

# Solu Comp® II Dual Input Analyzer

- BROAD SELECTION OF MEASUREMENT CHOICES includes pH/ORP, Resistivity/Conductivity, % Concentration, Total and Free Chlorine, Dissolved Oxygen, Dissolved Ozone, Flow, and Temperature.
- SINGLE OR DUAL MEASUREMENT with dual 4-20 mA outputs.
- FULL COMPLEMENT OF MEASUREMENT COMBINATIONS CAN BE COMMISSIONED IN THE FIELD.
- THREE FULLY PROGRAMMABLE ALARMS.
- CLEAR, EASY-TO-READ, two-line, back-lit display easily customized to read in English, French, German, Italian, Spanish, or Portuguese.
- CHOICE OF ENCLOSURES for pipe, surface, and panel mounting meet NEMA 4X/CSA 4 (IP 65) requirements.



## FEATURES AND APPLICATIONS

The Solu Comp II analyzers offer the choice of single or dual sensor input with measurement choices of pH/ORP, resistivity/conductivity/TDS, % concentration, ratio conductivity, total and free chlorine, dissolved oxygen, dissolved ozone, flow and temperature. Dual measurement analyzers offer a wide choice of measurement combinations thus reducing the cost per loop and needed panel space.

**FIELD COMMISSION OPTION:** The Solu Comp II can be ordered with the ability to commission measurements in the field. This added flexibility can greatly reduce the number of spare instruments required for field servicing.

**QUICK START PROGRAMMING:** Exclusive Quick Start screens appear the first time the Solu Comp II is powered up. Screen prompts direct the user to register the number of sensors, the measurement unit(s) and the language to display. Some measurement specific prompts are also displayed. The measurement loop is ready for use in a matter of minutes.

**MENUS:** Menu screens for calibrating and registering choices are simple and intuitive. Plain language prompts guide the user through the procedures. There are no service codes to enter before gaining access to menus.

**DUAL SENSOR INPUT AND OUTPUT:** The Solu Comp II accepts single or dual sensor input. The two 4-20 mA outputs can be independently programmed to correspond to any selected measurement or temperature. Output damping and linear or log output may also be field selected.

**ALARMS:** The Solu Comp II has three fully programmable alarm relays that can be assigned to any selected measurement or temperature. Alarms can be configured as high, low, or USP<sup>1</sup>. The third relay has the additional choice of fault alarm operation. When selected, a fault alarm will activate the relay when a sensor or analyzer fault occurs.

**ENCLOSURE:** The panel mount version fits standard ½ DIN panel cutouts, and its shallow depth is ideally suited for easy mounting in Hoffman-type enclosures. A panel mount gasket is included to maintain the weather rating of the panel. Surface/pipe mount enclosure includes self-tapping screws for surface mounting. A pipe mounting accessory kit is available for mounting to a 2-inch pipe.

<sup>1</sup>USP alarm applies to conductivity/resistivity only.

Continued on page 2

**DISPLAY:** The two-line, 16-character, back-lit display can be customized to meet user requirements. All operations and descriptive messages can be field selected for English, French, German, Italian, Spanish, or Portuguese. Informative screens, which permit data not shown in the regular display, may be seen at the push of a button.

**TEMPERATURE:** Most measurements (except ORP and flow) require temperature compensation. The Solu Comp II will automatically recognize either a Pt100 or Pt1000 RTD, normally built into the sensor. When this RTD is present, the Solu Comp II can be set up to display the temperature in °C or °F as well as set any one or more of the alarms and/or outputs to respond to this sensor input. If two measurements with temperature are present either can be chosen for each alarm and output selected.

## SPECIFICATIONS - General

**Case:** ABS (panel mount), polycarbonate (surface/pipe mount). All versions are NEMA 4X/CSA 4 (IP65).

### Dimensions

**Panel (code -10):** 6.10 x 6.10 x 3.72 in. (155 x 155 x 94.5 mm)

**Surface/Pipe (code -11):** 6.23 x 6.23 x 3.23 in. (158 x 158 x 82 mm); see page 5 for dimensions of pipe mounting bracket.

**Conduit Openings:** Accepts PG13.5 or 1/2 in. conduit fittings

**Display:** Two line, 16-character, back-lit display. Character height: 4.8 mm. Display can be customized to meet individual requirements. Depending on number of sensors, as many as 14 display screens are available.

**Ambient Temperature and Humidity:** 0 to 50°C, (32 to 122°F) RH 5 to 95% (non-condensing)

Note: The analyzer is operable from -20 to 60°C (-4 to 140°F) with some degradation in display performance.

**Ambient Temperature Effect:** ±0.05% of reading/°C


### Power:

Code -01: 115/230 Vac ±15%, 50/60 Hz ±6%, 8.0 W

Code -02\*: 24 Vdc ±15%, 6.0 W

Installation Category II

\* For +24Vdc Power Supply use only devices meeting NEC Class II or UL recognized (UL 1950).

 Equipment protected throughout by double insulation.

### Hazardous Location:



-LR 34186

Class I, Division 2,  
Groups A, B, C, & D



APPROVED

POLLUTION DEGREE 4: Extended Environment  
Outdoor use where conductive contamination such as rain, snow, or dust may be present. (Hazardous Location only)

RFI/EMI: EN-61326

LVD: EN-61010-1



### Code -68 only:



12RN

POLLUTION DEGREE 2: Normally only non-conductive pollution occurs. Occasionally, however, a temporary conductivity caused by condensation must be expected.

**Input:** Choice of single or dual sensor input with measurement choices of pH/ORP, conductivity/resistivity, toroidal conductivity, flow, chlorine, dissolved oxygen, and dissolved ozone. Field-commissioned units allow user to change measurements on either or both inputs. See combination guide for valid combinations. For contacting conductivity measurements, temperature element must be a Pt 1000 RTD. For other measurements, use either a Pt100 RTD, Pt1000 RTD, or 22k NTC (D.O. only).

**Outputs:** Two 4-20 mA or 0-20 mA isolated outputs. Continuously adjustable. Linear or logarithmic. Maximum load 500 ohms. Output dampening with time constant of 5 sec is user-selectable.

**Analog Output Accuracy:** ±0.05 mA

**Alarms:** Three alarm relays for process measurement(s) or temperature. Alarm 3 can be configured as a fault alarm, instead of a process alarm. Each relay can be configured independently. Alarm logic (high or low activation or USP\*) and deadband are user-programmable. The USP\* alarm can be programmed to activate when the conductivity is within a user-selectable percentage of the limit.



\*conductivity/resistivity measurement only

**Relays:** Form C, single pole double throw, epoxy sealed

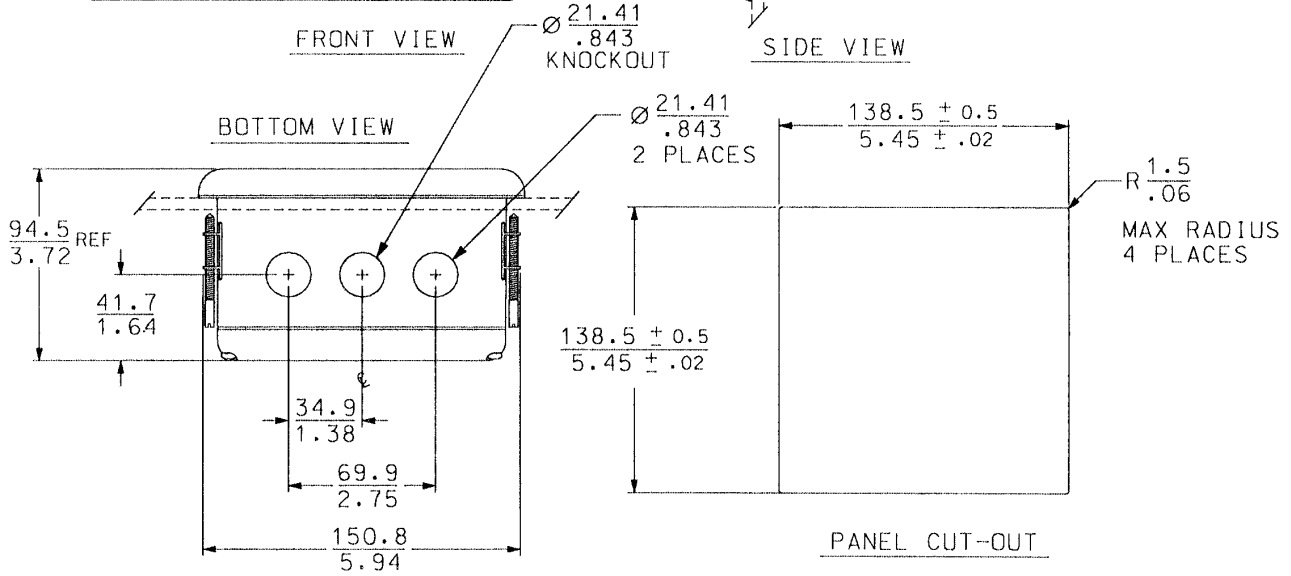
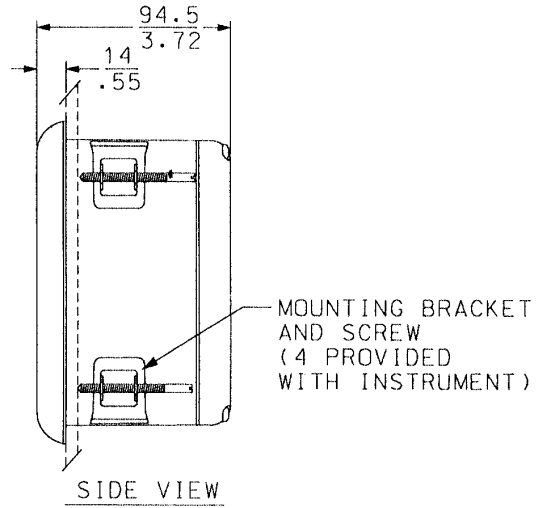
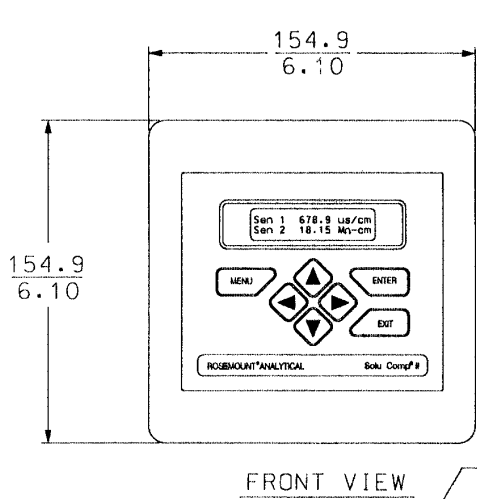
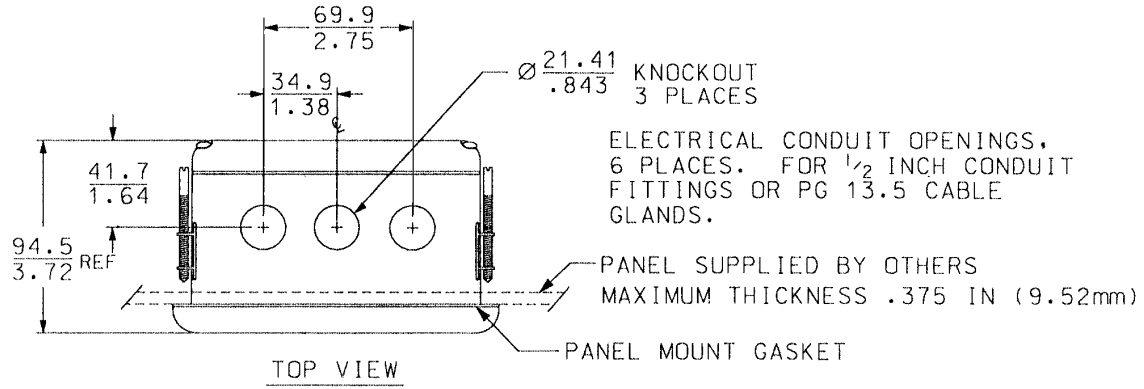


	Resistive	Inductive
28 Vdc	5.0 A	3.0 A
115 Vac	5.0 A	3.0 A
230 Vac	5.0 A	1.5 A

**Terminal Connections Rating:** 26-14 AWG wire size

**Weight/Shipping weight** (rounded up to nearest lb or nearest 0.5 kg): 3 lb (1.5 kg)/4 lb (2.0 kg)

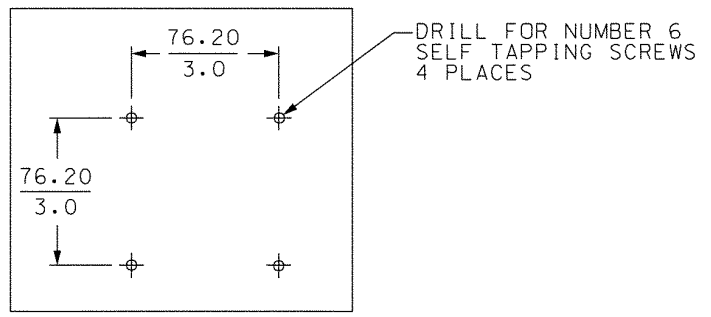
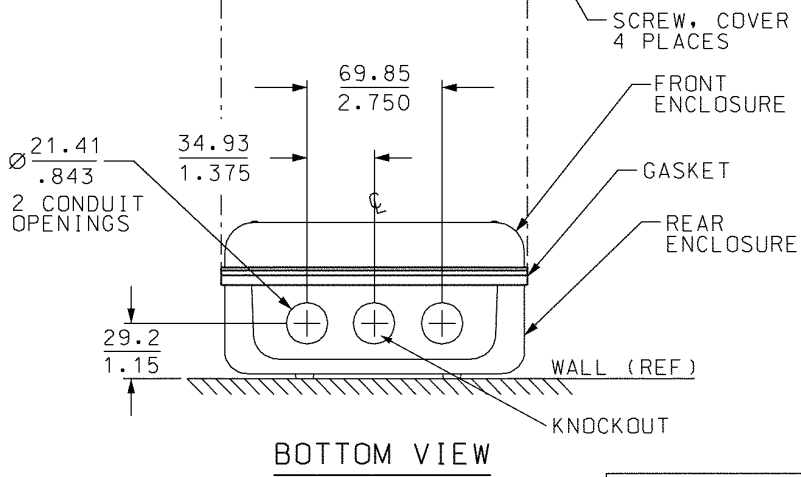
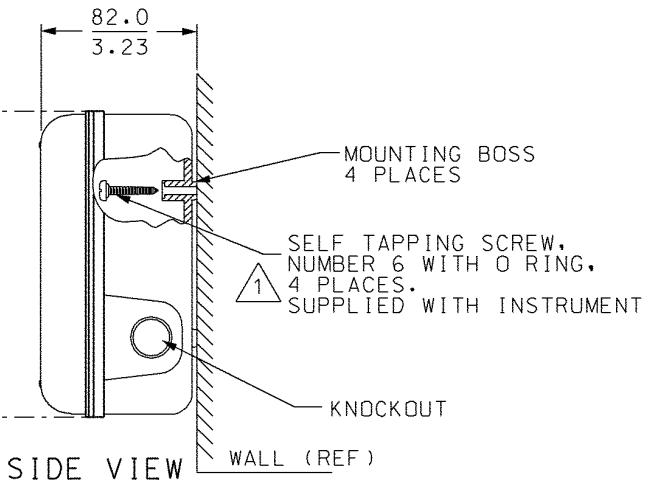
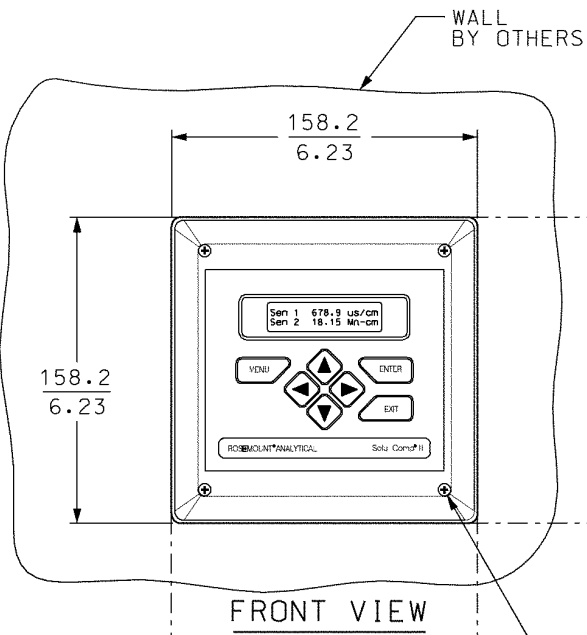
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 DO NOT OPERATE OR ENERGIZE INSTRUMENT WITH CASE OPEN.

**PANEL MOUNT INSTALLATION**

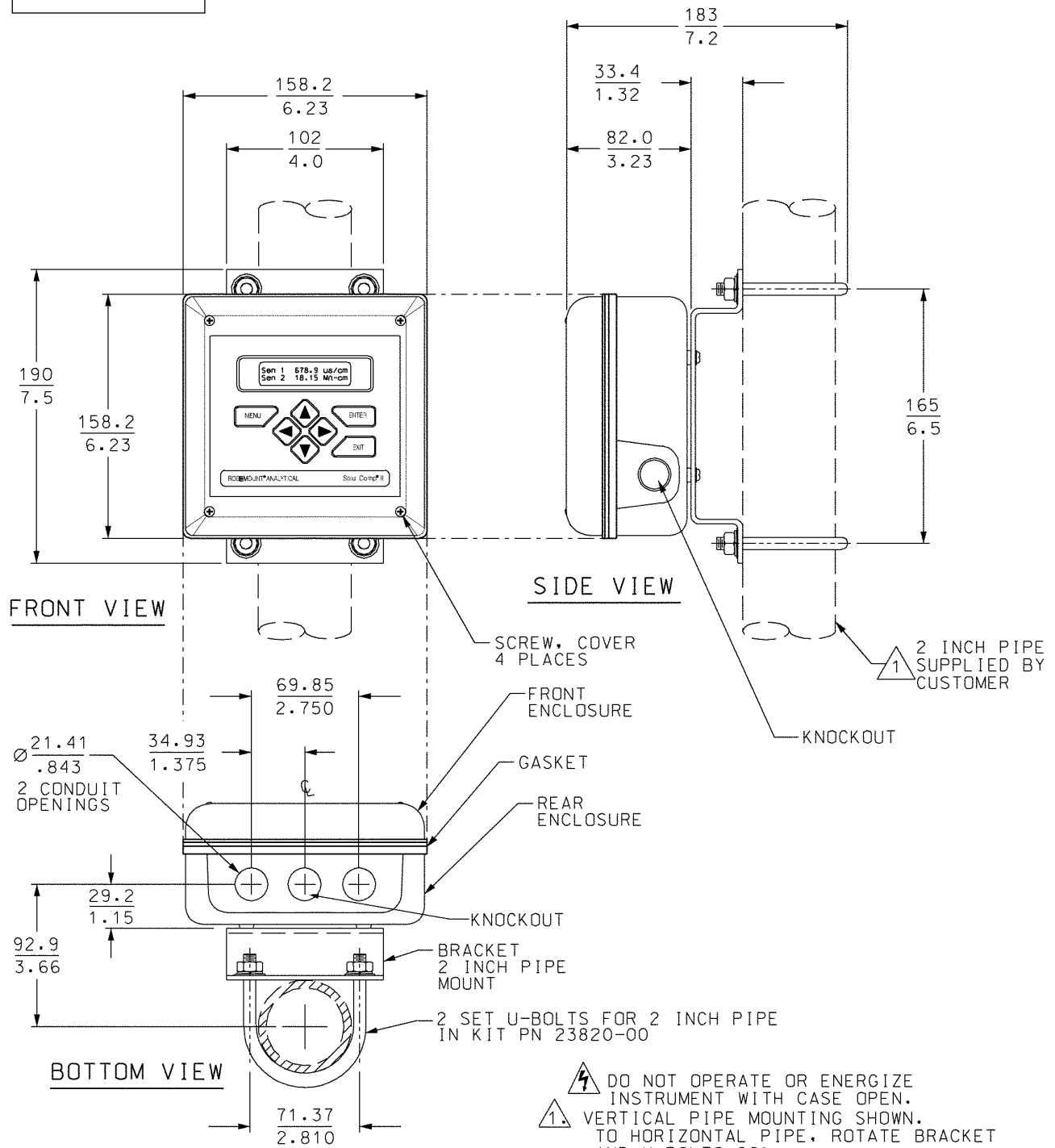
*Access to the wiring terminals is through the rear cover. Four screws hold the cover in place.*



⚡ DO NOT OPERATE OR ENERGIZE INSTRUMENT WITH CASE OPEN.  
 1 PIERCE MEMBRANE WITH SELF TAPPING SCREW

**SURFACE MOUNT INSTALLATION**

*The front panel is hinged at the bottom. The panel swings down for access to the wiring terminals.*



**PIPE MOUNT INSTALLATION**

*The front panel is hinged at the bottom. The panel swings down for access to the wiring terminals.*

# CONTACTING CONDUCTIVITY (Codes -20 and/or -30)

Measures conductivity in the range 0 to 20,000  $\mu\text{S}/\text{cm}$ . Display choices are conductivity, resistivity, and TDS (total dissolved solids). Three temperature corrections are available: high purity water (dilute sodium chloride), cation conductivity (dilute hydrochloric acid), and adjustable linear temperature coefficient (0 to 5.00%/°C). Temperature correction can be disabled, allowing the analyzer to display raw conductivity.

## PERFORMANCE SPECIFICATIONS -

Range	Cell constant (/cm)	Accuracy <sup>1,2</sup>
0.055 - 9.99 $\mu\text{S}/\text{cm}$	0.01	0.9% of reading or $\pm 0.002 \mu\text{S}/\text{cm}$
10 - 50 $\mu\text{S}/\text{cm}$	0.01	$\pm 2\%$ of reading
0.055 - 500 $\mu\text{S}/\text{cm}$	0.1	$\pm 2\%$ of reading or $\pm 0.1 \mu\text{S}/\text{cm}$
0.055 - 5000 $\mu\text{S}/\text{cm}$	1.0	$\pm 2\%$ of reading or $\pm 1 \mu\text{S}/\text{cm}$
0 - 5 mS/cm	1.0	$\pm 2\%$ of reading or $\pm 0.001 \text{mS}/\text{cm}$
0 - 20 mS/cm	10	$\pm 2\%$ of reading or $\pm 0.01 \text{mS}/\text{cm}$

## ANALYZER (CONDUCTIVITY)

**Accuracy (Resistivity)<sup>2</sup>:** 0.9% of reading

**Accuracy (Temperature)<sup>2</sup>:**  $\pm 0.1^\circ\text{C}$  between  $5^\circ\text{C}$  and  $100^\circ\text{C}$ ;  $\pm 1^\circ\text{C}$  between  $101^\circ\text{C}$  and  $200^\circ\text{C}$

**Stability:** 0.5% of reading/month

**Temperature Correction:** High purity water (dilute sodium chloride), cation conductivity (dilute hydrochloric acid), linear temperature coefficient (0.0 to 5.00%/°C), or none. High purity water and cation conductivity temperature correction apply between 0 and  $100^\circ\text{C}$ . Linear temperature coefficient can be applied between  $-5$  and  $200^\circ\text{C}$ .

**Measurement Range:** 0.0 to 20,000  $\mu\text{S}/\text{cm}$ , 0.05 to 20 M $\Omega$ -cm, or 0 to 10,000 ppm TDS

**Temperature Range:**  $-5^\circ\text{C}$  to  $200^\circ\text{C}$  ( $23^\circ\text{F}$  to  $392^\circ\text{F}$ )

12.34 $\mu\text{S}/\text{cm}$	40.3 C
7.34 pH	25.3 C

<sup>1</sup> whichever is greater

<sup>2</sup> Accuracy values pertain to Endurance Model 400 Series conductivity sensors only

## RECOMMENDED SENSORS FOR CONDUCTIVITY:

The Solu Comp II is intended for use with the ENDURANCE Model 400 series conductivity sensor (Pt 1000 RTD).

Model 400 Screw-in/Insertion

Model 400VP Screw-in/Insertion with 6.0 VP connector

Model 401 Screw-in/Insertion (except 401-15)

Model 402 Retractable

Model 402VP Retractable with 6.0 VP connector

Model 403 Sanitary Flanged

Model 403VP Sanitary Flanged with 6.0 VP connector

Model 404 Flow-Through

The analyzer can also be used with Rosemount Analytical conductivity sensor Models 140, 141, 142, and 150 having a Pt 100 RTD.

## Ratio Conductivity (Codes -20-30):

The dual conductivity Solu Comp II can function as a ratio analyzer or recovery device (% passage or % rejection). Product sensor 2's conductivity reading is always displayed.

### Ratio

Ratio	.3325
S2	4.621 $\mu\text{S}/\text{cm}$

### %Pass

%Passage	12.1
S2	4.621 $\mu\text{S}/\text{cm}$

### %Reject

%Reject	87.9
S2	4.621 $\mu\text{S}/\text{cm}$

## TOROIDAL CONDUCTIVITY (Codes -21 and/or -31)

When used with Model Series 200 Toroidal Conductivity Sensors, display choices are conductivity, resistivity, and percent concentration. The percent concentration selection includes the choice of four common solutions (0-12% NaOH, 0-15% HCl, and 0-25% or 96-99.7% H<sub>2</sub>SO<sub>4</sub>). The conductivity-concentration algorithms for these solutions are fully temperature compensated. For other solutions, a simple-to-use menu allows the customer to enter his own data. The analyzer accepts as many as five (5) data points and fits either a linear (two [2] points) or a quadratic function (three [3] or more points) to the data. Reference temperature and linear temperature slope may also be adjusted for optimum results.

Model 222 Flow-through conductivity sensor  
 Model 225 Clean-in-place conductivity sensor  
 Model 226 Large bore conductivity sensor  
 Model 228 Toroidal conductivity sensor  
 Model 242 Flow-through conductivity sensor  
 Model 247 Economy conductivity sensor

### PERFORMANCE SPECIFICATIONS -

**Measurement Range:** see table below

**Accuracy:** ± 1% of reading and ± 0.01 mS/cm

**Repeatability:** ± 0.5% of reading and ± 0.005 mS/cm

**Stability:** ± 0.25% of reading and ± 0.005 mS/cm/month, noncumulative

**Temperature Compensation:** -15 to 200°C (5 to 392°F) automatic or manual. Automatic requires a Pt100/1000 RTD

**Temperature Correction:** Linear temperature coefficient (0.0 to 5.00%/°C) neutral salt (dilute sodium chloride) or none

S1	1027mS/cm	100 C
S2	847.1µS/cm	100 C

### RECOMMENDED SENSORS:

RECOMMENDED RANGES FOR TOROIDAL SENSORS							
Conductivity Sensor Model	226	228	225	222 (1in.)	222 (2 in.)	242	247
Nominal Cell Constant	1.0	3.0	3.0	6.0	4.0	*	3.5
Minimum Conductivity (µS/cm)	50	200	200	500	500	100*	500
Maximum Conductivity (µS/cm)	1,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000*	2,000,000

\* Model 242 values depend on sensor configuration and wiring.

## pH/ORP (Codes -22 and/or -32)

For use with any standard pH or ORP sensor and all Uniloc sensors and junction boxes with built-in diagnostic style preamplifiers, display choices are pH, ORP or Redox. The automatic buffer recognition feature uses stored buffer values and their temperature curves for the most common buffer standards available worldwide. The analyzer will recognize the value of the buffer being measured and perform a self stabilization check on the sensor before completing the calibration. Manual or automatic temperature compensation is keypad selectable. Change in pH due to process temperature can be compensated using a programmable temperature coefficient or isopotential point. Measurement and display of pH glass and reference impedance helps alert the user to sensor maintenance needs.

*\*reference impedance is suppressed with amperometric/pH combinations (-24, -25, -26)*

### PERFORMANCE SPECIFICATIONS - ANALYZER (pH INPUT)

**Measurement Range [pH]:** 0 to 14 pH

**Accuracy:**  $\pm 0.01$  pH

**Repeatability:**  $\pm 0.01$  pH

**Stability:**  $\pm 0.01$  pH/month, non-cumulative

**Temperature Coefficient:**  $\pm 0.003$  pH/ $^{\circ}$ C

**Temperature Compensation:** Pt100/Pt1000 RTD, Automatic or Manual -15 to 100 $^{\circ}$ C (5 to 212 $^{\circ}$ F)

**Temperature Correction:** Choose from standard measurement compensation, solution temperature correction for high purity or dilute base solutions, and custom temperature correction.

### PERFORMANCE SPECIFICATIONS - ANALYZER (ORP INPUT)

**Measurement Range [ORP]:** -1400 to +1400 mV

**Accuracy:**  $\pm 2.0$  mV

**Repeatability:**  $\pm 1.0$  mV

**Stability:**  $\pm 1.0$  mV/month, non-cumulative

**Temperature Coefficient:**  $\pm 0.2$  mV/ $^{\circ}$ C

**Temperature Measurement:** -15 to 100 $^{\circ}$ C (5 to 212 $^{\circ}$ F)

**Temperature Correction:** none required

S1	4.34pH	25 C
S2	12.34pH	27 C

### RECOMMENDED SENSORS FOR pH:

Model 320B Flow Through pH  
Model 320HP High Purity pH  
Model 328A Steam Sterilizable pH  
Model 370 and 371 EuroSenz pH  
Model 381+ Insertion/Submersion/Flow Through pH  
Model 385+ Insertion/Submersion/Retractable pH  
Model 389 Insertion/Submersion pH  
Model 396 Insertion/Submersion pH  
Model 396VP Insertion/Submersion pH with VP 6.0 connector  
Model 396P Insertion/Submersion pH  
Model 396PVP Insertion/Submersion pH with VP 6.0 connector  
Model 396R Retractable pH  
Model 396RVP Retractable pH with VP 6.0 connector  
Model 397 Quik Disconnect pH  
Model 398 Insertion/Submersion pH  
Model 398VP Insertion/Submersion with VP 6.0 connector  
Model 398R Retractable pH  
Model 398RVP Retractable pH with VP 6.0 connector  
Model 399 Insertion/Submersion pH  
Model Hx338 Steam Sterilizable pH  
Model Hx348 Steam Sterilizable pH

### RECOMMENDED SENSORS FOR ORP:

Model 330 Flow Through ORP  
Model 371 EuroSenz ORP  
Model 381+ Insertion/Submersion/Flow Through ORP  
Model 385+ Insertion/Submersion/Retractable pH  
Model 389 Insertion/Submersion ORP  
Model 396P Insertion/Submersion ORP  
Model 396PVP Insertion/Submersion ORP with VP 6.0 connector  
Model 396R Retractable ORP  
Model 398 Insertion/Submersion ORP  
Model 398VP Insertion/Submersion with VP 6.0 connector  
Model 398R Retractable ORP  
Model 398RVP Retractable ORP with VP 6.0 connector

### When used with conductivity (-20-32 or -22-30):

Model 320HP High Purity ORP  
Model 381+ Insertion/Submersion/Flow Through ORP  
Model 385+ Insertion/Submersion/Retractable ORP  
Model 396P Insertion/Submersion ORP  
Model 396PVP Insertion/Submersion ORP with VP 6.0 connector  
Model 396R Retractable ORP  
Model 396RVP Retractable ORP with VP 6.0 connector



## FLOW (Code -23 and/or -33 or Suite 2)

For use with most pulse signal flow sensors, the Solu Comp II's user selectable units of measure include flow rates in GPM (Gallon per minute), LPM (liters per minute), or m<sup>3</sup>/hr (cubic meters per hour), and velocity in ft/sec or m/sec. When configured to measure flow, the unit also acts as a totalizer in the chosen unit (gallons, liters, or cubic meters).

Dual flow instruments can be configured as a % recovery device or a flow difference device.

### PERFORMANCE SPECIFICATIONS

**Frequency Range:** 0.5 - 4000 Hz

**Flow Rate:** 0 - 9999 GPM, LPM, m<sup>3</sup>/hr

**Totalized Flow:** 0 - 9,999,999 Gallons;  
37,850,000 Liters; 37,850 m<sup>3</sup>

**Accuracy:** ±1% (±1.5% from 3000 to 4000 Hz)

**Repeatability:** ±1%

### RECOMMENDED SENSORS\*

+GF+ Signet 515 Rotor-X Flow sensor Model  
515/8510-XX (PN P51530-PO)

Fluidyne Flow Sensor Model 2300A  
(PN Hydro-Flow-2300-A-10-5R-3-1-1)

\* *Input voltage not to exceed ±36V*

*Consult factory for other pulse type sensor compatibility.*

S2 12.34 GPM
S2 47.25K Gal

## FREE AND TOTAL CHLORINE (Code -24)

The Solu Comp II is compatible with the Model 499ACL-01 free chlorine sensor and the Model 499ACL-02 total chlorine sensor. The Model 499ACL-02 sensor **must** be used with the Model SCS921 sample conditioning system. Both sensors are membrane covered amperometric sensors. For more information concerning the use and operation of chlorine amperometric sensors, refer to the sensor product data sheets.

The Solu Comp II fully compensates free and total chlorine readings for changes in membrane permeability caused by temperature changes. Temperature is measured by a Pt 100 RTD in the sensor.

For free chlorine measurements, both automatic and manual pH correction are available. pH correction is necessary because amperometric chlorine sensors measure only hypochlorous acid. To measure free chlorine (hypochlorous acid plus hypochlorite ion) most competing analyzers add acid to the sample. Acid lowers the pH and converts hypochlorite to hypochlorous acid. The Solu Comp II eliminates messy and expensive chemicals by using the measured pH to correct the chlorine sensor signal. If the pH is relatively constant, a fixed pH correction can be used. If the pH is greater than 7 and fluctuates more than about 0.2 units, continuous measurement of pH and automatic pH correction is necessary. Corrections are valid to pH 9.5. For automatic pH correction select code -32 and an appropriate pH sensor.

An input filter allows the user to configure the analyzer for rapid response or low noise. The low noise option is recommended for samples containing less than 0.1 ppm chlorine.

Chlorine solutions are unstable, so chlorine standards are not generally available. Instead, chlorine sensors must be calibrated against the results of a chemical test run on a grab sample.

### PERFORMANCE SPECIFICATIONS

**Measurement Range:** 0-20 ppm (mg/L) chlorine  
(as Cl<sub>2</sub>)

**Resolution:** 0.001 ppm

**Automatic pH Correction (requires Code -32):** 5.0  
to 9.5 pH

**Temperature Correction:** Automatic (with Pt100 RTD  
in sensor) or manual 0-50°C. Can be disabled if  
desired.

**Input filter:** time constant 1 - 999 sec

### RECOMMENDED SENSORS

**Chlorine:** Model 499A CL-01 Free Chlorine or Model  
499A CL-02 Total Residual Chlorine (requires  
sample conditioning)

**pH:** The following pH sensors are recommended for  
automatic pH correction of chlorine readings:  
Models: 399-09-62, 399-14, and 399VP-09

12.34 PPM
26.3 C                      8.34pH

## DISSOLVED OXYGEN (Code -25)

The Solu Comp II is compatible with the Model 499ADO, 499ATrDO, Hx438, and Gx438 dissolved oxygen sensors. The sensors are membrane-covered amperometric sensors. For more information concerning the use and operation of the amperometric oxygen sensors, refer to the product data sheets. The Solu Comp II displays dissolved oxygen in ppm, ppb, or percent saturation.

The Solu Comp II fully compensates oxygen readings for changes in membrane permeability caused by temperature changes. In the Model 499ADO and 499ATrDO sensors, temperature is measured by a Pt 100 RTD. The Hx438 and Gx438 sensors use a 22kNTC.

Calibration is easy. Simply expose the sensor to water saturated air. Wait until readings are stable and press a few keys. The analyzer measures the temperature and barometric pressure and automatically completes the calibration. If removing the sensor from the process liquid is impractical, the analyzer can be calibrated against a standard instrument. Calibration can be corrected for process salinity.

10.34 PPM
29.3 C      12.34mA

### PERFORMANCE SPECIFICATIONS

**Measurement Range:** 0-20 ppm (mg/L) dissolved oxygen; 0- 250% saturation

**Resolution:** 0.01 ppm; 0.1 ppb for 499A TrDO sensor (when O<sub>2</sub> <1.00 ppm); 0.1%

**Temperature Correction for Membrane Permeability:** Automatic (with Pt100 RTD in sensor) or manual 0-50°C. Can be disabled if desired.

**Input filter:** time constant 1 - 999 sec

### RECOMMENDED SENSORS

Model 499A DO Dissolved Oxygen Sensor

Model Hx438 Steam Sterilizable Dissolved Oxygen Sensor

Model Gx438 Steam Sterilizable Dissolved Oxygen Sensor

Model 499A TrDO Trace Dissolved Oxygen Sensor

*NOTE: Suite S2A is not compatible with steam-sterilizable Dissolved Oxygen sensors (Models Hx438, Gx448, Bx438). Order Suite S1A for installations with steam sterilizable sensors.*

## DISSOLVED OZONE (Code -26)

The Solu Comp II is intended for use with the Model 499AOZ sensor. The Model 499AOZ sensor is a membrane-covered amperometric sensor. For more information concerning the use and operation of the sensor, refer to the sensor product data sheet.

The Solu Comp II fully compensates ozone readings for changes in membrane permeability caused by temperature changes. Temperature is measure by a Pt 100 RTD in the sensor.

An input filter allows the user to configure the analyzer for rapid response or low noise. The low noise option is recommended for samples containing less than 0.1 ppm ozone.

Ozone solutions are unstable; commercial standards are not available. Instead, ozone sensors must be calibrated against the results of a chemical test run on a grab sample.

### PERFORMANCE SPECIFICATIONS

**Measurement Range:** 0-10 ppm (mg/L)

**Resolution:** 0.001 ppm dissolved ozone

**Temperature Correction for Membrane Permeability:** Automatic (with Pt100 RTD in sensor) or manual 0-35°C. Can be disabled if desired.

**Input filter:** time constant 1 - 999 sec

### RECOMMENDED SENSOR

Model 499A OZ Dissolved Ozone Sensor

10.34 PPM
29.3 C      12.34mA

## ORDERING INFORMATION

The **Solu Comp II** analyzers offer the choice of single or dual sensor input with measurement choices of pH/ORP, conductivity/resistivity, toroidal conductivity, flow, chlorine, dissolved oxygen, and dissolved ozone. See combination guide for valid combinations. Standard features include two isolated outputs, three alarm relays, customizable two-line display, and temperature correction.

### MODEL 1055 SOLU COMP II ANALYZER

CODE	POWER
01	115/230 Vac, 50/60 Hz
02	24 Vdc

CODE	MOUNTING
10	Panel mounting enclosure
11	Pipe/Surface mounting enclosure (Pipe mounting requires accessory kit PN 23820-00)

CODE	MEASUREMENT 1 (Required Selection)
20	Contacting Conductivity
21	Toroidal Conductivity
22	pH/ORP
23	Flow
24	Chlorine
25	Dissolved Oxygen
26	Ozone

CODE	MEASUREMENT 2 (Optional)
30	Contacting Conductivity
31	Toroidal Conductivity
32	pH/ORP
33	Flow

CODE	OPTIONAL
68	UL Approval

**Field Commissioned Suites option** offers the user the ability to commission the Solu Comp II to any valid measurement combination. This feature provides the benefit of a reduction in the number of spare instruments required to meet emergency inventory needs. Please refer to the Suites tables (right) for valid measurement combinations. Suites include a complete set of instrument wiring labels.

### MODEL 1055 SOLU COMP II ANALYZER

CODE	POWER
01	115/230 Vac, 50/60 Hz
02	24 Vdc

CODE	MOUNTING
10	Panel mounting enclosure
11	Pipe/Surface mounting enclosure (Pipe mounting requires accessory kit PN 23820-00)

CODE	FIELD-COMMISSIONED SUITES (Optional) see tables below
S1	Suite 1 - Field Commissioned Measurement (basic)
S1A	Suite 1 - Field Commissioned Measurement (includes amperometric)
S2	Suite 2 - Field Commissioned Measurement (basic)
S2A	Suite 2 - Field Commissioned Measurement (includes amperometric)

CODE	OPTIONAL
DM	Dual Measurement

CODE	OPTIONAL
68	UL Approval

**NOTE:** Do not order Model 1055 Suite S2A for use with steam-sterilizable Dissolved Oxygen sensors (Models Hx438, Gx448, Bx438). Order Suite S1A for installations with steam sterilizable sensors.

## COMBINATION GUIDE

### Measurement Choices

Measure 2 \ Measure 1	None	pH/ORP	Flow	Conductivity	
				Toroid	Contact
pH/ORP					
Contacting conductivity					
Flow					
Toroidal Conductivity					
Dissolved Oxygen					
Chlorine					
Ozone					

### Field Commissioned Measurement Choices

#### Suite 1

Measure 2 \ Measure 1	None	pH/ORP	Flow	Dual Measurement (DM)	
				Contacting Conductivity	
Basic	pH/ORP				
	Contacting conductivity				
Amperometric	Dissolved Oxygen*				
	Chlorine				
	Ozone				
Toroidal Conductivity					

### Field Commissioned Measurement Choices

#### Suite 2

Measure 2 \ Measure 1	None	pH/ORP	Flow	Dual Measurement (DM)	
				Toroid	Contact
Basic	pH/ORP				
	Flow				
	Contacting conductivity				
	Toroidal Conductivity				
Amperometric	Dissolved Oxygen*				
	Chlorine				
	Ozone				

 Available

 Not available

\* For D.O. sensors with 22k thermistor, use Suite 1 only.

**ACCESSORIES** (Weights are rounded up to nearest whole lb or 0.5 kg)

PART NUMBER	DESCRIPTION	WEIGHT	SHIPPING WT.
23820-00	Pipe mounting kit, includes U-bolts, mounting bracket, nuts, washers, and screws (complete)	2 lb (1.0 kg)	4 lb (2.0 kg)
23554-00	Gland fittings, PG 13.5, 5 per package	1 lb (0.5 kg)	2 lb (1.0 kg)
9240048-00	Tag, stainless steel (specify marking)	1 lb (0.5 kg)	1 lb (0.5 kg)
	<b>pH INPUT</b>		
905-3506	Buffer Solution, 4.01 pH, 1 pt.	1 lb (0.5 kg)	2 lb (1.0 kg)
905-3501	Buffer Solution, 7.0 pH, 1 pt.	1 lb (0.5 kg)	2 lb (1.0 kg)
905-3505	Buffer Solution, 10.0 pH, 1 pt.	1 lb (0.5 kg)	2 lb (1.0 kg)
	<b>CONDUCTIVITY INPUT</b>		
SS-1	Conductivity Standard, 1409 $\mu$ S/cm at 25°C, 1 quart (945 mL)	2 lb (1.0 kg)	4 lb (2.0 kg)
SS-1A	Conductivity Standard, 1409 $\mu$ S/cm at 25°C, 1 gallon (3785 mL)	9 lb (4.0 kg)	11 lb (5.0 kg)
SS-5	Conductivity Standard, 1000 $\mu$ S/cm at 25°C, 1 quart (945 mL)	2 lb (1.0 kg)	4 lb (2.0 kg)
SS-5A	Conductivity Standard, 1000 $\mu$ S/cm at 25°C, 1 gallon (3785 mL)	9 lb (4.0 kg)	11 lb (5.0 kg)
SS-6	Conductivity Standard, 200 $\mu$ S/cm at 25°C, 1 quart (945 mL)	2 lb (1.0 kg)	4 lb (2.0 kg)
SS-6A	Conductivity Standard, 200 $\mu$ S/cm at 25°C, 1 gallon (3785 mL)	9 lb (4.0 kg)	11 lb (5.0 kg)
SS-7	Conductivity Standard, 5000 $\mu$ S/cm at 25°C, 1 quart (945 mL)	2 lb (1.0 kg)	4 lb (2.0 kg)
SS-7A	Conductivity Standard, 5000 $\mu$ S/cm at 25°C, 1 gallon (3785 mL)	9 lb (4.0 kg)	11 lb (5.0 kg)



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