS/TCP	The most convenient way to connect Protector to a building control system. Many systems support Modbus-TCP, and Protector enables access to real-time values from all sensors using this protocol.
Ethernet RJ-45	BACNet/IP	Another commonly used method to connect Protector to a Building Management System (BMS).
Ethernet RJ-45	HTTP on local port 80	Built-in web-server. Built-in web server. By entering the IP address displayed on the screen, you can connect to Protector using any web browser. A user-friendly webpage will display all real-time and historical data in easy-to-read charts.
RS485 1	MODBUS RTU/Master	Used to communicate with RS485 sensors and Digital Filling Unit.
RS485 2	MODBUS/RTU Slave	Connect Protector to different gateways or building control systems using the RS485 interface. Real-time values from all sensors are provided via Modbus-RTU.
4..20mA input	-	Connect analog sensors (pH/DO/ORP/pressure).
4..20mA out	-	Connect to a Building Management System (BMS). Available only on request.

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