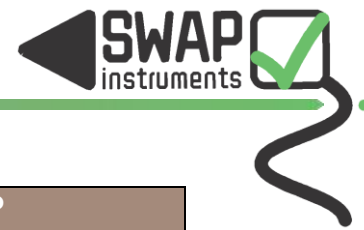



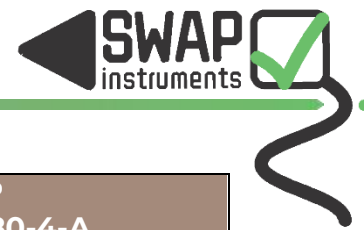





# Soil Redox probes (analog)



Standard versions	SWAP ORP-30-1-B Analog	SWAP ORP-40-4-B Analog	SWAP ORP-80-4-B Analog
Picture			
Parameters	Redox (Pt)	Redox (Pt)	Redox (Pt)
Units	Redox in mV	Redox in mV	Redox in mV
Electrodes	1 x redox	4 x redox	4 x redox
Electrode positions (cm distance from probe top side)	Redox: 30	Redox: 10, 20, 30, 40	Redox: 20, 40, 60, 80
Probe dimensions (cm)	Length: 36.5 Diameter: 1.4	Length: 46.5 Diameter: 1.4	Length: 86.5 Diameter: 1.4
Probe weight (kg)	0.12	0.18	0.26
Cable	3-meter, open wire ends	3-meter, open wire ends	3-meter, open wire ends
Materials	Shaft: epoxy glass fibre, Head and tip: POM-c, Redox electrode(s): Pt 99.99 %, Cable: PUR screened.		
Operating temperature	-10 to + 50 °C		
Environmental protection	IP67		
<b>Performance characteristics</b>			
Measuring range	Redox: -2500 to + 2500 mV		
Calibration accuracy	Redox: 5 mV (for Hanna ORP test solution 240 mV at 25 °C)		
Resolution	Redox: 1 mV		
<b>Output</b>			
Analog	✓	✓	✓
Integrated reference electrode	✗	✗	✗


# Soil Redox probes (analog)



Standard versions	SWAP ORP-30-1-A Analog	SWAP ORP-40-4-A Analog	SWAP ORP-80-4-A Analog
Picture			
Parameters	Redox (Pt), Temperature	Redox (Pt), Temperature	Redox (Pt), Temperature
Units	Redox in mV T in °C	Redox in mV T in °C	Redox in mV T in °C
Electrodes	1 x redox 1 x temperature	4 x redox 1 x temperature	4 x redox 1 x temperature
Electrode positions (cm distance from probe top side)	Redox: 30  T: 29	Redox: 10, 20, 30, 40  T: 25	Redox: 20, 40, 60, 80  T: 50
Probe dimensions (cm)	Length: 39 Diameter: 1.4	Length: 49 Diameter: 1.4	Length: 89 Diameter: 1.4
Probe weight (kg)	0.15	0.22	0.30
Cable	3-meter, open wire ends	3-meter, open wire ends	3-meter, open wire ends
Materials	Shaft: epoxy glass fibre, Head and tip: POM-c, Redox electrode(s): Pt 99.99 %, Temperature electrode: NTC, Reference electrode: Ag/AgCl, 3 M KCl gel, Cable: PUR screened.		
Operating temperature	-10 <sup>#1</sup> to + 50 °C ( <sup>#1</sup> 3M KCl gel in reference electrode can freeze, which can cause deviating measurement results)		
Environmental protection	IP67		
<b>Performance characteristics</b>			
Measuring range	Redox: -2500 to + 2500 mV Temperature: - 10 to + 50 °C		
Calibration accuracy	Redox: 5 mV (for Hanna ORP test solution 240 mV at 25 °C) Temperature: 0.2 °C (0 to 20 °C)		
Resolution	Redox: 1 mV Temperature: 0.1 °C		
<b>Output</b>			
Analog	✓	✓	✓
Integrated reference electrode	✓	✓	✓




# Soil Redox probes (analog)



Standard versions	SWAP ORP-30-1-BNC Analog
Picture	
Parameters	Redox (Pt)
Units	Redox in mV
Electrodes	1 x redox
Electrode positions (cm distance from probe top side)	Redox: 30
Probe dimensions (cm)	Length: 39 Diameter: 1.4
Probe weight (kg)	0.20
Cable	3-meter, BNC connector
Materials	Shaft: epoxy glass fibre, Head and tip: POM-c, Redox electrode(s): Pt 99.99 %, Reference electrode: Ag/AgCl, 3 M KCl gel, Cable: PUR screened.
Operating temperature	-10 <sup>#1</sup> to + 50 °C (#1 3M KCl gel in reference electrode can freeze, which can cause deviating measurement results)
Environmental protection	IP67
Performance characteristics	
Measuring range	Redox: -2500 to + 2500 mV
Calibration accuracy	Redox: 5 mV (for Hanna ORP test solution 240 mV at 25 °C)
Resolution	Redox: 1 mV
Output	
Analog	✓
Integrated reference electrode	✓

# Soil Redox probes (SDI-12)



Standard versions	SWAP ORP-30-1-D SDI-12	SWAP ORP-40-4-D SDI-12	SWAP ORP-80-4-D SDI-12
Picture			
Parameters	Redox (Pt), Temperature	Redox (Pt), Temperature	Redox (Pt), Temperature
Units	Redox in mV T in °C	Redox in mV T in °C	Redox in mV T in °C
Electrodes	1 x redox 1 x temperature	4 x redox 1 x temperature	4 x redox 1 x temperature
Electrode positions (cm distance from probe top side)	Redox: 30  T: 29	Redox: 10, 20, 30, 40  T: 25	Redox: 20, 40, 60, 80  T: 50
Probe dimensions (cm)	Length: 39 Diameter: 1.4	Length: 49 Diameter: 1.4	Length: 89 Diameter: 1.4
Probe weight (kg)	0.17	0.22	0.30
Cable	5-meter, connector 4 pole	5-meter, connector 4 pole	5-meter, connector 4 pole
Materials	Shaft: epoxy glass fibre, head and tip: POM-c, Redox electrode(s): Pt 99.99 %, temperature electrode: NTC, Reference electrode: Ag/AgCl, 3 M KCl gel, Cable: PUR.		
Operating temperature	-10 <sup>#1</sup> to + 50 °C ( <sup>#1</sup> 3M KCl gel in reference electrode can freeze, which can cause deviating measurement results)		
Environmental protection	IP67		
<b>Performance characteristics</b>			
Measuring range	Redox: -2500 to + 2500 mV Temperature: - 10 to + 50 °C		
Calibration accuracy	Redox: 5 mV (for Hanna ORP test solution 240 mV at 25 °C) Temperature: 0.2 °C (0 to 20 °C)		
Resolution	Redox: 1 mV Temperature: 0.1 °C		
<b>Output</b>			
SDI-12	✓	✓	✓
Integrated reference electrode	✓	✓	✓