

## Specifications HI 9829-02042, HI 9829-03042, HI 9829-12042 & HI 9829-13042

Please note the HI 9829-02042 and HI 9829-12042 can't measure turbidity.

<b>pH</b> <b>Auto Calibration.</b> <b>3 point, automatic compensation of T °.</b>	Measuring principle	Potentiometric with combined pH electrode, plastic body
	Range	0.00 to 14.00 pH
	Resolution	0.01 pH
	Accuracy	± 0.02 pH
<b>pH mV</b>	Measuring principle	Potentiometric with combined pH electrode, plastic body
	Range	± 600.0 mV
	Resolution	0.1 mV
	Accuracy	± 0.5 mV
<b>ORP</b> <b>Calibration self.</b> <b>1 point</b>	Measuring principle	Combined with potentiometric redox electrode, plastic body
	Range	± 2000.0 mV
	Resolution	0.1 mV
	Accuracy	± 1.0 mV
<b>Ammonium</b> <b>self calibration.</b> <b>2-point</b>	Measuring principle	Potentiometric ion specific electrode with
	Range	0.02 to 200 mg / L (ppm) (N)
	Resolution	0.01 to 1 mg / L (ppm), 0.1 to 200 mg / L (ppm)
	Accuracy	± 5% of reading or 2 mg / L (ppm), the largest
<b>Chlorides</b> <b>self calibration.</b> <b>2-point</b>	Measuring principle	Potentiometric with ion specific electrode
	Range	0.6 to 200 mg / L (ppm)
	Resolution	0.1 mg / L (ppm)
	Accuracy	± 5% of reading or 2 mg / L (ppm), the largest
<b>Nitrates</b> <b>self calibration.</b> <b>2-point</b>	Measuring principle	Potentiometric ion specific electrode with
	Range	0.62 to 200 mg / L (ppm) (N)
	Resolution	0.01 to 1 mg / L (ppm), 0.1 to 200 mg / L (ppm)
	Accuracy	± 5% of reading or 2 mg / L (ppm), the largest
	Measuring principle	Potentiometric probe with 4 rings

<b>Conductivity (EC)</b> <b>Calibration self. 1 point</b> <b>AutoCorrect T ° adjustable β</b>	Range	0.000 to 200.000 mS / cm (up to 400 mS / cm EC absolute)
	Resolution	Manual: 1 $\mu$ S / cm, 0.001 mS / cm, 0.01 mS / cm, 0.1 mS / cm, 1 mS / cm Auto: 1 $\mu$ S / cm 0 to 9999 $\mu$ S / cm, 0.01 mS / cm from 10.00 to 99.99 mS / cm, 0.1 mS / cm from 100.0 to 400.0 mS / cm, 0.001 mS / cm 0.000 to 9.999 mS / cm, 0.01 mS / cm 10, 00 to 99.99 mS / cm, 0.1 mS / cm from 100.0 to 400.0 mS / cm
	Accuracy	$\pm$ 1% of reading or $\pm$ 1 $\mu$ S / cm, the largest
<b>TDS</b> <b>Conversion Factor adjustable</b>	Measuring principle	Conversion of conductivity
	Range	0 to 400,000 mg / L (ppm) (the maximum value depends on the TDS factor)
	Resolution	Manual: 1 mg / L (ppm), 0.001 g / L (ppt), 0.01 g / L (ppt), 0.1 g / L (ppt), 1 g / L (ppt) Auto: 1 mg / L (ppm) from 0 to 9999 mg / L (ppm), 0.01 g / L (ppt) from 10.00 to 99.99 g / L (ppt), 0.1 g / L (ppt) of 100.0 to 400.0 g / L (ppt), 0.001 g / L (ppt) from 0.000 to 9.999 g / L (ppt), 0.01 g / L (ppt) from 10.00 to 99.99 g / L (ppt), 0.1 g / L (ppt) from 100.0 to 400.0 g / L (ppt)
	Accuracy	$\pm$ 1% of reading or $\pm$ 1 mg / L (ppm)
<b>Resistivity</b>	Measuring principle	Conversion of conductivity
	Range	0-999999 $\Omega \cdot$ cm; k: • 0 to 1000.0 cm M: • 0 to 1.0000 cm
	Resolution	Depending on the read
<b>Salinity</b>	Measuring principle	Conversion of conductivity
	Range	0.00 to 70.00 PSU (practical salinity scale - 1 PSU = 1 g / L)
	Resolution	0.01 PSU
	Accuracy	$\pm$ 2% of reading or $\pm$ 0.01 PSU largest
<b>Specific gravity of seawater</b> <b>Readings <math>\sigma_t</math>, <math>\sigma_0</math>, <math>\sigma_{15}</math></b>	Measuring principle	Conversion of conductivity
	Range	0.0 to 50.0 $\sigma_t$ , $\sigma_0$ , $\sigma_{15}$
	Resolution	0.1 $\sigma_t$ , $\sigma_0$ , $\sigma_{15}$
	Accuracy	$\pm$ 1 $\sigma_t$ , $\sigma_0$ , $\sigma_{15}$
<b>Dissolved Oxygen</b> <b>Calibration self. 2-point</b>	Measuring principle	Galvanic oxygen sensor without polarization
	Range	0.0 to 500.0%, from 0.00 to 50.00 mg / L
	Resolution	0.1%, 0.01 mg / L

<b>automatic temp compensation</b>	Accuracy	0.0 to 300.0% $\pm$ 1.5% of reading or $\pm$ 1.0%, the largest, from 300.0 to 500.0% $\pm$ 3% of reading, 0.00 to 30, 00 mg / L: $\pm$ 1.5% of reading or 0.10 mg / L, the largest, 30.00 mg / L to 50.00 mg / L $\pm$ 3% of reading
<b>Turbidity Calibration self. 3-point</b>	Measuring principle	EN ISO 7027
	Range	0.0 to 99.9 FNU; 100 to 1000 FNU
	Resolution	NTU 0.1 NTU of 0.0 to 99.9; FNU 1 100 to 1000 NTU
	Accuracy	$\pm$ 0.3 FNU or $\pm$ 2% of reading, the largest
<b>Atmospheric pressure auto calibration. 1 point</b>	Range	450 to 850 mm Hg, 17.72 to 33.46 Hg, 600.0 to 1133.2 mbar 8.702 to 16.436 psi, 0.5921 to 1.1184 atm; 60.00 to 113.32 kPa
	Resolution	0.1 mm Hg, 0.01 Hg, 0.1 mbar, 0.001 psi, 0.0001 atm, 0.01 kPa
	Accuracy	$\pm$ 3 mm Hg if $\Delta T$ ° measurement - calibration temp $<$ 15 ° C
<b>Temperature</b>	Range	-5.00 To 55.00 ° C
	Resolution	0.01 ° C
	Accuracy	$\pm$ 0.15 ° C.
<b>Temperature Compensation</b>		automatic from -5 to 55°C (23 to 131°F)
<b>Logging Memory from Meter</b>		44,000 records
<b>Logging Interval</b>		1 second to 3 hours
<b>Computer Interface</b>		USB (with HI 929829 software)
<b>Waterproof Protection</b>		IP67
<b>Environment</b>		0 to 50°C (32 to 122°F); RH 100%
<b>Power Supply</b>		1.5V alkaline C cells (4) / 1.2V NiMH rechargeable C cells (4), USB, 12V power adapter