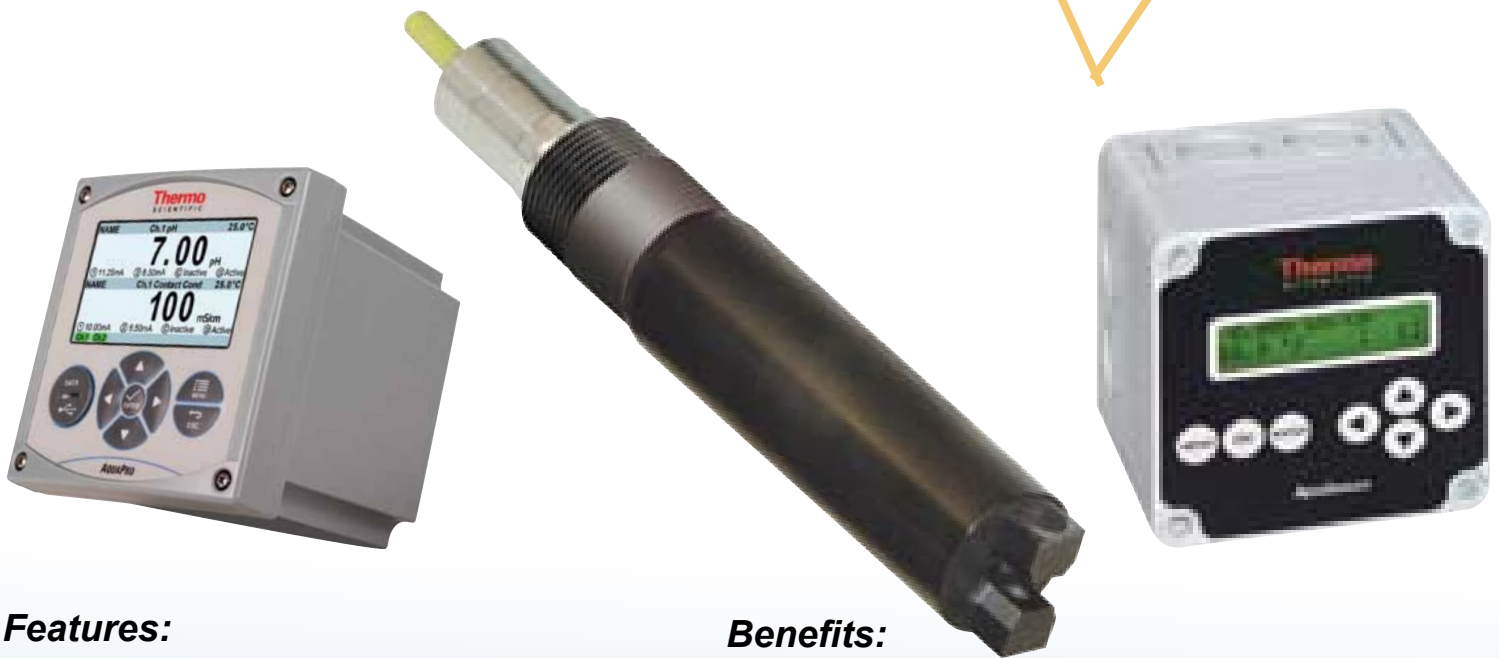




Suspended solids Sensor & System

SolSys: DataStick



Features:

- ❖ Fouling correction optics
- ❖ Optional Air clean system
- ❖ Versatile mounting options
- ❖ Temperature Measurement included
- ❖ 0-20000mg/l range
- ❖ Rugged Waterproof construction
- ❖ Plug & play industrial communications adaptors
- ❖ Connects direct to PLC or to AV38 interface/display or Aquapro multi input controller

Benefits:

- ❖ Minimised fouling effects
- ❖ Retains calibration in head
- ❖ May be used in aggressive environments
- ❖ May be used in-situ, or in pipe

Applications:

- ❖ Municipal/industrial wastewater
- ❖ Municipal potable water
- ❖ Pulp and paper
- ❖ Dairy industry
- ❖ Mining industry
- ❖ Chemical process

This Suspended Solids (TSS) sensor has a built in preamplifier, universal signal conditioning electronics, universal engineering units conversion, and interactive communications with a host computer or display interface using one of several protocols including Modbus[®] RTU, DeviceNet, Profibus, CANopen or USB. The built-in electronics of the sensor are completely encapsulated and O-ring sealed for protection from moisture and humidity. Its Polycarbonate construction gives exceptional chemical resistance and mechanical strength. The dual optics and optional air clean system minimise fouling effects making it ideal for monitoring all solids concentrations throughout a wastewater treatment plant. The sensor has interchangeable, precalibrated plug-in sensor heads and communications adapters that can be installed without powering down the system. For a stand alone system it may be interfaced with a AV38 or Aquapro controller. Various in-situ and pipe mounting options are available



Communications Adapter

Plugs into the DataStick to provide power and direct interactive communications with control systems.



System Specification

Measurement System Performance	<p style="text-align: center;">∅</p> <p>Range: 0 to 20,000 mg/L (diatomaceous earth) Resolution: 1 mg/L Step Response Time: 90% in 15 seconds</p>
Operational Environment	<p>Temperature Range: -5 °C to 50 °C Maximum Pressure: 150 psig @ 50 °C Maximum Flow Rate: 10 ft/second</p>
Power Requirements	<p>Voltage Range: 10 to 30 VDC Maximum Power: 200 mW Typical Power: 120 mW</p>
Construction	<p>Windows: Quartz Optical Topology: 1 cm path lengths for measurement and reference. Detectors : 90 degrees and 180 degrees to source O-rings: Viton® (other materials available) Sensor Head Material: Polycarbonate Weight 1.2 lbs Diameter: 1.45 " Length: 8.62" Thread: 1" NPT</p>
Units of Measure	<p>Suspended Solids: mg/L, ppm, % Temperature Units: °C, °F</p>
Calibration††	<p>Sample: 1 point Zero: 1 point Temperature: 1 point</p>
Measurement Modes	<p>Measurement Units: detected at 90 degrees and 180 degrees Temperature: Automatic from -5 °C to 50 °C</p>
Other Configuration Options	<p>Sensor Filter: 0 to 100 seconds Temperature Filter: 0 to 100 seconds</p>
Approvals and Ratings	<p>Immunity & Emissions: CE Certified 89/336/EEC: CISPER 11, EN61000 (-4-2,-4-3,-4-4,-4-6, 4-8) Safety: cULus Listed; 367G E303570 Hazardous Locations: Haz Loc Class 1, Division 2, Groups A, B, C, D. Max Ambient 50 °C</p>

† Note: Typical at 25 °C Performance unaffected by cable length ‡
 Note: Class II DC power supply required
 ††Note: Turbidity and Temperature are precalibrated at the factory



Sensor Mounting Accessories Include:

- Optional handrail mounting hardware assembly.
- Submersion extension pipe is available to install submersion style sensors.
- A stainless steel ball valve assembly with neoprene O-rings is offered for insertion style sensor installation. The assembly includes safety restrictor rods to limit sensor retraction, and position bolts to secure the fully inserted sensor.



AV38 controller



AquaPro controller

See separate sheets for details of above controllers

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