Measure Conductivity the Easy Way The 9782 Conductivity/Resistivity Analyzer/Controller



Honeywell has just made conductivity measurement easier with the 9782 Conductivity/Resistivity/Concentration Analyzer/ Controller. The user-friendly features of the 9782 provide:

- Quick assessment of vital process information
- Greatly reduced installation and wiring time
- Simplified maintenance and configuration

All this allows you to make accurate conductivity or resistivity measurements easily, wherever you need them—from industrial processes to ultrapure water applications.

Designed for the Ultimate in User Friendliness

The 9782 series analyzer was designed to be the easiest analyzer to use while providing you with the widest selection of advanced features:

- A "snapshot" of your process with multiple parameters on a single display
- Easy-to-follow menu-driven displays
- Intuitive prompts and instructional messages
- Quick problem assessment with text descriptions for diagnostics and alarms
- Minimum key strokes with conveniently grouped key pad
- Functions available when needed, with dynamic function keys



- Savings in cost and "real estate" with two independent inputs
- Improved accuracy with special temperature compensation algorithms for high-purity water applications
- Two methods of cell calibration available
- Four measurement types available for flexible display of process parameters
- Calculations available for advanced process analysis applications
- Automatic cell-cleaning function
- Simplified installation with direct cell placement up to 1,000 feet from the analyzer
- Up to three analog outputs
- Up to four internal relays.



Multiparameter Analyzer

The 9782 reduces your cost and equipment requirements by measuring, displaying, alarming, and outputting up to two independent conductivity cells on a single multivariable instrument. The 9782 conductivity analyzer offers the ultimate in flexibility, providing four different display formats, including conductivity, resistivity, total dissolved solids, and percent concentration by weight.

Menu-driven Configuration

Configuration is effortless—menudriven, step-by-step prompts guide the user through the entire process.

Configuration is simplified by offering the user only the options specified in the model number. Then an easy-to-follow sequence prompts you through the setup for input, output, alarm, auto functions, and control features.

The 9782 can be calibrated directly from the front panel using standard conductivity solutions and/or by storing a known cell calibration factor in memory. This combination permits on-line system calibration to accepted standards for unmatched system accuracy.

Specialized Applications

Challenge the Honeywell 9782 conductivity analyzer with your specialized applications. The 9782 can assist in preventive maintenance and/or process optimization through available calculations such as:

- Ratio
- Percent Passage
- Percent Rejection
- Difference.

The above calculations can be important in a variety of situations, including ion exchange operations, reverse osmosis efficiency monitoring, desalination processes, and cell reliability monitoring, to name a few.



All these advanced, user-friendly features are available in one reliable and economical instrument. But what good are reduced costs if the measurement is not accurate?

Accurate Conductivity Measurement

Conductivity is greatly affected by temperature changes and solution composition. The 9782 analyzer incorporates 70 years of experience in conductivity measurement to provide the temperature and solution compensation algorithms you need to accurately measure conductivity.

For pure-water applications, solution temperature compensation tables include:

- High-purity water
- Acid/ammonia/ETA
- Morpholine (Power Plants).

Solution temperature compensation for concentration applications includes:

- H₂SO₄
- NaOH
- HCl
- NaCl.

If you need access to conductivity data not compensated for temperature, with the touch of a button you can view "raw" conductivity on the 9782 analyzer.

Because of line impedance, lead wire length can introduce error into a conductivity measurement. The 9782 provides compensation to lead wire length to further improve the accuracy of your conductivity measurement.



Unique Functions of the 9782 Conductivity Analyzer

- Calibration factors are easy to enter through the front display.
- You can maximize relay usage by assigning multiple alarms to a single relay.
- Wiring summary reduces your setup and wiring time for relays and outputs. A summary screen based on user-selected hardware options tells the installer exactly how to wire the outputs and alarms.

- AutoClean enables unattended automatic cell washing. An internal clock schedules timing and duration of the flow of cleaning solution to the cells.
- A user-defined alphanumeric tag can be displayed on the screen for easy loop identification.



Condensed Specifications

Display	LCD Dot Matrix, 128 x 64 dpi; backlit-solid state LED
Standard Alarm/Control Relays	Two SPDT, Form C, general-purpose relays
Optional Additional Alarm/Control Relays	Two SPDT, Form C, general-purpose or hermetically sealed relays
Power Requirements	108-132/216-264 VAC, 47-63 Hz, 15 VA, 100-700 mA
Operating Conditions	Ambient temperature: 0° to 60°C normal; -30° to 70°C storage
	Relative humidity: 90% max., non-condensing at 40°C max.
Control	Discrete, PFT, DAT, On/Off, CAT available
Display Ranges	0.055µs to 1,000 ms (0.2 to 18.2 Mohms)
Display Accuracy	±0.5% of reading
Process Temperature Display Output	-9.9 to 99.0°C, resolution 0.1°C 100-140°C, resolution 1°C
Accuracy	As percent of span: 4-20 mA, ±0.1%; 0-1 V, ±0.2%; 0-10 V, ±0.4%
Output Signals Proportional to User-set Output Range(s) of Selected Parameter(s)	Up to three 4-20 mA DC
CE Mark-compliant	Full conformity with CE directives
Year 2000 ready	Full conformity with Year 2000 directive

For more information on the 9782 Conductivity Analyzer, as well as other Honeywell analytical instrumentation, contact your local Honeywell representative. Or visit our World Wide Web site at http://www.iac.honeywell.com. Or in the U.S. call 1-800-288-7491.



Industrial Automation and Control

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