

# OAKTON®

# waterproof conductivity/°C/°F, TDS/°C/°F and conductivity/TDS/°C/°F CON 400, TDS 400 and CON 410

Highly advanced microprocessor-based conductivity meters with a superior waterproof housing...and they FLOAT!

**Durable waterproof and dustproof design; IP67 rating**

**Easy to clean housing**

ideal for dirty, wet environments and food applications

**Expanded memory**

stores and recalls up to 50 readings with temperature, and previous calibration data

**Real-time clock**

stamps stored data and calibration data with date and time; meets standards for GLP

**°C or °F selectable**

**Manual or automatic temperature compensation**

for the highest accuracy in any situation

**Selectable temperature coefficient**

adjustable from 0 to 10% per °C for accurate compensation of almost any solution

**Selectable cell constant**

K = 1.0 for general applications; K = 0.1 for pure water; K = 10 for concentrated solutions

**Includes conductivity cell with 3-ft cable (K=1.0)**

ideal for hard to reach places, small sample sizes and fast responses

## CON 400 features

**Reads conductivity from 0 to 199.9 mS in five ranges**

## TDS 400 features:

**Reads TDS from 0 to 200 ppt in six ranges**

Features adjustable TDS conversion factor (0.4 to 1.0) for better accuracy

## CON 410 features:

**Switch between conductivity and TDS with a press of a button**



ISO 9001  
Vendor  
CERTIFIED

3 year  
warranty  
meter only

CE

Above: CON 410 shown with conductivity cell (included).

Top right: floating CON 400 shown with conductivity cell (included).

Middle right: These meters are ideal for dirty applications.

Bottom right: Conductivity calibration kit comes with everything you need to calibrate your meter (meter not included).

**Perfect for conditions that ruin ordinary conductivity meters!** The OAKTON CON 400, TDS 400 and CON 410 feature a superior waterproof and dustproof housing with IP67 rating. These meters read conductivity, TDS or both, and temperature in °C or °F (selectable).

The SETUP mode lets you customize meter parameters. Selectable auto-endpoint feature automatically freezes reading when it stabilizes. Other features include Hold function, Ready indicator, self-diagnostic error messages and automatic shutoff after 30 minutes of non-use.

Conductivity calibration kits contain a variety of calibration standards in a hard carrying case that has space for your meter (order separately). See the back of this sheet for ordering information and complete specifications.

OAKTON® ...setting the standard, again and again™

Large dual LCD shows measurement plus temperature, units and current function.



Easy-access waterproof connections for conductivity and temperature probe are located on the meter's top.



Superior waterproof housing that FLOATS for those accidental drop into water.



Removable probe guard makes cleaning easy.



Calibration solutions are available in economical bottles or convenient pouches (order separately).



Calibration kit contains the supplies you need for fast calibration and measurement in the field, all in a hard shell carrying case.



Bulletin CON B4R1

# Waterproof CON 400, TDS 400 and CON 410

## • Applications •

**Routine testing:** These meters are ideal for quick, accurate conductivity or TDS checks in labs, field and schools.

**Water quality testing:** Use to test hard water, untreated water, drinking water, incoming process water, and pool water. These meters are also useful in the hydroponics and agricultural industries.

**Industrial applications:** Use to check pollution control, metal finishing, cooling tower water, boiler water, drilling mud, brines, rinse tanks, ponds, recirculating systems, and waste water.

## • Specifications •

| Mode                | Conductivity   | TDS (CON 200 and 300 only)   | Temperature   |
|---------------------|--|--|---|
| Ranges (Resolution) | 0.00 to 19.99 $\mu$ S (0.01 $\mu$ S);<br>0.0 to 199.9 $\mu$ S (0.1 $\mu$ S);<br>0 to 1999 $\mu$ S (1 $\mu$ S);<br>0.00 to 19.99 mS (0.01 mS);<br>0.0-199.9 mS (0.1 mS) | 0.00 to 9.99 ppm (0.01 ppm);<br>10.0 to 99.9 ppm (0.1 ppm);<br>100 to 999 ppm (1 ppm);<br>1.00 to 9.99 ppt (0.01 ppt);<br>10.0-99.9 ppt (0.1 ppt); 100-200 ppt (1 ppt) | Epoxy body cells:<br>0 to 80°C (0.1°C)<br>Glass body cells:<br>0 to 100°C (0.1°C) |
| Accuracy            | $\pm$ 1% full scale  | $\pm$ 1% full scale  | $\pm$ 0.5°C; $\pm$ 0.5°F  |
| Calibration         | up to five points (one point per range)  | up to five points (one point per range)  | offset 0.1° increments  |

Temperature compensation: Automatic or manual (selectable) from 0 to 50°C

Operating temperature: 0 to 50°C (32 to 122°F)

Cell constant (K): 1.0, 0.1 or 10 selectable

Temperature coefficient: adjustable from 0 to 10% per °C or °F

Conductivity-to-TDS factor: adjustable from 0.4 to 1.0

Memory: Up to 50 sets

Real-time clock: Stamps calibration data and stored data with time and date (month and day)

Power: 4 x 1.5 V AAA batteries >100 hours continuous use (included)

Dimensions:

Meter: 7.5"L x 3.75"W x 2.25"H (19 x 9.5 x 5.7 cm)

Boxed: 9.2"L x 9.2"W x 2.75"H (23 x 23 x 7 cm)

Weight: Meter: 1.0 lb (0.5 kg); Boxed: 2.0 lbs (0.9 kg)

## • Ordering Information •

### CON 400, TDS 400 and CON 410 Meters

All meters include conductivity cell WD-35608-50 (K=1.0), operating instructions and batteries. Shipping weight 2.0 lb (0.9 kg).

WD-35608-00 Waterproof CON 400 meter

WD-35608-05 Waterproof TDS 400 meter

WD-35608-10 Waterproof CON 410 meter

### Conductivity Cells and Accessories

**Conductivity cells** Two-band platinum sensor. Choose K=1.0 for midrange; K=0.1 for low range; K=10 for high range. 5"L x 0.5" dia with 3-ft (0.9 m) cable. Shpg wt 0.44 lb (0.2 kg).

WD-35608-50 Replacement conductivity cell, Ultem body, steel sensor, with built-in temp. sensor. (K=1.0)

WD-35608-51 Conductivity cell, epoxy body, platinum sensor, with built-in temp. sensor. (K= 10)

WD-35608-55 Conductivity cell, epoxy body, platinum sensor, with built-in temp. sensor. (K= 0.1)

WD-35608-57 Conductivity cell, Ultem body, steel sensor, with built-in temp. sensor. 10-ft cable. Not for use above 20 mS / 10 ppt. (K= 1.0)

WD-35607-69 Calibration kit contains four each of TDS "Singles" calibration solution pouches 447  $\mu$ S, 1413  $\mu$ S, 2764  $\mu$ S, and 15.0 mS and four rinse water pouches, all in a hard plastic carrying case with room for your meter. Dimensions: 11.5"L x 14"W x 3"H. Shpg wt 1.5 lbs (0.7 kg)

### Calibration Solutions

| Catalog number | Calibration solution type | Conductivity-to-TDS conversion factors |          |         |
|----------------|---------------------------|--|----------|---------|
|                |                           | ppm KCl                                | ppm NaCl | ppm 442 |

Calibration solution pouches. box of 20. Each pouch contains 20 ml of premixed calibration solution. Since the pouches are individually sealed, the solution is guaranteed to be fresh and contaminant free every time. Accuracy  $\pm$ 1% at 25°C. Shpg wt 1 lb (0.5 kg).

|             |                |       |       |        |
|-------------|----------------|-------|-------|--------|
| WD-35653-10 | 447 $\mu$ S    | 225.6 | 215.5 | 300.0  |
| WD-35653-11 | 1413 $\mu$ S   | 744.7 | 702.1 | 1000   |
| WD-35653-13 | 15,000 $\mu$ S | 8759  | 8532  | 13,455 |

Calibration solution bottles. 1 pint of premixed calibration solution in recyclable-PE bottle. Accuracy  $\pm$ 1% at 25°C. Shpg wt 1.1 lbs (0.5 kg).

|             |                |        |        |        |
|-------------|----------------|--------|--------|--------|
| WD-00653-16 | 84 $\mu$ S     | 40.38  | 38.04  | 50.50  |
| WD-00653-47 | 447 $\mu$ S    | 225.6  | 215.5  | 300.0  |
| WD-00653-18 | 1413 $\mu$ S   | 744.7  | 702.1  | 1000   |
| WD-00653-15 | 1500 $\mu$ S   | 757.1  | 737.1  | 1050   |
| WD-00653-89 | 8974 $\mu$ S   | 5101   | 4487   | 7608   |
| WD-00606-10 | 12,880 $\mu$ S | 7447   | 7230   | 11,367 |
| WD-00653-50 | 15,000 $\mu$ S | 8759   | 8532   | 13,455 |
| WD-00653-32 | 80 mS          | 52,168 | 48,384 | 79,688 |

## • ORDER FROM •