

# Device Specifications

## OEM UNDERWATER pH METER

### PICO-PH-SUB

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For sensor specifications and response times, please refer to the webpages of the different sensor types.

Specifications	
<b>Max. hydrostatic pressure</b>	400 bar
<b>Material of fiber-optic feed-through</b>	Titanium (3.7035)
<b>Weight PICO-PH</b>	20 g
<b>Dimensions (WxDxH)</b>	Ø 17 mm, 59 mm in length
<b>Sensor Connector</b>	Proprietary PyroScience underwater connector for 1 fiber-optic pH sensor
<b>Compatible optical pH sensors</b>	pH sensors from PyroScience with SUB-connector
<b>Temperature port</b>	1 for Pt100 temperature sensor (solder points)
<b>Measuring principle</b>	Lifetime detection of REDFLASH luminescence via fiber-optics
<b>Excitation wavelength</b>	620 nm (orange-red)
<b>Emission wavelength</b>	760 nm (NIR)
<b>Max. sampling rate</b>	20 samples per seconds
<b>Logging software (optional)</b>	Pyro Workbench or Pyro Developer Tool with USB adapter cable
<b>System requirements</b>	USB, Windows 7 / 8 / 10
<b>Power supply</b>	Min. 3.3 V DC, max. 5.0 V DC (typ. 3-5mA)
<b>Connector plug</b>	Phoenix Contact PTSM0,5/4-P-2,5
<b>Power consumption: -while acquiring a new data point</b>	typ. 5-10 mA (typ. duration <100 ms)

<b>-during idle time -during deep sleep mode</b>	typ. 2-3 mA typ. 10 $\mu$ A
<b>Digital interface</b>	UART (3.0V levels, 5V tolerant), 19200 baud, 8 data bit, 1 stop bit, no parity, no handshake
<b>Operating / storage temperature</b>	0-50°C / -20-70°C
<b>Max rel. humidity</b>	Non-condensing conditions
<b>Temperature sensing principle</b>	2-wire or 4-wire Pt100 via 24 bit ADC, must be soldered on
<b>Pt100 temperature sensor*</b>	
<b>range</b>	-30°C- 50°C
<b>resolution</b>	0.02°C
<b>accuracy</b>	$\pm$ 0.5°C
<b>Optical pH sensor</b>	Refer to the separately available specifications for the connected optical pH sensor

\*Please note, that the optical pH sensors have a different temperature range

## Contact

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