



The Next Generation of Intelligent Processing

The AquaSelect Multi-Input Process Analyzer is far more than a 4-wire multi-input meter—it's a sophisticated and highly-flexible analysis platform for a wide range of process applications. Because it displays the status of up to four parameters simultaneously, the AquaSelect provides a complete picture of process status on a single instrument. This multi-channel capability reduces both the number of meters required and the time required for installation, maintenance, and upgrades.



The AquaSelect is fully compatible with a wide range of analytical sensors—both analog and digital—allowing measurement of many parameters, including:

- pH/ORP
- Conductivity (including resistivity, concentration, salinity, and TDS)
- Optical dissolved oxygen
- Dissolved ozone
- Free chlorine
- Turbidity
- Suspended solids

The HF scientific line of sensors includes:

AquaSelect Analog and AdvantEDGE Digital Differential pH Sensors

1.5-inch CPVC with NPT fitting, replaceable salt bridge, PT 1000 temperature element.

AquaSelect Analog and AdvantEDGE Digital Differential ORP Sensors

1.5-inch CPVC with NPT fitting, replaceable salt bridge, PT 1000 temperature element.

AquaSelect Analog and AdvantEDGE Digital Contact Conductivity Sensors

High-performance construction. Pre-calibrated, plug & play Digital Sensor.

AquaSelect Analog and AdvantEDGE Digital Toroidal Conductivity Sensors

High-resolution measurement. Pre-calibrated, plug & play Digital Sensor.

AdvantEDGE Digital FREE Chlorine Sensor Panel with Auto Cal

Reagent-free amperometric design, EPA Method 334.0 compliant, manual or automatic pH compensation. Pre-calibrated, plug & play.

AdvantEDGE Digital Optical Dissolved Oxygen Sensor

No electrolyte or membranes to replace. Two-year replaceable Cap. Models for use with AquaSelect and AdvantEDGE analyzers, and for direct connection to PLC or SCADA via 4-20 mA or Modbus RS-485. Pre-calibrated.

AdvantEDGE Digital Suspended Solids Sensor

0 – 20,000 mg/L. Rugged construction with fouling correction optics. Use with AquaSelect and AdvantEDGE analyzers or connect directly to PLC or SCADA via 4-20 mA or Modbus RS-485. Pre-calibrated, plug & play.

AdvantEDGE Digital Turbidity Sensor

0 – 4,000 NTU. Conforms to ISO 7027. 90° and 180° light paths. Rugged foul-resistant construction. Use with AquaSelect and AdvantEDGE analyzers or connect directly to PLC or SCADA via 4-20 mA or Modbus RS-485. Pre-calibrated, plug & play.



The AquaSelect is ready for today's most diverse process analysis tasks. With its modular design it's designed to grow & adapt as needs evolve:

- **Additional capacity:** Monitor additional parameters by adding plug and play cards
- **Field-configurable upgrades:** Install new firmware quickly & easily using removable digital storage media
- **Flexible communication:** Supports all major communication protocols
- **Local languages:** Select from seven languages (English, Spanish, French, German, Italian, Portuguese, and Chinese)

HF scientific product specifications are provided for reference only. HF scientific reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on HF scientific products previously or subsequently sold.

Configurable Analyzer Platform (1 to 4 Sensors): pH, ORP, Conductivity, Dissolved Oxygen, Ozone, Turbidity, Free Chlorine, Suspended Solids

Functions and Features

- One to four Sensors for optimal cost per measurement point.
- Temperature measurement for all sensors (standard).
- NEMA 4X Enclosure for indoor/outdoor use.
- Wall, Pipe and ½ DIN Panel Mounting options.
- Very readable large color graphics display.
- Math Functions for % rejection, % pass and others.
- Data and Event Logs for 4 channels for 30 days (Standard).
- Front panel USB port for easy data log extraction, quick system configuration, field software upgrades.
- Calibration, System Setup, Diagnostics and Service Menus.
- Two 4-to-20 mA loop outputs per sensor (up to 8).
- Three Form C Relays for Alarm, Control and Wash (Standard).
- Option for total of six Form C Relays when up to three sensors are used.
- Full Featured PID function for process control.
- Digital protocol options for remote measurement, calibration, setup and diagnostics: MODBUS, DeviceNet, Ethernet/IP...
- Six cable ports for standard conduit and cordgrip fittings.

Mounting Options

- Wall Mount with Quick Disconnect mounting plate.
- ½ DIN Panel Mount.
- Pipe/Hand rail mount (vertical and horizontal).

Interface

- Display: 4.3 Inch (109.22 mm) Color Graphics with High Contrast
- Keypad: 7 Key menu navigation

Environmental Conditions

- Ambient operating temperature range: -20 to 60°C
- Ambient storage temperature range: -20 to 70°C
- Maximum Relative humidity: 95% non-condensing
- Meets NEMA 4X requirements for outdoor use.
- Meets CE requirements for industrial use.

Interchangeable Modules

Factory installed function cards can be reconfigured in the field.

Slot 1: pH, ORP, Conductivity, DO, Ozone, Turbidity, Chlorine, SS

Slot 2: pH, ORP, Conductivity, DO, Ozone, Turbidity, Chlorine, SS

Slot 3: pH, ORP, Conductivity, DO, Ozone, Turbidity, Chlorine, SS

Slot 4: pH, ORP, Conductivity, DO, Ozone, Turbidity, Chlorine, SS, Host Comms, 3 Optional relays.

4 to 20 Milliamp Current Loops

- Two isolated current loops per sensor (standard).
- Setup as 0 / 4-to-20 mA.
- 0.01mA Resolution.
- Each output assignable to sensor, temperature or Math.
- Full featured PID control function w/ pH or conductivity.
- Loop power provided by AquaSelect.

Relays

- Three Form C Relays (Standard): 5A, 250 Volt
- Three Form C Relays (Optional): 5A, 250 Volt
- Normally Open and Normally closed contacts.
- Assignable to any measurement, temperature or math function in the system.
- Setup Functions Include: Alarm, Control and Timer.

Digital Protocol Options to Host

- MODBUS RTU
- DeviceNet
- Profibus DP/V1
- Ethernet/IP

Power Supply

AC Power Option: 100 to 240 VAC, 50/60Hz, 0.4A Max @ 25°C

DC Power Option: 24 VDC.

Approvals

CE: EN6100 -4-2, -4-3, -4-4, -4-5, -4-6, -4-11

Warranty

Two years