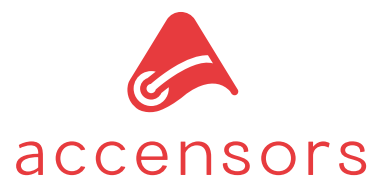


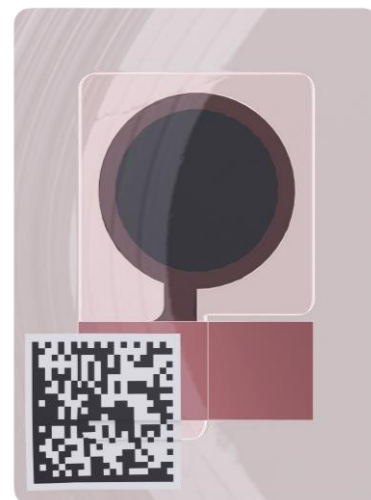
Datasheet (preliminary)

SMD foil reference electrode RE01

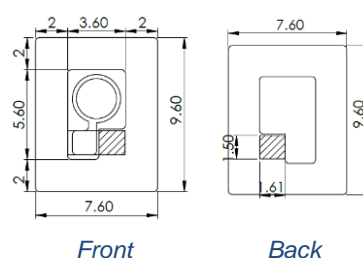


The SMD foil reference electrode RE01 is designed for electrochemical, potentiometric measurements in liquid or moist samples **when combined with a second, ion-selective sensing electrode**.

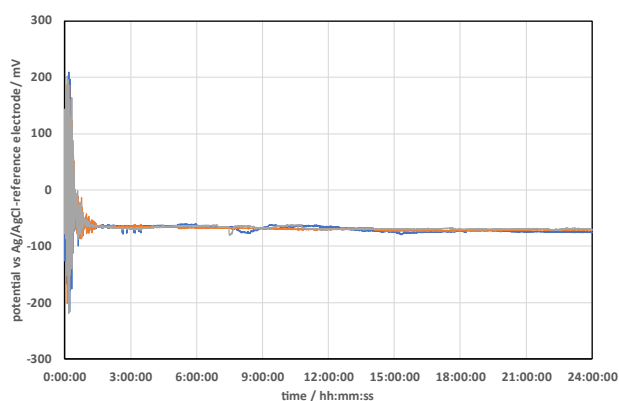
The readings are taken by measuring the open circuit potential/voltage between both electrodes via high resistivity voltage measurement electronics (see example circuit below). Once used, the sensor must be kept hydrated for further application and not allowed to dry out.



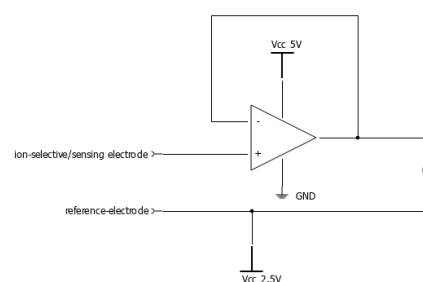
Technical Data	
Dimensions	L x W in mm
Whole sensor foil	9.6 x 7.6
Connection pad	1.5 x 1.61
Set-up time (time till stable output)	~ 1 h
Drift	~ 30 mV in first 24 hrs
Lifetime (in use)	~ 3 days
Measuring environment	
Operating range	5 – 9 pH 100 μM – 1 M NaCl
Samples	Diverse*



*must be sufficient moisture for contact to be maintained between both electrodes



Example output readings for the first 24h



Schematic example for a measuring circuit including an operational amplifier as voltage follower

All mechanical dimensions are valid at 25 °C ambient temperature, if not differently indicated. All data except the mechanical dimensions only have information purposes and are not to be understood as assured characteristics. Technical changes without previous announcement as well as mistakes reserved. Load with extreme values during a longer period can affect the reliability. Typing errors and mistakes reserved. Product specifications are subject to change without notice.

Datasheet (preliminary)

SMD foil reference electrode RE01



Version history:

Version	Release date	Changes
0.1	08.05.2023	First release
0.2	11.07.2023	Layout adjustments
1.0	14.05.2024	B-sample update