



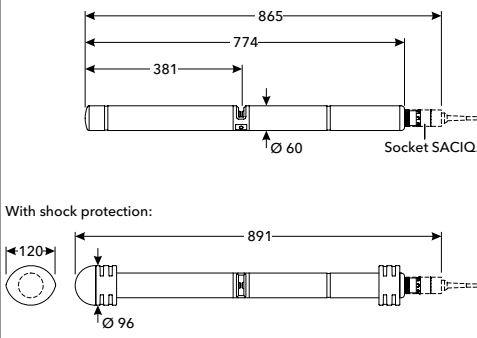
# NiCaVis® optical sensors for surface water monitoring



Multiparameter-sensors with ultrasonic cleaning technology for the reagent-free measurement of color, nitrate, nitrite, carbon parameters and total suspended solids in rivers and lakes.

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

| Model                          | NiCaVis® 705 IQ SF                                     |                     |           | NiCaVis® 705 IQ NI SF                                |                           | NiCaVis® 705 IQ SF Co                                  |           |
|--------------------------------|--------------------------------------------------------|---------------------|-----------|------------------------------------------------------|---------------------------|--------------------------------------------------------|-----------|
| Measuring method               | Spectral measurement in the UV-VIS range of 200-720 nm |                     |           | Spectral measurement in the UV range of 200 - 390 nm |                           | Spectral measurement in the UV-VIS range of 200-720 nm |           |
| Measuring gap                  | 5 mm (optical layer thickness)                         |                     |           |                                                      |                           |                                                        |           |
| Application (optimized for)    | Surface water e.g. rivers and lakes                    |                     |           |                                                      |                           |                                                        |           |
| Measuring range and resolution | NO <sub>3</sub>                                        | 0.0 ... 250.0 mg/l  | 0.1 mg/l  | 0.0 ... 250.0 mg/l                                   | 0.1 mg/l                  | 0.0 ... 250.0 mg/l                                     | 0.1 mg/l  |
|                                | NO <sub>3</sub> -N                                     | 0.00 ... 50.00 mg/l | 0.01 mg/l | 0.00 ... 50.00 mg/l                                  | 0.01 mg/l                 | 0.00 ... 50.00 mg/l                                    | 0.01 mg/l |
|                                | NO <sub>2</sub>                                        |                     |           | 0.0 ... 100.0 mg/l                                   | 0.1 mg/l                  |                                                        |           |
|                                | NO <sub>2</sub> -N                                     |                     |           | 0.00 ... 25.00 mg/l                                  | 0.01 mg/l                 |                                                        |           |
|                                | COD <sub>diss.</sub>                                   | 0.0 ... 800.0 mg/l  | 0.1 mg/l  | 0.0 ... 800.0 mg/l                                   | 0.1 mg/l                  | 0.0 ... 800.0 mg/l                                     | 0.1 mg/l  |
|                                | TOC                                                    | 0.0 ... 500.0 mg/l  | 0.1 mg/l  | 0.0 ... 500.0 mg/l                                   | 0.1 mg/l                  | 0.0 ... 500.0 mg/l                                     | 0.1 mg/l  |
|                                | DOC                                                    | 0.0 ... 500.0 mg/l  | 0.1 mg/l  | 0.0 ... 500.0 mg/l                                   | 0.1 mg/l                  | 0.0 ... 500.0 mg/l                                     | 0.1 mg/l  |
|                                | BOD                                                    | 0.0 ... 500.0 mg/l  | 0.1 mg/l  | 0.0 ... 500.0 mg/l                                   | 0.1 mg/l                  | 0.0 ... 500.0 mg/l                                     | 0.1 mg/l  |
|                                | SAC <sub>254 total</sub>                               | 0.0 ... 600.0 1/m   | 1 1/m     | 0.0 ... 600.0 1/m                                    | 1 1/m                     | 0.0 ... 600.0 1/m                                      | 1 1/m     |
|                                | SAC <sub>254 diss.</sub>                               | 0.0 ... 600.0 1/m   | 1 1/m     |                                                      |                           | 0.0 ... 600.0 1/m                                      | 1 1/m     |
|                                | UVT <sub>254 total</sub> *                             | 0.0 ... 100.0 %     | 0.1 %     | 0.0 ... 100.0 %                                      | 0.1 %                     | 0.0 ... 100.0 %                                        | 0.1 %     |
|                                | UVT <sub>254 diss.</sub> *                             | 0.0 ... 100.0 %     | 0.1 %     |                                                      |                           | 0.0 ... 100.0 %                                        | 0.1 %     |
|                                | TSS                                                    | 0.0 ... 900.0 mg/l  | 0.1 mg/l  |                                                      |                           |                                                        |           |
|                                | Hazen 340 nm                                           |                     |           |                                                      |                           | 0 ... 1,050 mg/l Pt/Co                                 | 1 mg/l    |
|                                | Hazen 350 nm                                           |                     |           |                                                      |                           | 0 ... 1,150 mg/l Pt/Co                                 | 1 mg/l    |
|                                | Hazen 390 nm                                           |                     |           |                                                      |                           | 0 ... 2,100 mg/l Pt/Co                                 | 1 mg/l    |
|                                | Hazen 445 nm                                           |                     |           |                                                      |                           | 150 ... 10,000 mg/l Pt/Co                              | 1 mg/l    |
|                                | Hazen 455 nm                                           |                     |           |                                                      |                           | 150 ... 10,000 mg/l Pt/Co                              | 1 mg/l    |
| Hazen 465 nm                   |                                                        |                     |           |                                                      | 150 ... 10,000 mg/l Pt/Co | 1 mg/l                                                 |           |
| ISO 410 nm                     |                                                        |                     |           |                                                      | 0 ... 5,300 mg/l Pt/Co    | 1 mg/l                                                 |           |
| ISO 436 nm                     |                                                        |                     |           |                                                      | 0 ... 200 1/m             | 1 1/m                                                  |           |
| ISO 525 nm                     |                                                        |                     |           |                                                      | 0 ... 200 1/m             | 1 1/m                                                  |           |
| ISO 620 nm                     |                                                        |                     |           |                                                      | 0 ... 200 1/m             | 1 1/m                                                  |           |

|                                               |                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                          |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Displayable parameters                        | Up to 5 at the same time                                                                                                                                                                                                                                                                                                                                                           | <div>NiCaVis® 705 IQ SF,<br/>NiCaVis® 705 IQ NI SF,<br/>NiCaVis® 705 IQ SF Co</div>  |
| Accuracy (standard application surface water) | NO <sub>3</sub> -N, NO <sub>2</sub> -N: ± 3 % of measured value ± 0.5 mg/l<br>Carbon parameters: ± 5 % of measured value ± 2.5 mg/l<br>SAC: ± 0.5 % of measured value ± 0.4 SAK<br>UVT: <10 % UVT ± 1 % UVT of measured value;<br>>10 % UVT ± 0.1 % UVT of measured value<br>TSS: ± 5 % of measured value ± 50 mg/l<br>Color: ± 5 % (at 410 nm) of the measurement value ± 10 mg/l |                                                                                                                                                                          |
| Turbidity compensation                        | For color parameters: selectable                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                          |
| Flow rate                                     | ≤ 3 m/s                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                          |
| Pressure resistance                           | Maximum 1 bar (incl. sensor connection cable)                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                          |
| Electrical connections                        | 2-wire shield cable with quick fastener to sensor                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                          |
| Electromagnetic compatibility                 | EN 61326, Class B, FCC Class A<br>Intended for indispensable operation                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                          |
| Certifications                                | CE, UKCA                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                          |
| Mechanical                                    | Housing: Titan Grade 2, PEEK; Window: Sapphire glass; Protection class: IP 68                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                          |
| Weight (without cable)                        | Approx. 8.82 lb (4 kg)                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                          |
| Warranty                                      | 2 years for defects in quality                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                          |

\* The UVT-254 value is standardized to 10 mm gap width.

| Model                 | Description                                                                                                                                                                                                               | Order No. |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| NiCaVis® 705 IQ SF    | Spectral UV-VIS probe to measure Nitrate, COD <sub>diss.</sub> , TOC, BOD, DOC, SAC, UVT <sub>254</sub> and TSS in surface waters with integrated ultrasonic cleaning, multifunctional slide and shock-absorption-rings   | 481058    |
| NiCaVis® 705 IQ NI SF | Spectral UV probe to measure Nitrate, Nitrite, COD <sub>diss.</sub> , TOC, BOD, DOC, SAC and UVT <sub>254</sub> in surface waters with integrated ultrasonic cleaning, multifunctional slide and shock-absorption-rings   | 481059    |
| NiCaVis® 705 IQ SF Co | Spectral UV-VIS probe to measure Nitrate, Color, COD <sub>diss.</sub> , TOC, BOD, DOC, SAC and UVT <sub>254</sub> in surface waters with integrated ultrasonic cleaning, multifunctional slide and shock-absorption-rings | 481060    |

All probes without connecting cable (order SACIQ separately)



Xylem Analytics Germany Sales GmbH & Co. KG · Am Achalaich 11 · 82362 Weilheim · Germany  
Phone: +49 881 1830 · Fax: +49 881 183-420 · Info.XAGS@xylem.com · www.xylemanalytics.com  
All names are registered tradenames or trademarks of Xylem Inc. or one of its subsidiaries. Technical changes reserved. © 2023 Xylem Analytics Germany Sales GmbH & Co. KG.

