

# ColorPlus 3 Nitrat

On-line-monitoring in nitrate concentration



## Properties

- On-line measurement of nitrate concentration
- Simultaneous measurement on two optical path lengths to compensate for window fouling and to increase the measuring range
- Integrated compensation of DOC and turbidity
- Flow cell easy to clean without tools
- Automatic instrument verification

## Applications

- Nitrate measurement

## Industries

- Treatment of drinking water

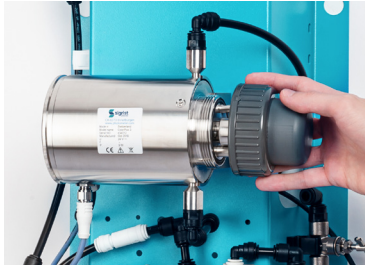
## Innovations with tangible benefits



### Device configuration

The instrument is equipped with different optical filters:

- 2 filters for automatic calibration verification
- 1 filter for nitrate measurement
- 1 filter for DOC and turbidity



### Measuring cell with a clever design

- Tool-free access
- Easy cleaning of the components in the measuring cell (window, sample distributor)



### Measuring with two optical path lengths

The measuring with two path lengths allows to:

- Increase the accuracy of the instrument over a wide measuring range
- Compensation of window fouling
- Automatic warning by the unit in case of high window contamination

### Complete wall mounting set

Plate with all components of the system (Instrument, SICON, filtration unit, measuring cell drainage, flow meter and pressure valve):

- Compact measuring station
- Simple and fast installation and commissioning



### Intelligent control system

The SICON control unit with state-of-the-art touch screen technology and colour display:

- Values, graphs, alarm and status messages can be presented
- An internal data logger allows recalling and displaying measured data of the last 32 days



### Main technical details

Measuring principle:	Absorption
Measuring range:	0 ... 100 mg/l Nitrate 0 .. 20 mg/l N03-N
Resolution:	0.01 mg/l
Measuring ranges:	8, freely configurable
Protection degree:	IP 67
Sample temperature:	0 ... 50 °C
Sample flow:	0.5 ... 1 l/min

Full details and  
technical data:



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## Datenblatt

### Device

Measuring principle:	Absorption
Measuring range:	0 ... 100 mg/l Nitrate (0 .. 20 mg/l) N03-N
Reproducibility:	+/- 0.1 mg/l resp. +/- 1% value
Resolution:	0.01 mg/l
Measuring ranges:	8, freely configurable
Units:	mg/l
Ambient temperature:	-20 °C ... +50 °C
Enclosure material:	Stainless steel 1.4301
Protection degree:	IP 67
Weight:	3.4 kg

### Measuring cell

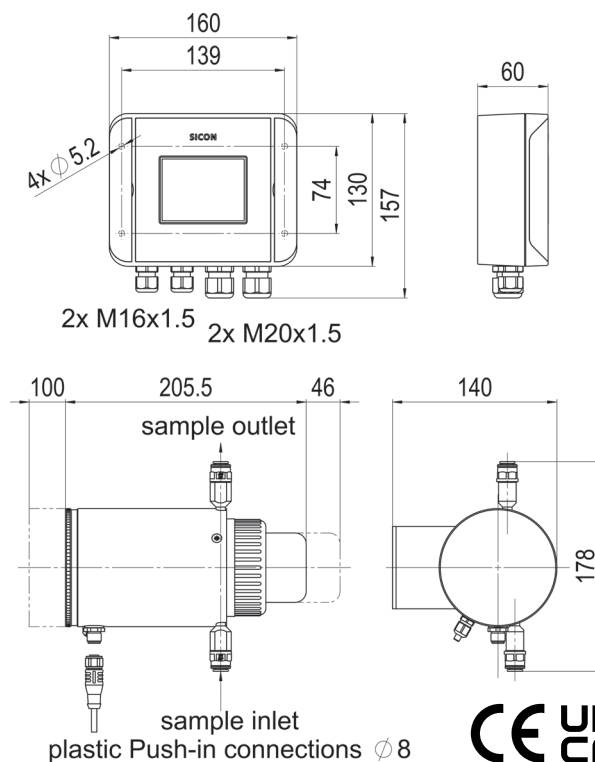
Material:	PVC
Path lengths Nitrate:	5/1.5 mm
Window material:	Quarz
Seals:	EPDM
Sample temperature:	0 ... 50 °C
Sample pressure:	600 kPa (6 bar)
Sample flow:	0.5 ... 1 l/min
Connections:	Push fit 8 mm / G 1/4" thread

### Control unit SICON

Power supply:	24 VDC +/- 10%
Power consumption:	max. 8 W, including photometer
Display:	1/4 VGA, 3.5"
Operation:	Touchscreen
Ambient temperature:	-20 °C ... +50 °C
Ambient humidity:	0 ... 100% RH
Protection degree:	IP 66

Outputs:	4 x 0/4 ... 20 mA galv. separated 7 x digital, freely configurable
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Inputs:	5 x digital, freely configurable
Digital interfaces:	Ethernet, micro-SD card,
Modbus TCP	
Optional modules (max. 2):	Profibus DP, Modbus RTU, HART, Profinet IO, 4 x 0/4 ... 20 mA outputs, galv. separated 4 x 0/4 ... 20 mA inputs



Authorised Distributor:



46, Jalan SS 22/21, Damansara Jaya,  
47400 Petaling Jaya,  
Selangor Darul Ehsan, Malaysia.  
Email: [nog@nog.com.my](mailto:nog@nog.com.my)  
Website: [www.nog.com.my](http://www.nog.com.my)