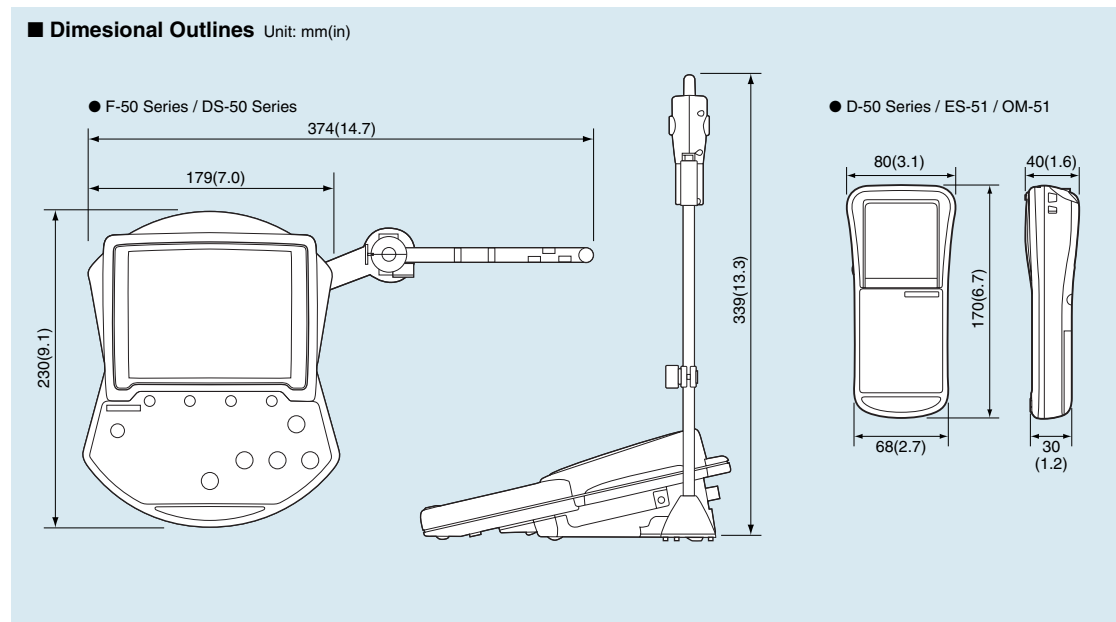




Customer Registration System

Register as a Horiba meter user to receive periodical information such as FAQ, Software upgrade, Technical documents and lot others.

<http://www.horiba-water.com>



Horiba continues contributing to the preservation of the global environment through analysis and measuring technology.



Please read the operation manual before using this product to assure safe and proper handling of the product.

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HORIBA

Explore the future



WATER QUALITY ANALYZERS

SENSOR TECHNOLOGY

pH

ORP

ION

Conductivity

DO

Temperature

Resistivity

SALT

<http://www.horiba-water.com>

ELECTRODE LINE UP

NEW pH

3-in-1 Electrode
9611-10D

3-in-1 Sleeve Eletrade
9677-10D

3-in-1 Micro Electrode
9669-10D

3-in-1 Plastic Electrode
9621-10D

ISFET Electrode
0030-10D

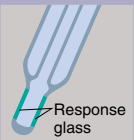
ToupH

pHast

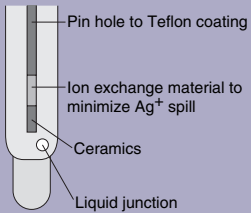
ISFET

ToupH electrode just got ToupHer!

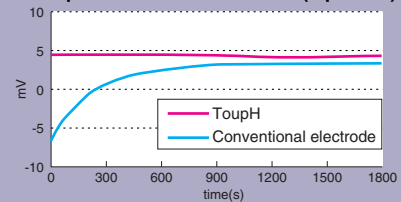
●Enhanced durability of the glass membrane makes it four times stronger than the conventional ToupH electrode.



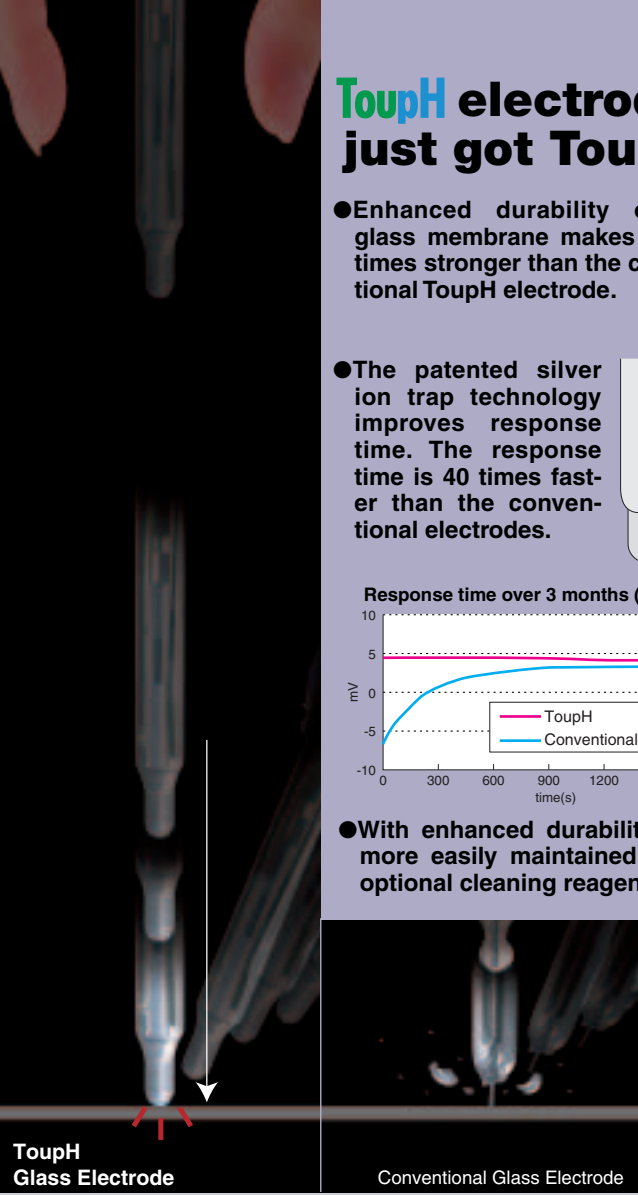
●The patented silver ion trap technology improves response time. The response time is 40 times faster than the conventional electrodes.



Response time over 3 months (tap water).



●With enhanced durability, the electrode is more easily maintained with a sponge or optional cleaning reagent.



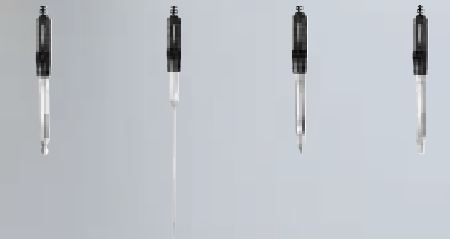
pH (3-in-1)

High Precision 6367-10D
For Test Tubes 6378-10D
For Food Analysis 6252-10D



pH (Combination)

Standard 6066-10D
For Extra-Thin Test Tubes 6069-10D
Needle Type 6251-10D
Flat Type 6261-10D



ORP

Metalic Electrode
Platinum
Combination Type 9300-10C



Temperature

Temperature Electrode
4163-10T



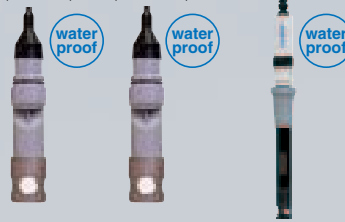
Conductivity

Immersion Type 3551-10D
Immersion Type 3552-10D
Immersion Type 3553-10D
Immersion Type 9382-10D
Flow Type 3561-10D
Flow Type 3562-10D
Flow Type 3573-10D
Flow Type 3574-10D



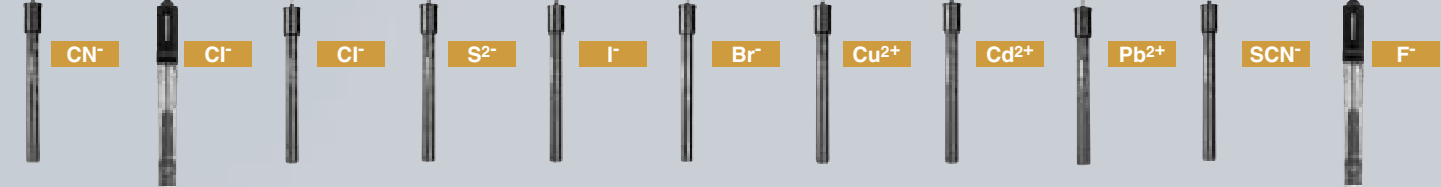
Dissolved Oxygen

Field Use 9551-20D (2 m Cable)
Field Use 9551-100D (10 m Cable)
Laboratory Use 9520-10D



ION

Cyanide Ion Electrode 8001-10C
Chloride Ion Electrode (Combination Type) 6560-10C
Chloride Ion Electrode 8002-10C
Sulfide Ion Electrode 8003-10C
Iodide Ion Electrode 8004-10C
Bromide Ion Electrode 8005-10C
Copper Ion Electrode 8006-10C
Cadmium Ion Electrode 8007-10C
Lead Ion Electrode 8008-10C
Thiocyanate Ion Electrode 8009-10C
Fluoride Ion Electrode (Combination Type) 6561-10C



Fluoride Ion Electrode 8010-10C
Silver Ion Electrode 8011-10C
Ammonia Electrode (Combination Type) 5002A-10C
Sodium Ion Electrode 1512A-10C
Nitrate Ion Electrode (Combination Type) 6582-10C
Nitrate Ion Electrode 8201-10C
Potassium Ion Electrode (Combination Type) 6582-10C
Potassium Ion Electrode 8202-10C
Calcium Ion Electrode (Combination Type) 6583-10C
Calcium Ion Electrode 8203-10C



LABORATORY

Navi^h

F-50 Series
DS-50 Series

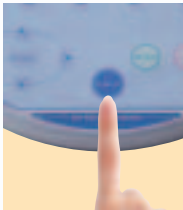


Screen images are superimposed.

- pH
- ORP
- ION
- Conductivity
- Temperature
- Resistivity
- SALT

Color display and navigation function for enhanced user-friendliness.

The world's first 5.7 inch wide screen with color display.



Just press "Navi" key
For operation or troubleshooting menus



Enhanced data reliability with validation feature.

(GLP/GMP compliance)

Self diagnostic features and optional printer assures data reliability.



Benchtop multi-parameter meter allows measurement of up to 4 parameters.

Electronic record, audit trail and electronic signatures are security function features. (FDA 21CFR Part11 compliance)

Data can be transferred to a PC by compact flash, Ethernet and/or serial connection.



Option



Printer
(For GLP/GMP compliance)
Part No. 9096003500

Printer Cable
Part No. 9096003800



Digital Simulator
X-51 (pH, ORP, ION, DO)
X-52 (COND)

Standard pH meter with custom LCD display



F-51BW

- RS232C printer output
- Battery operation possible

Color LCD display with navigation function



F-52

- RS232C printer output

Two channels meter with pH, ORP and ISE measurement, color LCD display with navigation feature.



F-53

- RS232C printer output
- Compact flash

Economical pH, ORP and conductivity meter with custom LCD display



F-54BW

- RS232C printer output
- Battery operation possible

Two channels meter with pH, ORP and conductivity measurement. Color LCD display with navigation feature.



F-54

- RS232C printer output
- Compact flash

World's first meter with FDA 21CFR Part11 support measures pH, ORP, conductivity and ISE



F-55

- RS232C printer output
- Battery operation possible
- Compact flash
- Ethernet

Standard conductivity meter with custom LCD display



DS-51

- RS232C printer output
 - Battery operation possible
- *Set includes conductivity electrode. (model 3552-10D)

Enhanced conductivity meter with color LCD and navigation function.



DS-52

- RS232C printer output
- *Set includes conductivity electrode. (model 3552-10D)



Economical meter for pH and temperature

D-51
pH



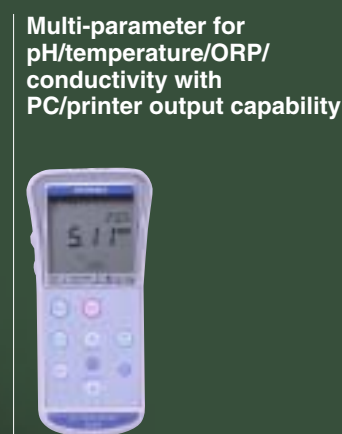
Multi-parameter for pH/temperature/ORP with PC/printer output capability.

D-52
pH ORP



Multi-parameter for pH/temperature/ORP/ISE with PC/printer output capability

D-53
pH ORP ION



Multi-parameter for pH/temperature/ORP/conductivity with PC/printer output capability

D-54
pH ORP COND



Multi-parameter for pH/temperature/ORP/dissolved oxygen with PC/printer output capability

D-55
pH ORP DO



Portable conductivity/resistivity/salinity meter with PC/printer output

ES-51
COND SALT RESI



Portable dissolved oxygen meter with PC/printer output

OM-51
DO

FIELD

navi^h

D-50 Series ES-51 OM-51



- pH
- ORP
- ION
- Conductivity
- Temperature
- Resistivity
- SALT
- DO

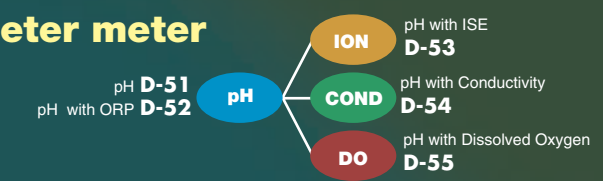
Revolutionary waterproof meter and electrodes enhance care-free operation in the lab or field.

HORIBA portable meter conforms to waterproof standard of IEC529:IP67.

Quick connection to PC allows easy and fast data evaluation.



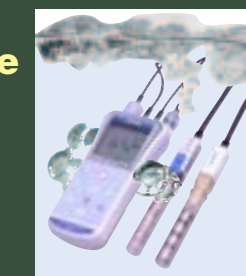
Portable multi-parameter meter allows simultaneous measurement of up to 4 parameters.



Automatic data-logging function.
Store up to 300 sets of data automatically.

Self diagnostic function assures reliable measurement.
User-friendly self-diagnostic modes for battery voltage, temperature, calibration and LCD checks.

User-friendly features and portability with large LCD display.



pH electrode (model 9611-10D) is waterproof down to depth of 1m.
DO electrode (model 9550/9551) is waterproof down to depth of 10m.



Option



Digital Simulator
X-51(pH, ORP, ION, DO)
X-52(COND)



Electrode Stand
Part No. 9096002700



F-51BW

pH

ORP

•RS232C printer output
•Battery operation possible

F-52

pH

ORP

•RS232C printer output

F-53

CH.1

pH

ORP

ION

CH.2

pH

ORP

ION

•RS232C printer output
•Compact flash

F-54BW

pH

ORP

COND

•RS232C printer output
•Battery operation possible

F-54

CH.1

pH

ORP

CH.2

COND

SALT

RESI

•RS232C printer output
•Compact flash

F-55

CH.1

pH

ORP

ION

CH.2

COND

SALT

RESI

•RS232C printer output
•Compact flash
•Ethernet

DS-51

COND

SALT

RESI

•RS232C printer output
•Battery operation possible

DS-52

COND

SALT

RESI

•RS232C printer output



D-51

pH

D-52

pH

ORP

•RS232C printer output

D-53

pH

ORP

ION

•RS232C printer output

D-54

pH

ORP

COND

•RS232C printer output

D-55

pH

ORP

DO

•RS232C printer output

ES-51

COND

SALT

RESI

•RS232C printer output

OM-51

DO

•RS232C printer output

■ pH Electrode Line up

Name		Model	Description	Temp.range(℃)	pH range	Part No.
Combination electrode	3-in-1 electrode	9611-10D	Waterproof thick membrane type	0 ~ 80	0 ~ 14	9096001800
		9677-10D	Protein, high viscosity type	0 ~ 60	0 ~ 14	9096002000
		9669-10D	Precious, trace amount sample type	0 ~ 60	0 ~ 14	9096001900
		9621-10D	Plastic body	0 ~ 100*2	0 ~ 14	9096001700
		6367-10D	High precision*1	0 ~ 60	0 ~ 14	9003011800
		6378-10D	For test tubes*1	0 ~ 60	0 ~ 14	9003011900
		6252-10D	For food analysis*1	0 ~ 60	0 ~ 12	9003013800
	6066-10C	Standard	0 ~ 100	0 ~ 14	9003013400	
	6069-10C	For extra-thin test tubes	0 ~ 60	0 ~ 14	9003013500	
	6251-10C	Needle type	0 ~ 50	0 ~ 12	9003013600	
	6261-10C	Flat type	0 ~ 50	0 ~ 12	9003013700	
ISFET electrode	0030-10D	Needle type ISFET	0 ~ 60	0 ~ 14	9096002100	
ORP electrode	9300-10C	Platinum combination type	0 ~ 60	—	9096000400	
Temperature electrode	4163-10T	For temperature compensation and measurement	0 ~ 100	—	9003013000	

*1 Do not use this electrode with other electrodes, as it will interfere the measurement value. *2 0-50℃ when completely immersed.

■ Conductivity Electrode Line up

Electrode	Cell constant m ⁻¹ (cm ⁻¹)		Model	Range m ⁻¹ (cm ⁻¹)	Samples req'd(ml)	Temp. range(℃)	Part No.
Conductivity electrode	Immersion type	10 (0.1)	3551-10D	10μS ~ 1S (0.1μS ~ 10mS)	50	0 ~ 60	9056000800
		100 (1)	9382-10D	0.1mS ~ 10S (1μS ~ 100mS)	20 ~ 30	0 ~ 80	9096000300
		100 (1)	3552-10D	0.1mS ~ 10S (1μS ~ 100mS)	15	0 ~ 100	9056000900
		1000 (10)	3553-10D	1mS ~ 100S (10μS ~ 1S)	50	0 ~ 60	9056001000
	Flow type	10 (0.1)	3561-10D	10μS ~ 1S (0.1μS ~ 10mS)	10	0 ~ 60	9056001100
		100 (1)	3562-10D	0.1mS ~ 10S (1μS ~ 100mS)	16	0 ~ 60	9056001200
		1000 (10)	3573-10C	1mS ~ 100S (10μS ~ 1S)	4	0 ~ 60	9056001300
		1000 (10)	3574-10C	1mS ~ 10S (10μS ~ 100mS)	0.25	0 ~ 60	9056001400

■ Ion Electrode Line up

Please be aware of the hindering ion and pH range interference of ion electrodes.

Electrode name	Model	Measuring range	Applicable reference electrode	Part No.
Cyanide ion electrode	8001-10C	0.03 ~ 2,600 ppmCN ⁻	2060A • 2565A	9003015500
Chloride ion electrode (composite type)	6560-10C	0.4 ~ 35,000 ppmCl ⁻	—	9003014500
Chloride ion electrode	8002-10C	0.4 ~ 35,000 ppmCl ⁻	2565A	9003015600
Sulfide ion electrode	8003-10C	0.3 ~ 32,000 ppmS ²⁻	2060A • 2565A	9003017500
Iodide ion electrode	8004-10C	0.01 ~ 13,000 ppml ⁻	2060A • 2565A	9003015800
Bromide ion electrode	8005-10C	0.8 ~ 80,000 ppmBr ⁻	2565A	9003015900
Copper ion electrode	8006-10C	0.06 ~ 6,400 ppmCu ²⁺	2060A • 2565A	9003016000
Cadmium ion electrode	8007-10C	0.1 ~ 11,000 ppmCd ²⁺	2060A	9003016100
Lead ion electrode	8008-10C	2 ~ 20,000 ppmPb ²⁺	2565A	9003016200
Thiocyanate ion electrode	8009-10C	0.6 ~ 5,800 ppmSCN ⁻	2565A	9003016300
Fluoride ion electrode (composite type)	6561-10C	0.02 ~ 19,000 ppmF ⁻	—	9003014600
Fluoride ion electrode	8010-10C	0.02 ~ 19,000 ppmF ⁻	2060A • 2565A	9003016400
Silver ion electrode	8011-10C	0.01 ~ 110,000 ppmAg ⁺	2565A	9003016500
Ammonia electrode (composite type)	5002-10C	0.1 ~ 1,000 ppmNH ₃	—	9003016600
Sodium ion electrode	1512A-10C	2.3 ~ 230,000 ppmNa ⁺	2565A	9003016700
Nitrate ion electrode (composite type)	6581-10C	0.62 ~ 62,000 ppmNO ₃ ⁻	—	9003014700
Nitrate ion electrode	8201-10C	0.62 ~ 62,000 ppmNO ₃ ⁻	2565A	9003016800
Potassium ion electrode (composite type)	6582-10C	0.04 ~ 39,000 ppmK ⁺	—	9003014800
Potassium ion electrode	8202-10C	0.04 ~ 39,000 ppmK ⁺	2565A	9003016900
Calcium ion electrode (composite type)	6583-10C	0.4 ~ 40,080 ppmCa ²⁺	—	9003014900
Calcium ion electrode	8203-10C	0.4 ~ 40,080 ppmCa ²⁺	2060A • 2565A	9003017000
Chloride ion chip	7660	—	—	9003015000
Fluoride ion chip	7661	—	—	9003015100
Nitrate ion chip	7681	—	—	9003015200
Potassium ion chip	7682	—	—	9003015300
Calcium ion chip	7683	—	—	9003015400
Ammonia electrode membrane (6pcs)	membrane(NH ₃)	—	—	9012001000

■ DO electrode / DO Tip Line up

Electrode	Lead length	Model	Specification	Temp. range(℃)	Part No.
Waterproof DO electrode	2m	9551-20D	Field immersible type	0 ~ 40	9096002300
Waterproof DO electrode	10m	9551-100D	Field immersible type	0 ~ 40	9096002400
DO electrode	1m	9520-10D	Laboratory use	0 ~ 45	9096000500
DO Tip	—	5401	Replacement electrode Tip for 9551	—	9033010000
DO Tip	—	7541	Replacement electrode Tip for 9520	—	9074000200

Water Quality

MONITORING SYSTEM

U-20XD Series

The U-20XD Series:
Same Innovative features,
now with Xtra Durable design

- Heavy-duty stainless steel protective cover
- Pelican® carrying case standard (U-22XD Only)
- Rubber-made sensor guard to protect sensors and prevent contamination

Up to one month
Data logging

"Simply leave the probe submerged in the sample and the sensor's built-in memory function enables continuous measurement for up to one month.* Personnel do not need to be present during the measurement process. Data can even be retrieved by personal computers in remote locations."

Simultaneous
measurement of
13 parameters

With the W-23XD unit (only), simultaneous measurements of up to 13 parameters (from pH, dissolved oxygen, and conductivity to seawater specific gravity and a variety of ions)

can be obtained — much more quickly and easily than with conventional instruments. With its powerful measurement capabilities, the compact U-20XD series is recommended for all water quality researchers and professionals.

Measurement at
depths as low as
100 meters

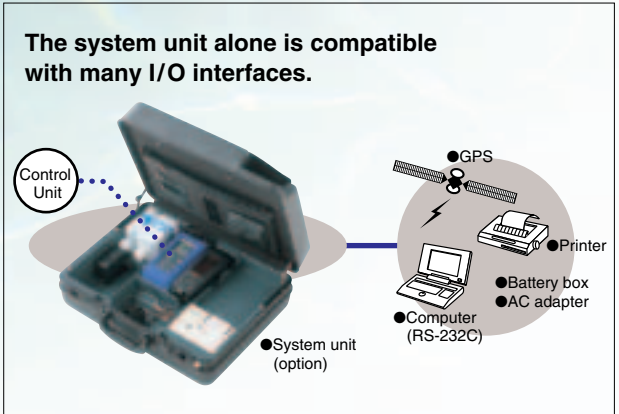
With its superior durability and high pressure resistance, the newly developed sensor facilitates measurements as far as 100 meters below the water surface. Thus, in addition to rivers, lakes and other shallow bodies, high-precision measurement can now be readily obtained — and water quality can be monitored — at dams, and even in the open sea.



System enables GPS and numerous other data processing mechanisms

System capabilities can be greatly increased by installing the Global Positioning System (GPS), supplied with unit U-2002. GPS allows measurement of location and time, in addition to water quality, and enables main unit screen display of the obtained data — an indispensable function for maintaining detailed records. With the acquired longitude, latitude and depth data, subject locations can be mapped in 3-D.

GPS functions by processing satellite signals to provide position measurement with pinpoint accuracy. It is widely employed in air and sea navigation, as well as car navigation systems.



COMPACT pH METER

twinpH
WATERPROOF

pH

Immersion, scoop, and flat measurement.



B-211 single-point pH7 Auto Calibration

B-212 Two point pH7/pH4 Auto Calibration

B-213 Two point pH7/pH4 Auto Calibration

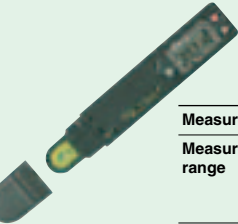
Measurement method	Glass electrode method
Measurement range	pH2 ~ 12
Repeatability	±0.1pH
Power supply	Two 3-volt lithium batteries
Mass	approx. 53g.

COMPACT CONDUCTIVITY METER

Twin Cond

COND SALT

Two measurement methods: drop the sample on the sensor or immerse the sensor in the sample.



B-173

Measurement method	AC bipolar method
Measurement range	Conductivity 0 ~ 19.9mS/cm
	SALT 0 ~ 1.1%
	Temperature 5 ~ 35°C
Repeatability	±1% full scale
Power supply	Two 3-volt lithium batteries
Mass	46g

CARDY Series

CARDY

ION

Compact SALT & ION meters



Na⁺ Ion meter
C-122 Na⁺

K⁺ Ion meter
C-131 K⁺

NO₃⁻ Ion meter
C-141 NO₃⁻

SALT meter
C-121 SALT

	C-121/122 (Na ⁺ /SALT)	C-131 (K ⁺)	C-141 (NO ₃ ⁻)
Measurement range	0.1%(w/w) ~ 10%(w/w) NaCl 23 ~ 2300ppm Na	39 ~ 3900ppm	62 ~ 6200ppm
Sample amount required	approx. 0.1ml	approx. 0.1ml	approx. 0.1ml
Sample temperature	5 ~ 35°C	5 ~ 35°C	5 ~ 35°C
Liquid junction	Porous macromolecule	Porous macromolecule	Porous macromolecule
Mass	Approx. 40 g		