

# HandyLab 680

The portable IDS hand-held device measures two parameters simultaneously. ORP, pH, conductivity and oxygen.

*The HandyLab 680 increases the measuring accuracy via:*

**IDS technology** - The digitalization of the measuring signal eliminates interferences.

**AutoRead function** - Autoread provides a stabile, precise measuring value.

**CMC (Continuous Measurement Control)** - Visualizes whether the measuring value is within the calibration range.

**QSC (Quality Sensor Control)** - Informs about the actual condition of the electrode and therefore increases operation safety.

*The HandyLab 680 increases the operator comfort via:*

**IDS Technology** - the secure allocation of the calibration data to the sensor eliminates any uncertainty about the date and results of its last calibration. This saves time and money while assuring the highest confidence in your measurements.

**Traceability of the measuring values** - By the digital and automatic capture of all sensor data.

**User administration** - Can be activated to allow tiered access and capabilities ensuring security and confidence of your data.

**Transmission of all data in \*.csv format** - Via USB interface to the PC or the USB memory stick, or, as an alternative, formatted transfer to Excel by means of MultiLabImporter (included in the delivery).

- ▶ Two-channel IDS measuring device for pH/mV, conductivity and DO
- ▶ Measuring accuracy and highest operator comfort without compromise
- ▶ Waterproof design. Sealed keypad. (IP67)
- ▶ 1 to 5 point calibration with 22 stored buffer sets
- ▶ Huge data storage with output on display and to the USB interface as well to the USB memory stick
- ▶ Color backlit graphic display with clear text menu control
- ▶ Versatile application-oriented sets offered

Advanteges  
HandyLab 680



## Technical specifications

Measuring range/ resolution/ accuracy (all values +/-1 digit) depending on the kind of IDS sensor	pH	0.000 ... 14.000 +/-0.004 pH
	mV	+/- 1200.0 mV +/- 0.2 mV
	Temperature	-5.0 ... 105.0 °C +/- 0.2 °C
	Conductivity	0.00 ... 2000 mS/cm +/- 0.5 % of mean value
	Specific resistance	0.00 Ohm cm ... 100 MOhm cm +/- 0.5 % of mean value
	Salinity	0.0 ... 70.0 (IOT) +/- 0.5 % of mean value
	TDS	0 ... 1999 mg/l, 0 bis 199.9 g/l +/- 0.5 % of mean value
	DO concentration	0.00 ... 20.00 mg/l +/- 0.5 % of value
	DO saturation	0.0 ...200.0 % +/- 0.5 % of value
	DO partial pressure	0 ... 400 hPa +/- 0.5 % of value
Calibration pH	Calibration points	1-, 2-, 3-, 4-, 5-Point
	Stored buffers	22 preprogrammed buffer sets
	Calibration memory	10 last calibrations
	Timer	1 - 999 Days
Calibration cell constant conductivity	Fixed	0.475 cm <sup>-1</sup> , 0.100 cm <sup>-1</sup> , 0.010 cm <sup>-1</sup>
	Calibratable (1 point)	0.450 to 0.500 cm <sup>-1</sup> , 0.800 ... 0.880 cm <sup>-1</sup> , Standard: 0.01 mol/L KCl
	Adjustable	0.250 ... 25.000 cm <sup>-1</sup> ; 0,090 ... 0.110 cm <sup>-1</sup>
Temperature compensation conductivity	Adjustable	Automatic/manual
	Temperature coefficient	nLF: none linear function according to EN 27 888 and ultrapure water function
		Linear compensation 0.000 ... 10.000 %/K
		No compensation
Calibration DO Handling	Calibration point	1 point in OxiCal-calibration vessel
	Digital: IDS Sensor	Yes for pH, ORP, DO and conductivity
	AutoRead	Automatic/manual
	Celsius/Fahrenheit	Yes
	CMC	Yes
	QSC	Yes
	User administration	Yes
	Traceability of results	Yes
	Display	Colored graphic backlit
	Data storage	Manually 500/automatic 10,000 data sets
	Logger	Manually/time triggered
	Interface	USB-A and Mini USB-B
	Data transfer	In *.csv format via USB interface to the PC or USB-Memorystick. Alternatively also transfer into Excel via MultiLab Importer (scope of delivery).
	Power supply	4 x 1.2 V NiMH-rechargeable battery
	Continuous operating time	150h (dependent on connected sensor)
	Sensor connector	2 x IDS (any combination)
	Waterproof	IP67
	QS	Good Laboratory Practice (GLP)
	Waterproof	IP67 (including battery compartment, USB ports and channels)