





# **OAKION®** CON 11 and CON 110 Conductivity/TDS/Meters

### Multifunctional—use as a benchtop laboratory meter or as a handheld in the field

- Store and recall up to 50 measurements with °C temperature (CON 11 meter) or up to 100 measurements with °C or °F temperature (CON 110 meter)
- CON 110 meter features RS-232 output—download data to a computer or printer!
- CON 110 meter includes FREE PC Datalog Assist Software to import data into popular spreadsheet programs

The CON 11 and CON 110 meters feature dual-line LCD that allows viewing of conductivity or TDS and temperature simultaneously. Both models allow selection between manual and automatic temperature compensation (ATC) for correct values, even with changing solution temperatures. Normalization temperature and temperature coefficients are also customizable.

Selectable auto-ranging function selects the correct range for best resolution and fastest response. Calibrate the meters with a single or multi-point calibration for greater linearity. Calibration points can be automatically selected from programmed standard values or manually entered values specific for the application.

Selectable cell constants of 0.1,1.0, or 10.0 and adjustable TDS conversion factors between 0.4 to 1.0 can be set for accurate and precise measurements in applications from pure water to solutions up to 200 mS. Use the built-in stands for benchtop operation or use battery power for handheld field operation. Meters operate up to 200 hours on a single set of batteries and have a selectable auto-off function that shuts down the meter after 20 minutes of nonuse. Select meter kits for storage and field operation.

Meters include: conductivity cell 35608-50 and batteries. CON 110 meter also includes Datalog Assist PC software on CD-ROM.

Meter kits include: conductivity cell 35608-50, calibration solution pouches (four each of 447 µS, 1413 µS, 2764 µS, and 15,000 µS), four rinse pouches, sample bottles, batteries, and hard side carrying case. CON 110 meter kit also includes Datalog Assist PC software on CD-ROM.

# **Specifications & Ordering Information**





Catalog number		K-35607-40	K-35607-80	K-35607-45	K-35607-85	
Description		CON 11 meter	CON 11 meter kit	CON 110 meter	CON 110 meter kit	
Range	Conductivity	0 to 19.99, 20.0 to 199.9, 200 to 1999 μS; 2.00 to 19.99, 20.0 to 199.9 mS				
	TDS	1.00 to 9.99, 10.0 to 99.9, 100 to 99		99 ppm; 0 to 9.99, 10.0 to 99.9 ppt		
	Temperature	−10.0 to 110.0°C		-10.0 to 110.0°C (14 to 230°F)		
Resolution	Conductivity	0.01, 0.1, 1 μS; 0.01, 0.1 mS		0.01, 0.1, 1 μS; 0.01, 0.1 mS		
	TDS	0.01, 0.1, 1 ppm; 0.01, 0.1 ppt		0.01, 0.1, 1 ppm; 0.01, 0.1 ppt		
	Temperature	0.1°C		0.1°C (0.1°F)		
Accuracy	Conductivity	±0.2 μS, ±2 μS, ±20 μS, ±0.2 mS, ±2 mS		±0.2 μS, ±2 μS, ±20 μS, ±0.2 mS, ±2 mS		
	TDS	±0.1 ppm, ±1 ppm, ±10 ppm, ±0.01 ppt, 0.1 ppt		±0.1 ppm, ±1 ppm, ±10 ppm, ±0.01 ppt, 0.1 ppt		
	Temperature	±0.5°C		±0.5°C (0.9°F)		
Temperature compensation		Automatic or manual from 0 to 100°C		Automatic or manual from 0 to 100°C		
Temperature coefficient		0.0 to 10.0% /°C		0.0 to 10.0% /°C		
Conductivity-to-TDS factor		0.4 to 1.0		0.4 to 1.0		
Output		_		RS-232		
Data storage		50 data sets		100 data sets		
Power/battery life		Four AAA alkaline batteries, optional AC/DC adapter 9 V, 200 mA/>200 hours		Four AAA alkaline batteries, optional AC/DC adapter 9 V, 200 mA/>200 hours		
Display		Dual-line LCD		Dual-line LCD		
Dimensions		7 <sup>1</sup> / <sub>8</sub> "L x 3 <sup>1</sup> / <sub>2</sub> "W x 1 <sup>5</sup> / <sub>8</sub> "H		7 <sup>1</sup> / <sub>8</sub> "L x 3 <sup>1</sup> / <sub>2</sub> "W x 1 <sup>5</sup> / <sub>8</sub> "H		
Price		7 /0 2 × 0 /2		7/02/0/2		

#### **Accessories**

K-35615-07 Adapter, 110 VAC K-35615-08 Adapter, 220 VAC K-35615-09 RS-232 cable, 9 pin

K-17090-30 NIST-traceable calibration certificate for conductivity meter

K-09376-00 Replacement batteries, AAA. Pack of 12 /pk

#### Conductivity Cells; dip cells with 21/2-ft cable

Catalog number	Cell constant (K)	Body/electrode	Maximum temperature	Price
K-35608-55 K-35608-50 K-35608-51	0.1 1.0 10	Epoxy/platinum Ultem <sup>®</sup> /Stainless steel Epoxy/platinum	90°C 90°C	



CON 11 meter 35607-40



CON 110 meter kit 35607-85

## Technical info

#### EC and TDS Measurement

Electrochemical measurement of total dissolved solids (TDS) is determined by multiplying the electrical conductivity (EC) by a conversion factor, usually between 0.4 to 1.0. The factor is specific to the dissolved solids and can change with concentration. Measuring unknown solution or a variable mixture of salts is difficult. Since the factor can be variable, TDS may not be as precise and repeatable as EC. While TDS is useful for certain applications, EC is often preferred over TDS for these reasons.



