

## Honeywell Solutions-Model 5000TC & APT 4000

# Honeywell's Answer to Successful Clean-In-Place Results

### Model 5000TC Non-Contacting Conductivity Sensor Model APT4000 Conductivity Analyzer

The Honeywell Model 5000TC Non-Contacting Conductivity Sensor and Model APT4000 Conductivity Analyzer  
“A solution that insures successful CIP results using sanitary, non-contacting measurement technology”.



### Application

Clean-in-place systems to sanitize process piping and vessels use cleaning solutions and rinse water to kill microorganisms left from previous products and batches.

- **Do you monitor your CIP operation to insure proper cleaning solution strength and successful final rinsing?**

- **Are you risking product contamination in process piping and vessels by not removing all residue from previous products and batches ?**
- **Is your current monitoring solution adding to the contamination?**

### The Problem

Proper cleaning solution strength must be maintained to kill all microorganisms. Rinse water conductivity must be measured to insure all residue has been removed. Accurate rinse water conductivity and a direct concentration reading of cleaning solution strength are needed for successful CIP results.

#### Contributing factors are:

- Cleaning solutions often use harsh chemicals resulting in difficult conductivity measurement
- Many times, cleaning solutions are reused and solution strength becomes diluted

- Rinse water conductivity indicates the presence of contaminants and residue. High accuracy is needed
- Non-sanitary conductivity measuring sensors with process connections that can trap residue/organisms, may be adding contamination to the process

**Honeywell eliminates these problems with a sanitary non-contacting (torodial) solution that measures water conductivity and a direct concentration reading of nitric acid, sodium hydroxide or other cleaning liquids.**

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## The Honeywell Solution

*Honeywell's 5000TC Conductivity Sensor and APT4000 Analyzer Solution gives you the measurement you want ...*

- Cleaning solution direct concentration
- Rinse water conductivity
- 3A approved process compatible materials
- Sanitary process fittings
- Connections to fit most vessels and piping
- Torodial sensor technology seldom requires cleaning

*... and the Time-Proven accuracy and performance you need.*

- High accuracy
- Rapid response sensor identifies stage of cleaning
- Temperature compensation of conductivity measurement
- Conductivity, Concentration and Temperature indication
- Easy to configure, menu driven configuration
- Process and Diagnostic Alarms

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### Specifications: Model 5000TC Conductivity Sensor & APT4000 Analyzer Solution

Measuring Range	0.2 to 2000 milliSiemens/cm
Wetted Materials	PFA Teflon, Polypropylene, PVDF or PEEK
Process Connection	2 in. Sanitary Fitting
Sensor Certification	3A Sanitary Materials
Operating Temperature	10 °C to 125 °C (14 °F to 257 °F)
Max Pressure/Temperature Limits	200 PSI@ 302°F (PEEK, PFA Teflon) 100 PSI@ 212°C (Polypropylene) 100 PSI@ 248°C (PVDF)
Temperature Compensator	100 OHM Platinum RTD
Accuracy	+/-1% of reading +/-0.02 mS/cm +/-1 of least significant digit
Output	4-20 maDC, 0-20 maDC
Alarm/Relays	Max, Min, Wash, Diagnostic (all SPDT)

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