



OpreX™ Analyzers

PH91 / PH92 / SC92

Portable pH Meter, pH/ORP Meter, Conductivity Meter

Durable Design, Effortless Use

Portable liquid meter for Professional

Handy pH/ORP or Conductivity/Resistivity Meter



Portable pH Meter
PH91

Portable pH/ORP Meter
PH92

Portable Conductivity Meter
SC92

Both handy meter and sensors have IP67 protection

Build-in sensor holders add convenience for on-the-go use

Large backlit display

Stability check function supports your accurate measurement

Excellent fit in your hand and back stand for table use

Easy operation (Direct calibration switch etc.)

Plastic sensor body avoids accidental cracking*

*: Chemical-resistant conductivity sensors and high conductivity measurement sensors feature Glass body

Manufacturing



Lab analyses



Wastewater testing



- pH measurement in research applications
- pH measurement at water treatment plant
- Conductivity measurement of drinking water and pure water
- ORP measurement at wastewater treatment plant

YOKOGAWA's technology enables stable and accurate measurements.

PH91 Portable pH meter

Model	Suffix code	Option code	Description
PH91	.....	.....	Portable pH meter
Connecting sensors	-00	.....	Without sensor
	-11	.....	With KCl replenish-free type combination pH sensor (cable length: 0.75 m)
	-13	.....	With KCl replenish-free type combination pH sensor (cable length: 2.75 m)
	-21	.....	With KCl refillable type combination pH sensor (cable length: 0.75 m)
	-23	.....	With KCl refillable type combination pH sensor (cable length: 2.75 m)
Country *1	-J	.....	Japan (with Japanese manual and batteries, without standard markings)
	-E	.....	Except Japan (with English manual and standard markings, without batteries)

*1: Always specify "-J" for orders to Japan ("-E" is not acceptable).
Always select "-E" for orders destined for outside Japan ("-J" is not acceptable).

PH92 Portable pH/ORP meter

Model	Suffix code	Option code	Description
PH92	.....	.....	Portable pH/ORP meter
Connecting sensors	-00	.....	Without sensor
	-11	.....	With KCl replenish-free type combination pH sensor (cable length: 0.75 m)
	-13	.....	With KCl replenish-free type combination pH sensor (cable length: 2.75 m)
	-21	.....	With KCl refillable type combination pH sensor (cable length: 0.75 m)
	-23	.....	With KCl refillable type combination pH sensor (cable length: 2.75 m)
	-41	.....	With KCl refillable type ORP sensor (cable length: 0.75 m)
	-43	.....	With KCl refillable type ORP sensor (cable length: 2.75 m)
	-51	.....	With KCl refillable type combination pH sensor (cable length: 0.75 m) + KCl refillable type ORP sensor (cable length: 0.75 m)
Country *1	-J	.....	Japan (with Japanese manual and batteries, without standard markings)
	-E	Except Japan (with English manual and standard markings, without batteries)

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PH92SN pH sensor for portable pH/ORP meter

Model	Suffix code	Option code	Description
PH92SN	.....	.....	pH sensor for portable pH/ORP meter
Type	-11	.....	KCl replenish-free type combination pH sensor (cable length: 0.75 m)
	-13	.....	KCl replenish-free type combination pH sensor (cable length: 2.75 m)
	-21	.....	KCl refillable type combination pH sensor (cable length: 0.75 m)
	-23	.....	KCl refillable type combination pH sensor (cable length: 2.75 m)
—	-AA	.....	Always -AA

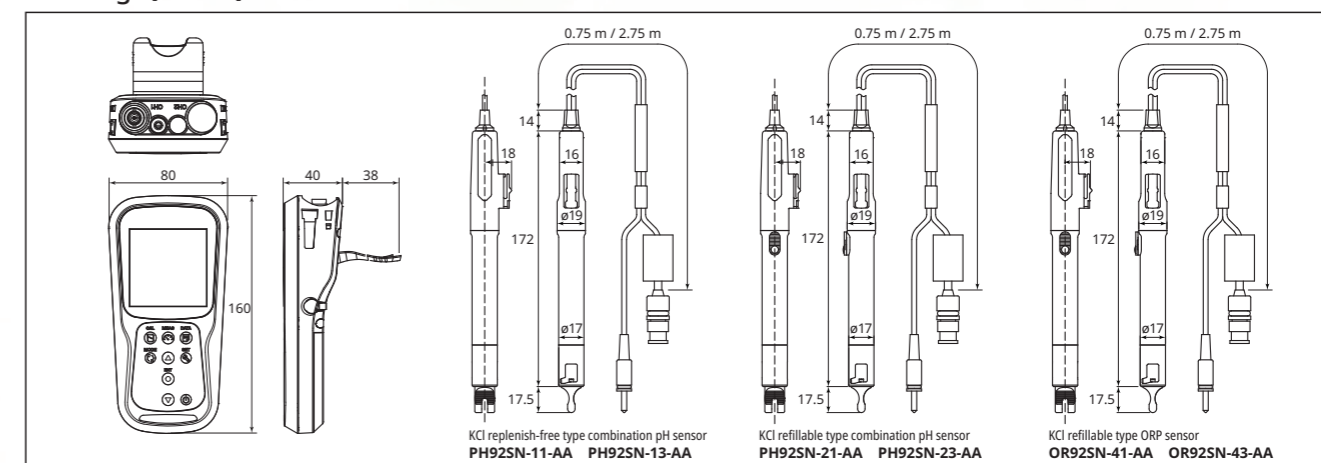
OR92SN ORP sensor for portable pH/ORP meter

Model	Suffix code	Option code	Description
PH92SN	.....	.....	ORP sensor for portable pH/ORP meter
Type	-41	.....	KCl refillable type ORP sensor (cable length: 0.75 m)
	-43	.....	KCl refillable type ORP sensor (cable length: 2.75 m)
—	-AA	.....	Always -AA

Specifications of Portable pH/ORP Meters

	PH91		PH92	
Measurement	Hydrogen ion concentration (pH)		Hydrogen ion concentration (pH) or oxidation-reduction potential (ORP) of solution	
Measuring range	pH	0.00 to 14.00 pH	pH	0.00 to 14.00 pH
	ORP		ORP	-2000 to 2000 mV
Temperature	0 to 80 °C (with sensors) (0 to 50 °C when a KCl replenish-free type sensor and its sensor cable are immersed in water)		0 to 80 °C (with sensors) (0 to 50 °C when a KCl replenish-free type sensor and its sensor cable are immersed in water)	
	Temperature		Temperature	
Display limit	pH	-2.00 to 16.00 pH	pH	-2.00 to 16.00 pH
	ORP		ORP	-2000 to 2000 mV (1 decimal place in -999 to 999 mV)
Repeatability (Simulated input without sensor)	-10.0 to 120.0 °C		-10.0 to 120.0 °C	
	pH	±0.01pH±1 digit	pH	±0.01pH±1 digit
ORP		ORP	±0.3 % of Reading (-999.9 to 999.9 mV; ±0.3 mV)	
Temperature accuracy	Simulated input for main unit only; ±0.5 °C±1 digit Combined with sensors; ±1.0 °C (0 to 70 °C), ±1.3 °C (above 70 °C)			
Display	Digital LCD with backlight			
Temperature compensation	automatic, manual			
Calibration	pH: Automatic (NIST, USA: 5 points maximum, DIN: 6 points maximum) Temperature: Manual (1 point)			
Functions	Display pH and solution temperature (simultaneously), Electrode sensitivity diagnostic functions, Stability check functions, Data Memory (500 points)		Display pH or ORP (mV) and solution temperature (simultaneously), Electrode sensitivity diagnostic functions, Stability check functions, Data Memory (500 points)	
Construction	IP67			
Compatible standards	CE, RCM, KC			
Connectable sensor	PH92SN		PH92SN, OR92SN	
Wetted Material	pH Sensor		KCl replenish-free type combination pH sensor; Polypropylene resin (sensor body, protective cover), Glass (glass electrode, temperature sensor protection tube), Ceramics (liquid junction), Silicon rubber (sensor seal), PVC (cable), rigid polyethylene (grip), ethylene propylene rubber (grip and cable connection), Nylon 6 (cable bushings) KCl refillable type combination pH sensor; Polypropylene resin (sensor body, protective cover), Glass (glass electrode, temperature sensor protection tube), Ceramics (liquid junction), Silicon rubber (sensor seal)	
	ORP Sensor		KCl refillable type ORP sensor; Polypropylene resin (sensor body, protective cover), Glass (glass electrode, temperature sensor protection tube), Ceramics (liquid junction), Silicon rubber (sensor seal), Platinum (electrode)	
Solution conductivity	50 µS/cm or more			
Ambient temperature	0 to 45 °C			
Dimensions	Approximately H160 × W80 × D40 mm (not including connector part)			
Weight	Approximately 230 g (without batteries, sensor)			
Power source	2 x AA batteries (LR6), Auto power off function (time configurable: 1 to 30 minutes)			
Battery life	Approximately 500 hours			

Drawings [unit: mm]



SC92 Portable conductivity meter

Model	Suffix code	Option code	Description
SC92	.....	.....	Portable conductivity meter
Connecting sensors	-00	.....	Without sensor
	-11	.....	With sensor for high purity water measurement (cable length: 0.75 m)
	-21	.....	With general-purpose type sensor (cable length: 0.75 m)
	-23	.....	With general-purpose type sensor (cable length: 2.75 m)
	-31	.....	With chemical-resistant type sensor (cable length: 0.75 m)
	-41	.....	With sensor for high-conductivity measurement (cable length: 0.75 m)
Country *1	-J	.....	Japan (with Japanese manual and batteries, without standard markings)
	-E	Except Japan (with English manual and standard markings, without batteries)

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SC92SN Conductivity sensor for portable conductivity meter

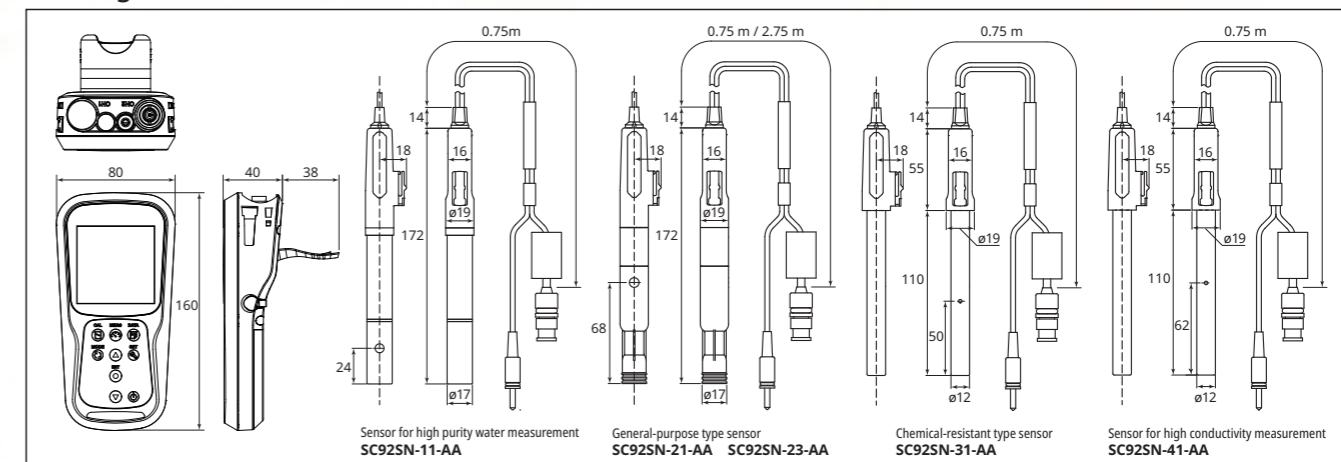
Model	Suffix code	Option code	Description
SC92SN	.....	.....	Conductivity sensor for portable conductivity meter
Type	-11	.....	Sensor for high purity water measurement (cable length: 0.75 m)
	-21	.....	General-purpose type sensor (cable length: 0.75 m)
	-23	.....	General-purpose type sensor (cable length: 2.75 m)
	-31	.....	Chemical-resistant type sensor (cable length: 0.75 m)
	-41	.....	Sensor for high conductivity measurement (cable length: 0.75 m)
—	-AA	.....	Always -AA

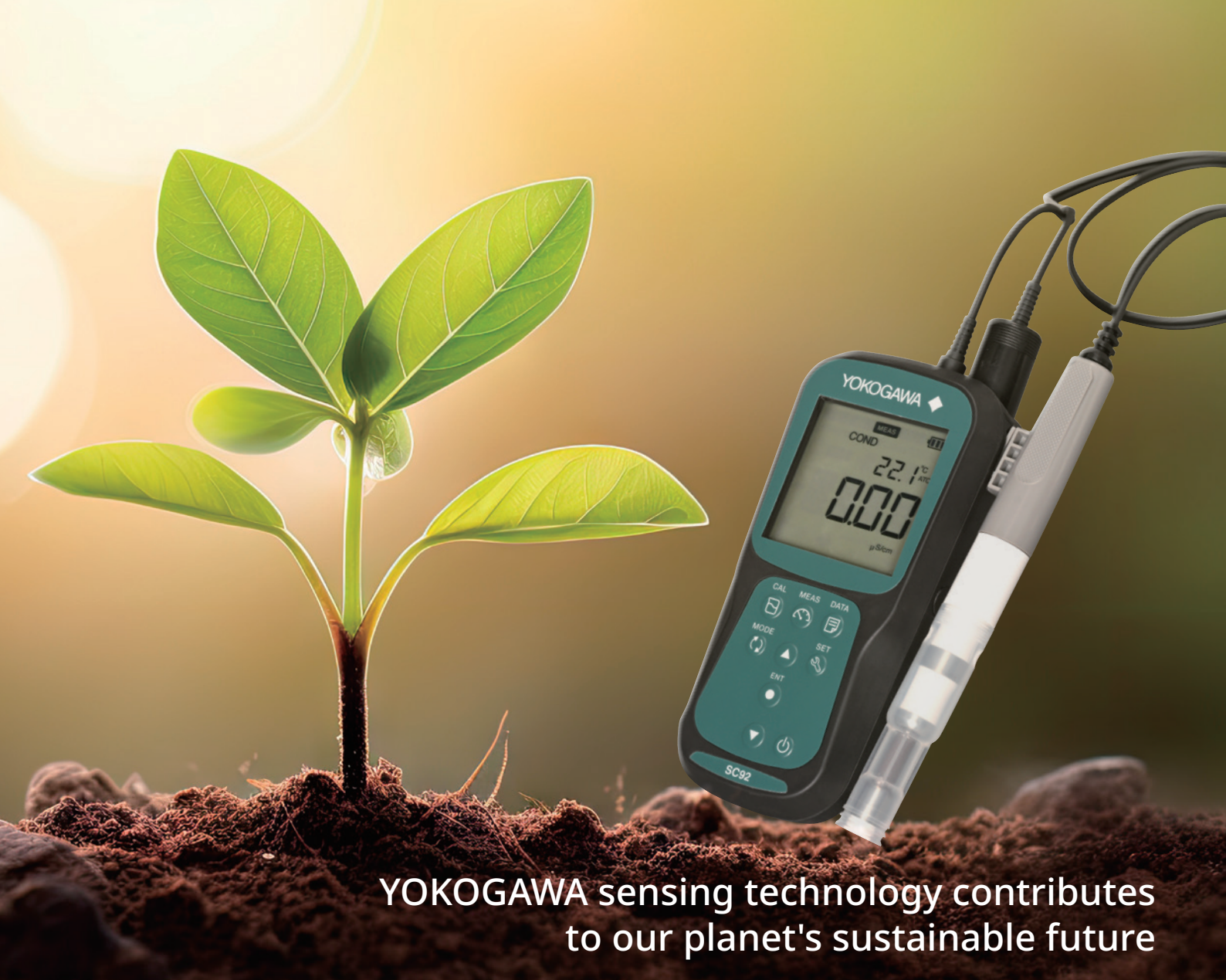


Specifications of Portable Conductivity Meter

		SC92
Measurement	Conductivity or resistivity in aqueous solution	
Measuring range	Conductivity (min. to max. range)	With a sensor for high purity water measurement: 0–2.00 µS/cm to 0–200.0 µS/cm With a general-purpose type sensor: 0–20.00 µS/cm to 0–200.0 mS/cm With a chemical-resistant type sensor: 0–20.00 µS/cm to 0–200.0 mS/cm With a sensor for high conductivity measurement: 0–200.0 µS/cm to 0–2,000 S/cm
	Resistivity	0.001 MΩ·cm to 40.0 MΩ·cm (with a sensor for high purity water measurement)
	Temperature	0 to 80 °C (sensor combination dependent) (0 to 50 °C when the entire sensor is submerged in water)
Number of display digits	Conductivity	4 digit maximum (automatic range turnover)
	Resistivity	4 digit maximum
Temperature indication range	-10.0 to 120.0 °C	
Repeatability (Combined with sensors)	Conductivity	±2 % of full scale. (±5 % of full scale of the 0–200 mS/cm range of general-purpose type sensor)
Temperature accuracy	Simulated input for main unit only; ±0.5 °C±1 digit Combined with sensors; ±1.0 °C (0 to 70 °C), ±1.3 °C (above 70 °C)	
Display	Digital LCD with backlight	
Temperature compensation	0.00 to 10.00 % /°C (reference temperature conversion: 15 to 30 °C)	
Calibration	Conductivity/Resistivity: Automatic (2 points maximum), Manual (5 points maximum) Temperature: Manual (1 point)	
Functions	Display Conductivity or Resistivity and solution temperature (simultaneously), Electrode degradation diagnostic functions, Stability check functions, Data Memory (500 points)	
Construction	IP67	
Compatible standards	CE, RCM, KC	
Connectable sensor	SC92SN	
Wetted Material	Sensor for high purity water measurement	SUS316 (electrode element), polypropylene resin (insulator body), fluorine rubber (O-ring), PVC (cable), silicone rubber (sensor sealing section), hard silicone rubber (sensor sealing), rigid polyethylene (grip), nylon 6 (code bushing), epoxy resin (epoxy), polypropylene resin (sensor body), Epoxy resin (sensor internal filler)
	General-purpose type sensor	Titanium (sensor electrode), Polypropylene resin (sensor body and cover), Fluorine rubber (O-ring), PVC (cable), Polyphenylene sulfide resin (neck), Silicone rubber (sensor seal), Polypropylene resin (sensor body, cover), Fluorine rubber (O-ring), PVC (cable), Polyphenylene sulfide resin (neck), Silicone rubber (sensor seal), Rigid polyethylene (grip), Polyethylene (grip), Nylon 6 (cord bushing), Epoxy resin (sensor internal filler)
	Chemical-resistant type sensor/Sensor for high conductivity measurement	High corrosion resistant/high concentration sensors; glass (sensor body), platinum black (electrode element), PVC (cable), Silicone rubber (sensor sealing section), rigid polyethylene (grip), Nylon 6 (cord bushing), Epoxy resin (sensor internal filler)
Ambient temperature	0 to 45 °C	
Dimensions	Approximately H160 × W80 × D40 mm (not including connector part)	
Weight	Approximately 230 g (without batteries, sensor)	
Power source	2 x AA batteries (LR6), Auto power off function (time configurable: 1 to 30 minutes)	
Battery life	Approximately 500 hours	

Drawings [unit: mm]





YOKOGAWA sensing technology contributes to our planet's sustainable future

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