Electrochemistry portable meters

C5010



pH - mV - Conductivity - Dissolved oxygen - Temperature

 $\begin{array}{lll} \mbox{pH:} & 0...14 \mbox{ pH} \\ \mbox{mV:} & \pm 1000 \mbox{ mV} \\ \mbox{Conductivity:} & 0...100 \mbox{ mS/cm} \\ \mbox{Dissolved oxygen:} & 0...20 \mbox{ mg/l} \ / 0...200\% \\ \mbox{Temperature:} & 0...100 \mbox{ °C} \\ \end{array}$

One pH/mV channel

e.g.: C5010U

One conductivity/oxygen channel

One temperature channel

CODE	DESCRIPTION		
C5010	Meter only (without electrodes) + 4 NiMH batteries + mains adaptor		
C5010X	Meter kit without electrodes: C5010 + 2x50 ml buffers (pH 4 and 7) + 50 ml electrolyte (3M KCl) + 50 ml conductivity standard (0.01 M KCl) + carrying case		
C5010P	Meter kit for pH: C5010 + pH/ATC electrode SP10T + 2x50 ml buffers (pH 4 and 7) + 50 ml electrolyte (3M KCl) + carrying case		
C5010K	Meter kit for conductivity: C5010 + conductivity/ATC electrode SK10T + 50 ml conductivity standard (0.01 M KCl) + carrying case		
C5010Z	Meter kit for oxygen: C5010 + dissolved oxygen electrode SZ10T + carrying case		
C5010T	Meter kit complete: C5010 + pH/ATC electrode SP10T + conductivity/ATC electrode SK10T + dissolved oxygen electrode SZ10T + 2x50 ml buffers (pH 4 and 7) + 50 ml electrolyte (3M KCl) + 50 ml conductivity standard (0.01 M KCl) + carrying case		
A4049	Car adaptor, 12 V (optional)		
→ Add a \$-sign for 120 VAC versions, e.g.: C5010\$, → Add a U-sign for UK plug versions,			

C5020

pH - mV - Conductivity - Salinity - TDS - Dissolved oxygen - Temperature



 $\begin{array}{lll} \text{pH:} & 0...14 \text{ pH} \\ \text{mV:} & \pm 1000 \text{ mV} \\ \text{Conductivity:} & 0...1000 \text{ mS/cm} \\ \text{Salinity:} & 0...70 \text{ ppt} \\ \text{TDS:} & 0...100 \text{ g/l} \\ \text{Dissolved oxygen:} & 0...20 \text{ mg/l} \text{ /0...200\%} \\ \text{Temperature:} & 0...100 ^{\circ}\text{C} \\ \text{One pH/mV channel} \end{array}$

CODE DESCRIPTION

C5020 Meter only (without electrodes) + 4 NiMH batteries + mains adaptor

C5020X Meter kit without electrodes: C5020 + 2x50 ml buffers (pH 4 and 7) + 50 ml electrolyte (3M KCl) + 50 ml conductivity standard (0.01 M KCl) + carrying

One conductivity/oxygen channel

Car adaptor, 12 V (optional)

C5020P Meter kit for pH: C5020 + pH/ATC electrode SP10T + 2x50 ml buffers (pH 4 and 7) + 50 ml electrolyte (3M KCl) + carrying case

C5020K Meter kit for conductivity: C5020 + conductivity/ATC electrode SK10T + 50 ml conductivity standard (0.01 M KCl) + carrying case

C5020Z Meter kit for oxygen: C5020 + dissolved oxygen electrode SZ10T + carrying case

C5020T Meter kit complete: C5020 + pH/ATC electrode SP10T + conductivity/ATC electrode SK10T + dissolved oxygen electrode SZ10T + 2x50 ml buffers (pH 4 and 7) + 50 ml electrolyte (3M KCl) + 50 ml conductivity standard (0.01 M KCl) + carrying case

→ Add a \$-sign for 120 VAC versions, e.g.: C5020\$, → Add a U-sign for UK plug versions, e.g.: C5020U

pH

Automatic calibration with one up to three buffers out of eleven pre-programmed pH buffers.

Reads pH with 0.01 pH resolution.

mV

Features mV calibration for accurate ORP measurements.

Reads potentials with 1 mV resolution.

Conductivity

Use a 1 cm 1 electrode (standard) to measure from 0.1 $\mu\text{S/cm}$ to 100 mS/cm.

Use a 0.1 cm $^{-1}$ electrode to measure from 0.01 μ S/cm to 10 mS/cm (C5020 only).

Use a 10 cm $^{-1}$ electrode to measure from 1 μ S/cm to 1000 mS/cm (C5020 only).

Automatically selects correct range and frequency.

Selectable reference temperature: 20° or 25°C .

Automatic calibration with any of three preprogrammed standards (0.01, 0.1 or 1 M KCl).

Dissolved oxygen

Operates with a galvanic oxygen electrode requiring no polarisation time and no zero calibration.

Reads dissolved oxygen with 0.01 mg/l or 0.1% resolution.

Rapid air calibration.

Temperature

Reads temperatures with 0.1°C resolution.

Manual or automatic temperature compensation.

Calibrates temperature probe for quality measurements.

Inputs

One common input for pH and mV.

One common input for conductivity and dissolved oxygen.

One input for a Pt1000 automatic temperature probe.

Low voltage DC input for a mains adaptor.

Display

Bright LCD screen for better readability.

A white backlight automatically illuminates when operated on the mains.

Stability indicator prompts the user when readings should be taken.

The interactive LCD screen provides step by step instructions in the language of your choice (English, Dutch, French, German).

Shows a GLP report on the LCD screen.

Data-logging

Storage memory for 300 values including temperature.

Cabinet

Robust dust and splash-proof cabinet.

• Special features

Three year warranty.

Mains and rechargeable battery operation with programmable automatic switch-off.

Optional 12 V car adaptor.

Specifications		C5010	C5020
рН	Range	014 pH	014 pH
	Resolution	0.01 pH	0.01 pH
	Accuracy	0.2% ± 1 digit	0.2% ± 1 digit
	Calibration	13 points	13 points
	Buffers	11 pre-programmed	11 pre-programmed
	Temperature compensation	0100°C	0100°C
	ISO-pH	68 pH	68 pH
	Slope	80120%	80120%
mV	Range	+1000 mV	+1000 mV
	Resolution	1 mV	1 mV
	Accuracy	0.2% ± 1 digit	0.2% ± 1 digit
	Calibration	1 point	1 point
CONDUCTIVITY	Range (cc dependent)	0100 mS/cm	01000 mS/cm
CONDUCTIVITI	Resolution (cc dependent)	0.1 µS/cm	0.01 μS/cm
	Accuracy	1% f.s. of range	1% f.s. of range
	Calibration	1 point	1 point
	Standards	0.01/0.1M KCl	0.01/0.1/1 M KCl
			0.1/1/10 cm ⁻¹ ± 30%
	Cell constant (cc)	1 cm ⁻¹ ± 30%	
	Temperature compensation	0100°C	0100°C
	Reference temperature	20° or 25°C	20° or 25°C
	Temperature coefficient	natural waters (EN27888)	natural waters (EN27888)
SALINITY	Range		070 ppt
	Resolution		0.1 ppt
TDS	Range		0100 g/l
	Resolution		0.1 mg/l
DISSOLVED OXYGEN	Range	020 mg/l (0200%)	020 mg/l (0200%)
	Resolution	0.01 mg/l (0.1%)	0.01 mg/l (0.1%)
	Accuracy	1% ± 1 digit	1% ± 1 digit
	Calibration	1 point	1 point
	Temperature compensation	050°C	050°C
	Salinity compensation	040 ppt	040 ppt
	Air pressure compensation	8001200 hPa	8001200 hPa
TEMPERATURE	Range	0100°C	0100°C
	Resolution	0.1°C	0.1°C
	Accuracy	0.5°C	0.5°C
	Calibration	1 point	1 point
INPUTS	pH/mV	BNC, 10 ¹² Ω	BNC, 10 ¹² Ω
	Conductivity/Dissolved oxygen	BNC	BNC
	Temperature	2 banana, for Pt1000	2 banana, for Pt1000
STORAGE MEMORY	Data sets		300
DISPLAY	LCD	122x32 pixels	122x32 pixels
LA	White backlight	√ V	√
AMBIENT CONDITIONS	Temperature	040°C	040°C
AUDIENT CONDITIONS	Humidity	095%, non condensing	095%, non condensing
POWER SUPPLY	Mains	210250 VAC, 50/60 Hz	210250 VAC, 50/60 Hz
FOWER SUPPLI	Low voltage	915 VDC	915 VDC
	Batteries	4x1.2 V, NiMH	4x1.2 V, NiMH
DIMENCIONS			
DIMENSIONS	WxDxH	10x20x4 cm	10x20x4 cm
WEIGHT	Meter	350 g	350 g

