

Water Distribution Monitoring Panel

The Heart of the Hach
Distribution Monitoring
System





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Industry Leading Instrumentation Included

- Turbidity – Hach 1720E
- Chlorine – Hach CI-17
- pH – GLI pHD pH probe
- Conductivity – GLI conductivity
- The same instruments used in thousands of water treatment plants worldwide – market leaders in performance and reliability
- One Year Warranty on all components, except 1720E and pH probe (2yr,3yr)



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Panel Comparisons

- WDMP
- 36" x 48"
- 1720D
- Requires flow of 500-1000 ml/min
- AquaTrend Network
- Flow control with rotometers
- Shipped in crate
- WDMP sc
- 22" X 51"
- 1720E
- Requires flow of 400-600 ml/min
- SC1000 w/Modbus
- Flow control with orifice plate (constant head device)
- Shipped in carton

SC1000 Controller



- Specially configured for the WDMP sc
- Variety of I/O
 - 4 Digital inputs
 - 8 Analog outputs
 - 4 Alarm contacts
 - Analog and/or RS485 Modbus connections to recorders, PLCs, RTUs, SCADA systems
- Separate mounting from the panel for installation flexibility

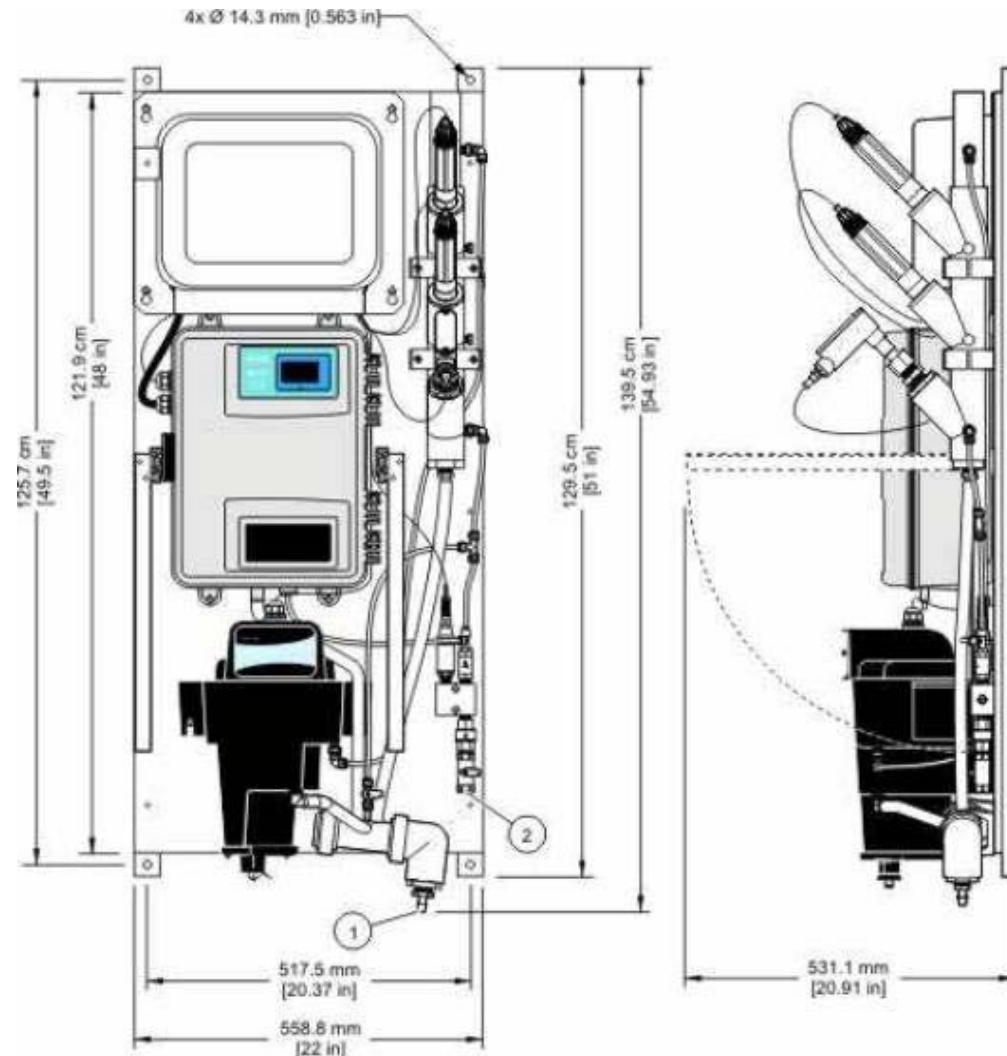
Add an Event Monitor



- Add the Event Monitor Trigger System
- Communication with Modbus from the SC 1000 to the Event Monitor
- Analog and/or RS485 Modbus connections to recorders, PLCs, RTUs, SCADA systems

Specifications

- Dimensions: 22 X 51.5" (52" overall length with rails)
- Flow: 400 to 600 ml/min
- Flow control
 - orifice plate and constant head device
 - Constant head device also provides mounting for probe-type sensors
- Power: 100-115/230Vac, 50/60 Hz, 500 VA.





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Small Footprint, Easy Installation

- Easily fits through 24" or larger manhole
- Mounted on rails (overall length 51")
- Mount with four 1/4" bolts using predrilled holes on the rails
- Four external connections
 - Power
 - Drain
 - Sample
 - SC 1000

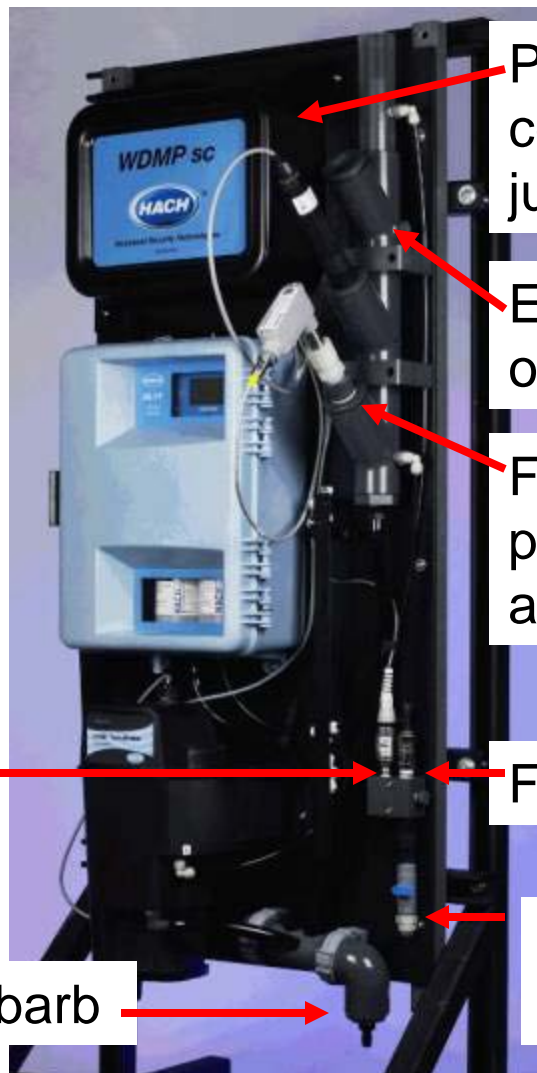
NEMA 4X Enclosure Available

- Fiberglass reinforced polyester
- NEMA 4X
- 36X60X16"



Rapid, Flexible Installation

- Preassembled!
- Mount, plumb, wire and measure!
- Optional NEMA 4X enclosure available (36"X60")



Power, sensor and data connections in common junction box

Easy to add ORP probe and other probes as available

Flexible mounting for probes – easy removal and installation

Pressure sensor

Flow orifice – no rotometers!

Common drain, 1/2" hose-barb

Common 3/8" sample connection

Easy Access Features

- Junction box cover becomes a utility tray for convenient maintenance



- Common junction box for all power, signal and sensor connections →

Pricing for WDMPsc

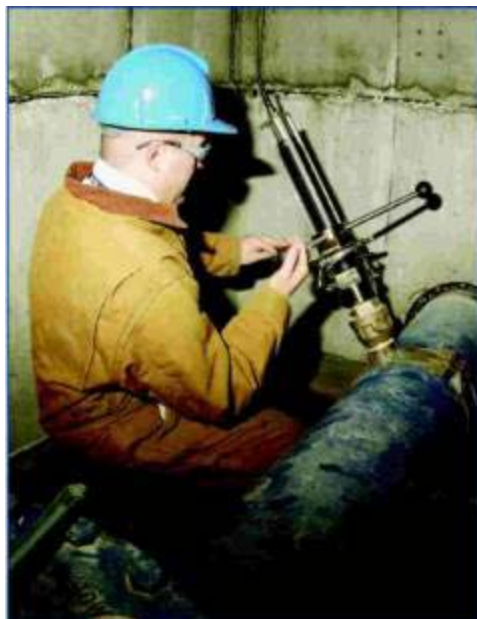
- List \$13,200 includes panel, sc1000 and the following: (Pricing still being debated by Tollgate team, more to come)

4 pH, 500 mL
7 pH, 500 mL
10 pH, 500 mL
Conductivity Reference Solution 1000 us/cm, 100mL, quantity of 3
StablCAL 20 NTU, 1L
Calibration Cylinder
Start-up kit for CI17
Free Chlorine reagent set
Total Chlorine reagent set
Sulfuric Acid, 19.2 N, 100mL MDB (for CL17 cleaning)
Beaker, 100 mL
10 feet of 3/4 inch Drain Tubing
Hose clamp
10 feet of 1/2 inch OD tubing



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Add To The Panel to Make a Complete Water Distribution Monitoring System



Portable Kits – First Responders

EPA Emergency Response Kit



pH, Conductivity, Radiation,
Chlorine, Cyanide

ToxTrak Toxicity Test Kits



Screen toxicity of samples. Also
available with a color comparator

Eclox Test Kit

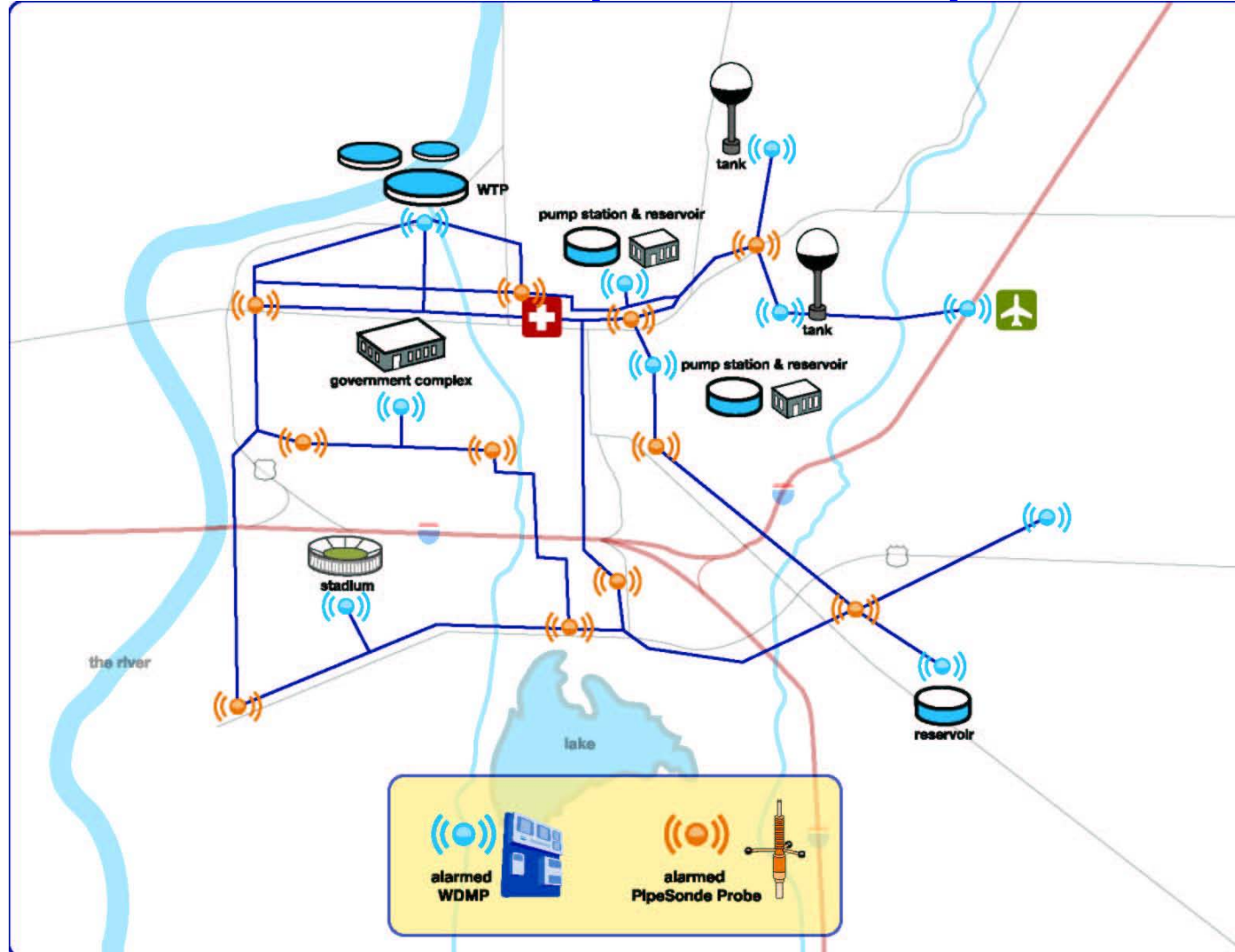
- Toxicity evaluation fast and simple.
- Validated by the EPA's (ETV) program
- Reliable detection of heavy metals, poisons, and chemical warfare agents on site.
- Hach Eclox Test Kit also includes
 - Hach pH, TDS, F & T chlorine, Color
 - Screening tests for pesticide/nerve agents and arsenic;
 - Complete, illustrated instructions.
 - Requires minimal training



Site/Installation Considerations

- *Secure*
- *A representative sample*
- *Good environmental conditions*
- *Reliable power source*
- *Access to drain (WDMP)*
- *Accessible for maintenance*
- *Availability of RTU/PLC or use wireless communication – good signal strength*

The Best Approach is a Network – A combination of panels and probes





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System Monitoring Benefits

Enhance system operation and reduce downtime

Improved customer satisfaction and relations

Satisfy regulatory record keeping and reporting requirements

Reduce labor costs associated with time and travel.

Alert operators and managers to undesirable changes in water quality

Distribution and plant personnel can troubleshoot remotely

Distribution and plant personnel can identify trends and adjust operating parameters more efficiently

The EPA website lists a number of benefits of remote monitoring in the distribution system.



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Questions??