



Hydro-Check
SYSTEMS, INC

414C & 414TDS Conductivity Monitor-Controllers



*One Instrument, One Sensor
Four Range AUTO-RANGING
Versatile Performance!*

The 414C and 414TDS, Conductivity Monitor-Controllers set a new standard in performance at a reasonable cost. Designed for the demands of Water Conditioning and Water Treatment applications, they are the ideal specification for the OEM, Engineer, or Service Dealer.

Four Range Auto-Ranging to 10,000 μ S or 5000 ppm TDS insures precise accuracy and optimum resolution for virtually any system...
pure water or feed, process or wastewater... without requiring different cell constants!

Temperature may be momentarily displayed in $^{\circ}$ C and $^{\circ}$ F. Large $\frac{1}{2}$ inch digits make the LCD easy to read at a distance.

The 414's also feature a High/Low Setpoint Controller for connection of valves, alarms, etc. Activation of the SPDT relay may be delayed from 0 to 999 sec to compensate for any anticipated equipment rinse-up times. All is easily programmed via just 3 pushbuttons. Front panel red and green LEDs indicate water quality relative to the setpoint.

Field selectable 0-5 VDC/4-20 mA/0-20 mA isolated outputs are available on both models.

Sample Applications:

- RO Product and Feedwater
- Distillation
- Desalination
- Two-bed DI
- Process Water
- Rinse Tanks
- Cooling Towers
- Printing Fountain Solution
- Fertilizer Control

MONITOR

Conductivity Ranges, MODEL 414C

Automatic, Zero to



Total Dissolved Solids Ranges, MODEL 414TDS

Automatic, Zero to



conductivity conv. curve, .62 to .83 std factory embedded program

Temperature Display:

0 - 50.0°C or 32 - 122°F

Accuracy:

Conductivity, $\pm 3\%$ of Reading; Repeatability, $\pm 1\%$

Temperature, $\pm 0.1^\circ\text{C}$

Temperature Compensation:

Automatic to 25°C from 0 to 50°C

Measurement Update:

3 times per second

Display:

numeric: $\frac{1}{2}$ inch, 4 digit LCD

indicator: Red and Green LEDs for controller status

CONTROLLER

Relay:

1 SPDT rated 1 amp resistive @ 28VDC; 0.5 amp resistive @ 120VAC

Function:

Adjustable High/Low Setpoint

Relay Activation Delay:

Adjustable from 0 - 999 seconds

Memory:

non-volatile EEPROM

OPTIONAL OUTPUTS

Isolated, 0-5 VDC / 4-20 mA / 0-20 mA, Field Selectable

GENERAL

Power Input: Selectable 110 or 220 VAC; 50 - 60 Hz

Power Consumption: 52 milliwatts; 0.43mA @ 110 VAC

Enclosure: ABS, Panel or Wall Mount

CONDUCTIVITY CELL & TEMPERATURE SENSOR

Type: Insertion Style, $\frac{1}{2}$ " or $\frac{3}{4}$ " mNPT fitting

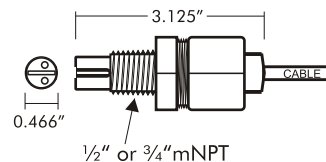
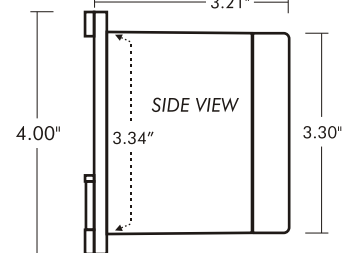
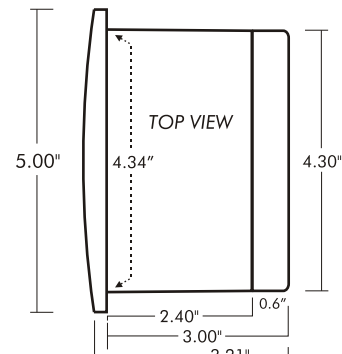
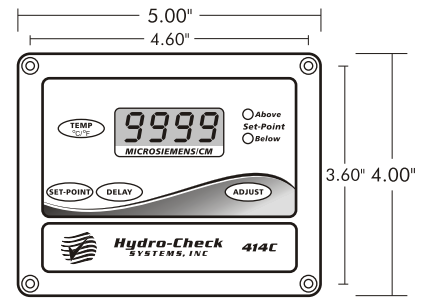
Conductivity Cell: 1.06 Cell Constant

Temperature Sensor: Linear Thermistor Network

Maximum Sensor Deployment: 100ft of cable

Wetted Materials: 316SS, Polypropylene, Noryl731^{®1}, Viton^{®2}

¹Noryl731[®] is a registered trademark of the General Electric Company
²Viton[®] is a registered trademark of DuPont Dow Elastomers



ORDERING INFORMATION

CONDUCTIVITY MODEL: **414C**

TDS MODEL: **414TDS**

OPTIONAL OUTPUTS: **-520** (add to monitor model number)

SENSOR: **CTS1-10** (std 10ft cable)

Optional: **-25/50/100 feet**

ACCESSORIES: Wall Mount Adapter

110VAC Powercord

Warranty: The Hydro-Check Systems 414 Monitor-Controllers, and Sensors have a warranty against defects in materials and workmanship for a period of 2 years from the date of manufacture. Warranty items returned prepaid will be repaired or replaced by the factory at no charge. Warranty applies only to product defects and Hydro-Check Systems, Inc. accepts no other liability.

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