

# Thermo Scientific AquaSensors AV38

DataStick Local Monitor and Controller

Thermo Scientific™ AquaSensors™  
DataStick™ measurement system for  
universal plug & play



## AV38 DataStick Local Monitor and Controller

- Connects to any DataStick system
- Convenient ¼ DIN enclosure
- Display sensor and temperature data
- Menu functions: Calibration, configuration and diagnostics
- Digital protocol options for remote measurement,
- calibration, configuration and diagnostics
- Two 4 to 20 mA current outputs
- Two Form C relays for alarm, control and wash
- PID controller for use with pH and conductivity
- 7 conduit knockouts for easy cabling

## Features and Benefits

### Mounting Options

Enclosure, NEMA 4X  
¼ or ½ DIN NEMA 4X panel mount  
Display only with NEMA 4X gasket

### Interface

Display: 2 line by 16 character LCD  
Backlight: High contrast green  
Keypad: 4 directional arrows, MENU, ESCAPE and ENTER

### Environmental Conditions

Ambient Operating Temperature Range: -20 to 65 °C  
Maximum Relative Humidity: 95% non-condensing  
Meets CE requirements for heavy industrial use

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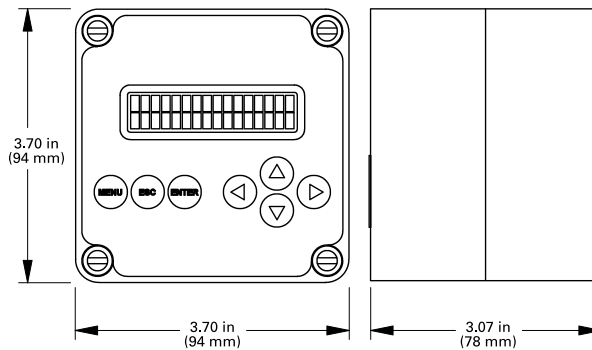
**Global support**—with experience that comes from supporting our customers for over 35 years throughout the world, our water quality specialists and customer support teams offer a quick, thorough and professional response to any problem encountered.

**Focus on user benefits**—we work closely with you to define your needs, and ensure you are using the monitor in a way that improves your bottom line. For more information, contact your local water quality specialists or visit: [www.thermoscientific.com/processwater](http://www.thermoscientific.com/processwater).

Product Specifications	
Mounting Options	Wall-mount Enclosure: NEMA 4X Panel-mount: ¼ or ½ DIN NEMA 4X panel mount available Display Only: with NEMA 4X Gasket
User Interface	Display: 2 line by 16 character LCD Backlight: High contrast green Keypad: 4 directional arrows, MENU, ESCAPE and ENTER
Environmental Conditions	Ambient Operating Temperature Range: -20 to 65 °C Maximum Relative Humidity: 95% non-condensing
DataStick Sensor Connections	Supports 1 to 255 Modbus® RTU DataStick Sensors of any type Supported Sensors: pH, ORP, two electrode conductivity, two electrode resistivity, toroidal conductivity, dissolved oxygen (ppm and ppb) dissolved ozone, drinking water and wide-range turbidity, suspended solids and free chlorine
4 to 20 Milliamp Current Output Options	Assignable parameters PID function when pH or conductivity parameter selected Loop power provided by AV38
Relays	Two 1 amp Form C relays with NO and NC contacts Assignable parameters Configured for alarm, control and timer functions
Digital Communications	Options to Host Computer Network: MODBUS RTU, DeviceNet, Modbus RS232, RS232 ASCII, CANopen, Ethernet IP, Modbus TCP, TCP/IP Others: Consult factory
Power Supply	Input: 10 to 30 VDC or 100 to 240 VAC (optional) Power: 2W at 25°C
Approvals	Meets CE requirements for heavy industrial use

Ordering Information	
Part No.	Description
<b>AV38-v-w-x-y-z</b>	<b>Local Monitor/Controller</b>
Current Outputs (v)	B = One C = Two
Mounting (w)	B = ¼ DIN NEMA 4X Wall-mount Enclosure
Communications (x)	0 = None 1 = RS232 ASCII 2 = Modbus RS232 4 = MODBUS RTU (for Modbus + Profibus) 5 = DeviceNet 6 = CANopen 7 = Ethernet IP, Modbus TCP, TCP/IP
Relays (y)	A = None C = Two
Power (z)	1 = 24 VDC 2 = 100 to 240 VAC

Consult factory for additional configurations and accessories.



**Certified System**  
Thermo Fisher Scientific  
Water Analysis Instruments  
Chelmsford, MA USA  
Quality Management System  
Registered to ISO 9001

[thermoscientific.com/processwater](http://thermoscientific.com/processwater)

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