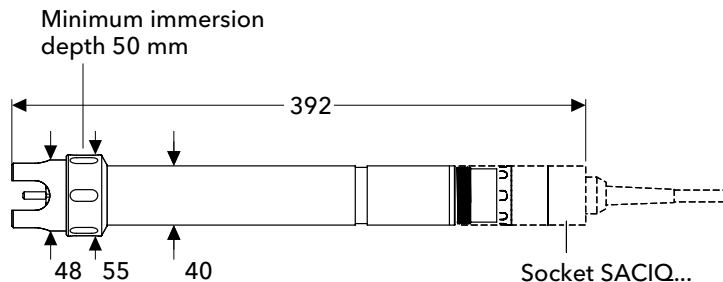




Digital ISE combination sensor VARiON® for ammonium and nitrate

Ion selective measurement of ammonium and nitrate free of reagents with automatic compensation of potassium/chloride with the VARiON® Plus 700 IQ

We would like to inform you about the application range on our website



Technical Data

Model	VARiON®Plus	
	Ammonium Measurement	Nitrate Measurement
Measuring method	Electrochemical	
Maximum Configuration	Common reference electrode, two measuring electrodes, one compensation electrode	
Integrable Electrodes:	VARiON®Plus Ref	
Reference Electrode	VARiON®Plus K	
Measuring Electrode	VARiON®Plus NH ₄	VARiON®Plus NO ₃
Compensation Electrode	VARiON®Plus K	VARiON®Plus Cl
Measuring range/Resolution	NH ₄ -N: 1 ... 2,000 mg/l / 1 mg/l; 0.1 ... 100 mg/l / 0,1 mg/l NH ₄ ⁺ : 1 ... 2,580 mg/l / 1 mg/l; 0.1 ... 129.0 mg/l / 0,1 mg/l	NO ₃ -N: 1 ... 1,000 mg/l / 1 mg/l; 0.1 ... 100 mg/l / 0,1 mg/l NO ₃ ⁻ : 5 ... 4500 mg/l / 1 mg/l; 0.5 ... 450.0 mg/l / 0,1 mg/l
Compensation Ranges	K ⁺ : 0.1 ... 1,000 mg/l / 0,1 mg/l	Cl ⁻ : 0.1 ... 1,000 mg/l / 0,1 mg/l
Measuring Accuracy in laboratory standard solutions	± 5 % of measured value ± 0.2 mg/l in standard solutions	
Calibration Procedures	Matrix adjustment against any reference value, 2-point-calibration possible with multiple standard solution	
Working Life (typically)	Reference electrode: 18 months, measuring and compensation electrode: 18 months (in typical application - municipal sewage plants)	
Temperature Measurement and Compensation	Integrated NTC thermistor, Range 32 °F ... 104 °F (0 °C ... +40 °C), Accuracy ±0.5 K, Resolution 0.1 K, t ₉₅ < 20 s	
Pressure Resistance	Maximum 0.2 bar (incl. SACIQ sensor connection cable, with installed electrodes)	
Ambient Conditions	Operating temperature: 32 °F ... 104 °F (0 °C ... +40 °C), storing temperature: 32 °F ... 104 °F (0 °C ... +40 °C)	
Electrical connections	2-wire shield cable with quick fastener to sensor	
Electromagnetic Compatibility	EN 61326, Class B, FCC Class A; Intended for indispensable operation	
Certifications	CE	
Mechanical	Sensor body: V4A stainless steel 1.4571 Temperature sensor: V4A stainless steel 1.4571 Electrode connector: POM	Protective cup: POM Protection rating: IP 68 (0.2 bar, with installed electrodes)
Weight	Approx. 1.48 lb (670 g, without electrode, without sensor connection cable)	
Warranty	VARiON®Plus 700 IQ: 2 years Electrodes: 1 year for defects of quality	

Model	Description	Order No.
VARiON®Plus 700 IQ	Digital sensor for the ion selective measurement of ammonium and nitrate, without electrodes (Please order the sensor cable SACIQ separately)	107040
VARiON®Plus A comp SET NH ₄	VARiON®Plus 700 IQ, reference electrode VARiON® Ref, ammonium measuring electrode VARiON®Plus NH ₄ and compensation electrode VARiON®Plus K (potassium) (Please order the sensor cable SACIQ separately)	107060
VARiON®Plus N comp SET NO ₃	VARiON®Plus 700 IQ, VARiON® Ref, VARiON®Plus NO ₃ and VARiON®Plus Cl (chloride) (Please order the sensor cable SACIQ separately)	107062
VARiON®Plus AN/A comp SET NH ₄ & NO ₃	VARiON®Plus 700 IQ, VARiON®Ref, VARiON®Plus NH ₄ and VARiON®Plus NO ₃ , VARiON®Plus K (potassium) (Please order the sensor cable SACIQ separately)	107066
VARiON®Plus AN/N comp SET NH ₄ & NO ₃	VARiON®Plus 700 IQ, VARiON®Ref, VARiON®Plus NH ₄ and VARiON®Plus NO ₃ , VARiON®Plus Cl (chloride) (Please order the sensor cable SACIQ separately)	107068