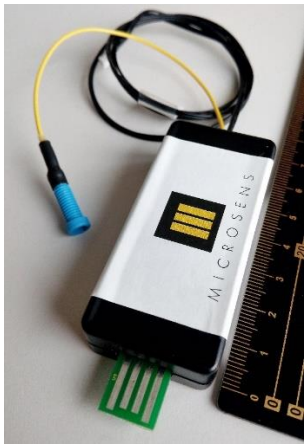
MICROSENS

pH- ISFET Measurement Kit
Product Overview

MSFET 3330-2 pH Measurement Kit

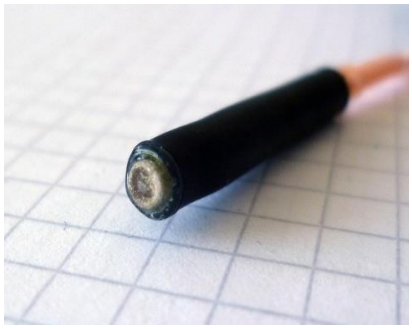
Content of the kit:

MSFET-USB Interface (1x)



Packaged MSFET3330-2 pH sensing element (3x)

MSREF1 Mini Ag/AgCl reference electrode (2x)



MSFET–USB interface: Key Features

- Small packaging (40mm x 70mm)
- USB powered (galvanic isolation of in- and outputs)
- Digital sensor output
- pH calibration function
- Graphical user interface (Java)

Applications

- Laboratory
- Water quality monitoring
- Environment control
- Security and industrial process control

Characteristics

- Temperature range: 0°C … 80°C
- USB powered (galvanic isolation)
- pH calibration functionality
- Digital output of sensor output (raw data) and measured pH

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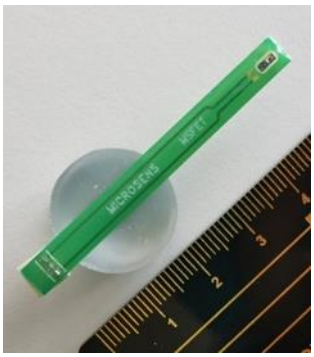
MSFET 3330-2 pH Sensor: Key Features



Base structure

- Sensor base materials: Silicon, Polysilicon
- Technology: 4" planar CMOS process
- pH-sensitive material: Ta_2O_5

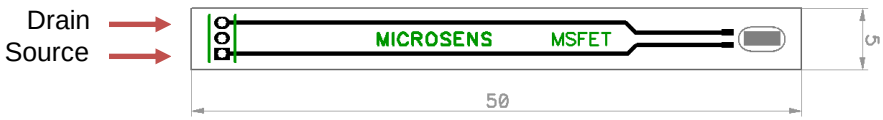
Sensor dimensions:

	Width	Length	Height	Unit
Chip dimensions	1.2	3	0.3	mm
Packaged sensor	5	50	1 - 2	mm

pH Sensor Characteristics:

	min	typical	max	Unit
V_{ds}		0.5		V
I_{ds}	0.05	0.1		mA
Sensitivity (ΔVs/pH)	-50	-55.0	-59.2	mV/pH

pH Sensor Connections:



MSREF1 Mini Ag/AgCl reference electrode: Key Features

- Solid state Ag/AgCl reference electrode
- No storage in KCl buffer required
- Resistant to drying
- Very small size
- Long lifetime

The MSREF1 reference electrode is available with and without a solid electrolyte layer. The Measurement kit contains one MSREF1 with electrolyte layer and one MSREF1 without electrolyte layer.