

# Bench Top Conductivity/TDS/ Resistivity/Temp. Meter

## HD3406.2

### Technical Characteristics

$\chi$ ,  $\Omega$ , TDS, NaCl, °C/ °F Measurement

#### Measured Values

$\chi$ ,  $\Omega$ , TDS, NaCl, °C, °F

#### Storage of Measured Values

Type 2000 pages of 18 samples each  
Quantity 36,000 sets of measures made up of ( $\chi$ ,  $\Omega$ , or TDS or NaCl) & (°C - °F)

#### Measurement Connections

Input Conductivity 8-pole male DIN45326 connector  
Input for Temp. Probes 8-pole male DIN45326 connector

Complete with TP47 Modules

#### Measurement of Conductivity by Instrument

Measurement range (Kcell=0.01)/Res. 0.000...1.999 $\mu$ S/cm / 0.001 $\mu$ S/cm  
Measurement range (Kcell=0.1)/Res. 0.00...19.99 $\mu$ S/cm / 0.01 $\mu$ S/cm  
Measurement range (Kcell=1)/Res. 0.0...199.9 $\mu$ S/cm / 0.1 $\mu$ S/cm  
200.1999 $\mu$ S/cm / 1 $\mu$ S/cm  
2.00...19.99mS/cm / 0.01mS/cm  
20.0...199.9mS/cm / 1mS/cm  
Range di misura (Kcell=10) Res. 200...1999mS/cm / 1mS/cm  
Accuracy (conductivity)  $\pm 0.5\%$   $\pm 1$  digit

#### Measurement of Resistivity by Instrument

Measurement range (Kcell=0.01)/Res. Up to 1G $\Omega$ ·cm / (\*)  
Measurement range (Kcell=0.1)/Res. Up to 100M $\Omega$ ·cm / (\*)  
Measurement range (Kcell=1)/Res. 5.0...199.9 $\Omega$ ·cm / 0.1 $\Omega$ ·cm  
200...999 $\Omega$ ·cm / 1 $\Omega$ ·cm  
1.00k...19.99k $\Omega$ ·cm / 0.01k $\Omega$ ·cm  
20.0k...99.9k $\Omega$ ·cm / 0.1k $\Omega$ ·cm  
100k...999k $\Omega$ ·cm / 1k $\Omega$ ·cm  
1...10M $\Omega$ ·cm / 1M $\Omega$ ·cm  
Measurement (Kcell=10) Res. 0.5...5.0 $\Omega$ ·cm / 0.1 $\Omega$ ·cm  
Accuracy (Resistivity)  $\pm 0.5\%$   $\pm 1$  digit

#### Measurement of total Dissolved Solids (with coefficient $\chi$ /TDS=0.5)

Measurement range (Kcell=0.01)/Res. 0.00...1.999mg/l / 0.005mg/l  
Measurement range (Kcell=0.1)/Res. 0.00...19.99mg/l / 0.05mg/l  
Measurement range (Kcell=1)/Res. 0.0...199.9 mg/l / 0.5mg/l  
200...1999 mg/l / 1 mg/l  
2.00...19.99 g/l / 0.01g/l  
20.0...99.9 g/l / 0.1 g/l  
Measurement range (Kcell=10) Res. 100...999 g/l / 1 g/l  
Accuracy (Total Dissolved Solids)  $\pm 0.5\%$   $\pm 1$  digit



#### Measurement of Salinity

Measurement range / Resolution 0.000...1.999g/l / 1mg/l  
2.00...19.99g/l / 10mg/l  
20.0...199.9g/l / 0.1g/l  
 $\pm 0.5\%$   $\pm 1$  digit  
Accuracy (Salinity)

#### Temperature Measurement by Instrument

Measurement range Pt-100 -50...+200°C  
Measurement range Pt-100 -50...+200°C  
Resolution 0.1°C  
Accuracy  $\pm 0.25^\circ\text{C}$   
Drift after 1 Year 0.1°C / year

#### Automatic / Manual Temp. Compensation

Reference Temp. 0...100°C with  $\alpha_T = 0.00...4...00\%/^\circ\text{C}$   
20°C or 25°C selectable from menu  
Conversion factor  $\chi$  / TDS 0.4...0.8  
Cell constant K (cm<sup>-1</sup>) 0.01 - 0.1 - 0.7 - 1.0 - 10.0

#### Standard solutions Automatically Detected (@25° C)

147  $\mu$ S/cm  
1413  $\mu$ S/cm  
12880  $\mu$ S/cm  
111800  $\mu$ S/cm



## HTA INSTRUMENTATION (P) LTD.,

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Phone : 080-26749750, 26759253, 26740681 E-mail : sales@htaipl.com Website : www.htaipl.com



ISO 9001:2015 CERTIFIED  
Certificate No. IQSC202010014

# Specification

Technical Characteristics	HD3406.2
Display	2×4½ characters plus symbols. Visible area : 52×42mm
Measuring Range	0.0...199.9mS/cm; 5.0Ω....10MΩ.cm; TDS = 0.0....99.9 g/l NaCl = 0.000...199.9 g/l; -50...+200°C
Maximum Resolution	0.1 μS/cm; 0.1 Ω.cm; TDS = 0.5 mg/l; NaCl = 1 mg/l; 0.1°C
Accuracy Instrument	±0.5% ±1 digit per χ, Ω, TDS, NaCl ±0.1°C ± 1 digit
Measured Values	χ, Ω, TDS, NaCl, °C, °F
Body	ABS, Rubber
Cell constant K (cm <sup>-1</sup> )	0.01 - 0.1 - 0.7 - 1.0 - 10.0 (Configurable)
Conversion factor χ/TDS	0.4....0.8
Electronics Operating Conditions	T = -5.....50°C 0....90%RH no condensate
Protection Degree	IP 66
Power Supply	3 batteries Type 1.5V AA - Mains adapter 12Vdc/1A (cod. SWD10)
Storage Interval	1s, 5s, 10s, 15s, 30s, 1min, 2min, 5min, 10min 15min, 20min, 30min and 1 hour
Printing Interval	Immediate or 1s, 5s, 10s, 15s, 30s, 1min, 2min, 5min, 10min 15min, 20min, 30min and 1 hour
Data Interface	RS232C and USB2.0 electrically isolated
Automatically Detected Standard Solutions	147 μS/cm; 1413 μS/cm; 12880 μS/cm; 111800 μS/cm
Dimensions (L×W×H)	220 × 120 × 55mm
Weight	460g (complete with batteries)

## ORDER CODES :

### Accessories for Instruments HD3406.2 with input for Conductivity Measurement

- Combined conductivity and Temperature Probes

SP06T	Combined conductivity and Temperature 4-electrode cell in Platinum, body in Pocan. Cell constant K = 0.7. Measurement range 5 μS/cm...20mS/cm, 0...90°C.
SPT401.001	combined conductivity and Temperature 2-electrode cell in stainless steel AISI 316. Cell constant K = 0.01. Measurement range 0.04 μS/cm, ...20μS/cm, 0....120°C. Measurement in closed - cell...
SPT01G	Combined conductivity and Temperature 2-electrode Platinum-wire cell, body in glass. Cell constant K = 0.1 Measurement range 0.1μS/cm...500μS/cm, 0...80°C.
SPT1G	Combined conductivity and Temperature 2-electrode Platinum-wire cell, body in glass. Cell constant K = 1. Measurement range 10μS/cm...10mS/cm, 0...80°C.
SPT10G	Combined conductivity and Temperature 2-electrode Platinum-wire Cell, body in glass cell constant K=10. Measurement range 500μS/cm....200mS/cm, 0...80°C.

- Common Accessories for instruments Series HD34....

HD2110CSNM	8-pole connection cable Mini Din - Bus D 9-pole female for RS232C, for connection to PC without USB input.
HD2101/USB	Connection cable USB 2.0 connector type A - 8-pole Mini Din for connection to PC with USB input.
SWD10	Stabilized power supply at 230Vac/9Vdc-300mA mains voltage.
S'print-BT	Portable, Serial input, 24 column thermal printer, 58mm paper width.
HD2110CSP	Connection Cable for instruments series HD34... to printer S'print-BT
HD22.2	Laboratory electrode holder composed of basis plate with incorporated magnetic stirrer, staff and replaceable electrode holder. Height max. 380mm.
HD22.3	Laboratory electrode holder with metal basis plate. Flexible electrode holder for free positioning. For ø12mm probes.
TP47	Module for the connection of Pt100 4-wire and Pt1000 2-wire probes to instrument series HD34...without amplifying electronics and linezrization.