

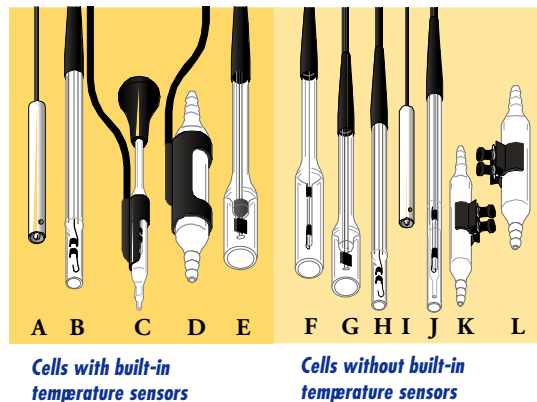


## YSI 3100/3200 Conductivity Systems

### YSI 3200 Conductivity Instrument

*Unmatched for ultrapure water measurement*

- User-selected measurement mode: conductivity, temperature, resistivity, conductance, salinity, resistance, or total dissolved solids
- RESISTANCE RATIO TECHNOLOGY™ provides unmatched accuracy for ultrapure water
- New cells with built-in temperature sensors
- Multipoint calibration allows measurement of a variety of samples with the same cell
- High and low alarms for process applications
- Linear and nonlinear temperature compensation



### YSI 3100 Conductivity Instrument

*High-accuracy for basic measurement*

The YSI 3100 provides high-accuracy measurements for basic conductivity.

#### Conductivity cells with easy automatic temperature compensation

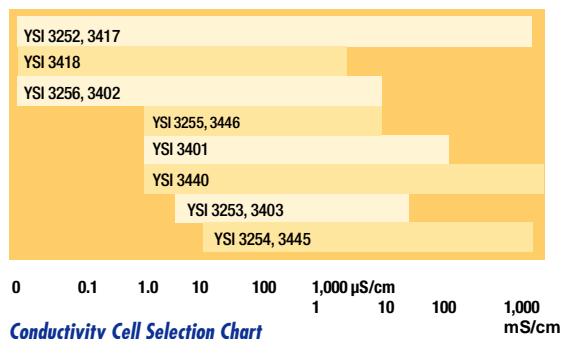
YSI 3200 Series Conductivity Cells have built-in thermistors, allowing automatic temperature compensation. All YSI cells are calibrated according to OIML recommendations 56 and 68.

Pure Data for a Healthy Planet.™

**YSI Resistance Ratio Technology™ is the first improved system for measuring conductivity in 20 years.**

#### Resistor set verifies performance

Used with the YSI 3232 Cell Adaptor, YSI 3166 Resistor Set tight-tolerance calibrators are more precise than common resistors and can verify meter performance.



#### NIST-traceable calibrator solutions for highest accuracy

To assure quality, YSI inspects them with reference to primary standard solutions according to OIML recommendation 56. Bottles include a table of corrections at temperatures between 20 and 30°C.

YSI 3161	1,000 µS/cm	±0.50% tolerance	quart
YSI 3163	10,000 µS/cm	±0.25% tolerance	quart
YSI 3165	100,000 µS/cm	±0.25% tolerance	quart
YSI 3167	1,000 µS/cm	±1.0% tolerance	8 pints
YSI 3168	10,000 µS/cm	±1.0% tolerance	8 pints
YSI 3169	50,000 µS/cm	±1.0% tolerance	8 pints



## Instrument Specifications

Pure  
Data for a  
Healthy  
Planet.™

To order or for more  
information, contact  
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ISO 9001  
ISO 14001

Pure Data for a Healthy Planet is a  
registered trademark and Resistance  
Ratio Technology is a trademark of  
YSI Incorporated.

YSI 3200				YSI 3100		
<b>Technology</b>	Resistance Ratio			Forced Current		
<b>Modes</b>	Conductivity Resistivity Salinity Temperature	Conductance Resistance Total Dissolved Solids Temperature		Conductivity Salinity Temperature		
<b>Conductance</b>	<b>Range</b>	<b>Accuracy</b>	<b>Resolution</b>	<b>Range (Conductivity)</b>	<b>Accuracy</b>	<b>Resolution</b>
	0 to 0.9999 µS	±0.30% full scale	0.0001 µS	0 to 49.99 µS/cm	±0.50% full scale	0.01 µS/cm
	0.950 to 9.999 µS	±0.20% full scale	0.001 µS	0 to 499.9 µS/cm	±0.50% full scale	0.1 µS/cm
	9.50 to 99.99 µS	±0.10% full scale	0.01 µS	0 to 4999 µS/cm	±0.50% full scale	1 µS/cm
	95.0 to 999.9 µS	±0.10% full scale	0.1 µS	0 to 49.99 mS/cm	±0.50% full scale	0.01 mS/cm
	950 to 9999 µS	±0.10% full scale	1 µS	0 to 499.9 mS/cm*	±0.50% full scale	0.1 mS/cm
	9.50 to 99.99 mS	±0.10% full scale	0.01 mS			
	95.0 to 999.9 mS	±0.30% full scale	0.1 mS			
	0.95 to 3.00 S	±1.0% full scale	0.01 S			
<b>Resistance</b>	<b>Range</b>	<b>Accuracy</b>	<b>Resolution</b>			
	0 to 9,999	±0.2% full scale	0.001			
	0 to 99.99	±0.1% full scale	0.01			
	0 to 999.9	±0.1% full scale	0.1			
	0 to 9,999 k	±0.1% full scale	0.001 k			
	0 to 99.99 k	±0.1% full scale	0.01 k			
	100.0 to 999.9 k	±0.2% full scale	0.1 k			
	1.00 to 9.99 M	±0.5% full scale	0.01 M			
	10.0 to 29.9 M	±1% full scale	0.1 M			
<b>Salinity</b>	0 to 80 ppt (NaCl)	±0.1 ppt	0.1 ppt	0 to 80 ppt	2% or ±0.1 ppt	0.1 ppt
<b>Temperature</b>	-5 to +100°C	±0.1°C	0.01°C	-5 to +95°C	±0.1°C + 1 lsd	0.1°C
<b>TDS</b>	0 to 19,999 mg/L	±0.50%	1 mg/L			
<b>Temperature compensation</b>						
	Method	linear, nonlinear		linear		
	Reference temperature	0 to 100°C		15 to 25°C		
	Temperature coefficient	0 to 10%, nonlinear		0 to 4%		
	Cell configuration storage	6 configurations		na		
	Data storage	100 points		na		
	Cell constant	0.001 to 100 cm <sup>-1</sup>		0.01, 0.1, 1, 10 cm <sup>-1</sup>		
	Cell calibration	up to 5 points		single point		
	Output	RS232		na		
	Alarm & clock	yes		na		
	Display	Graphic LCD		LCD		
	Cell connector	7-pin mini DIN		7-pin mini DIN		
	Platinizing	included		included		
	Power	115, 220 VAC		115, 220 VAC		
	Approvals	UL, CSA, CE		UL, CSA, CE		
	Environment	95% RH non-condensing		95% RH non-condensing		

\*Requires K = 10 cm<sup>-1</sup> cell.

### Cells with built-in temperature sensors

	Model	Cell Type	S.I. Cell Constant	Cell Constant	Material	Overall Length	Max O.D.	Chamber I.D.	Chamber Depth	Chamber Volume
A	3252	dip	1.0/cm	100/m	ABS plastic	146 mm	13 mm	10 mm	20 mm	
B	3253	dip, micro	1.0/cm	100/m	Pyrex 7740	178 mm	13 mm	10 mm	51 mm	
C	3254	fill	1.0/cm	100/m	Pyrex 7740	135 mm	19 mm	11 mm	83 mm	5 mL
D	3255	flow	0.1/cm	10/m	Pyrex 7740	146 mm	25 mm	21 mm	76 mm	30 mL
E	3256	dip	0.1/cm	10/m	Pyrex 7740	159 mm	25 mm	21 mm	52 mm	

### Cells without built-in temperature sensors\*

	Model	Cell Type	S.I. Cell Constant	Cell Constant	Material	Overall Length	Max O.D.	Chamber I.D.	Chamber Depth	Chamber Volume
F	3401	dip	1.0/cm	100/m	Pyrex 7740	191 mm	25 mm	21 mm	76 mm	
G	3402	dip	0.1/cm	10/m	Pyrex 7740	159 mm	25 mm	21 mm	52 mm	
H	3403	dip	1.0/cm	100/m	Pyrex 7740	178 mm	13 mm	10 mm	51 mm	
I	3417	dip	1.0/cm	100/m	ABS plastic	146 mm	13 mm	10 mm	20 mm	
I	3418	dip	0.1/cm	10/m	ABS plastic	159 mm	13 mm	10 mm	30 mm	
J	3440	dip	10/cm	1000/m	Pyrex 7740	203 mm	13 mm	2 mm	86 mm	
K	3445	flow	1.0/cm	100/m	Pyrex 7740	146 mm	19 mm	10 mm	76 mm	15 mL
L	3446	flow	0.1/cm	10/m	Pyrex 7740	146 mm	25 mm	21 mm	76 mm	30 mL

\*Requires a YSI 3232 Cell Adaptor for use with YSI 3100 and 3200 Conductivity Instruments. For automatic temperature compensation, use a YSI 3220 or a YSI Series 700 Temperature Probe.