

# **CatControl EDI**

Total and cation conductivity meter with cation exchange module by Electro

Deionization



The EDI module is installed in place of the traditional cationic filter filled with cationic resin. This system allows cation exchange through electro-deionization and therefore automatic and continuous regeneration of the resin. Self-diagnostic functions guarantee maximum reliability and minimized maintenance.

### BENEFITS

- > Flow monitoring
- > Reliable and accurate data
- > Simultaneous total and cation conductivity measurements
- > Easy integration into existing measurement systems
- > Eliminates cation resin replacement
- > Compatible with third-party measurement devices
- > No periodic maintenance
- > Reduced operating costs

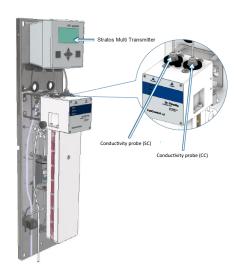


Stratos Multi Interface

#### THE SOLUTION

The new EDI technology proposed by ARCYS and Dr. Thiedig features its own intelligence, allowing easy integration into existing conductivity measurement systems. The single- and dual-channel transmitter allows the measurement variables pH/ORP, conductivity (conductive or inductive), and oxygen to be freely combined, and can, for example, simultaneously measure pH and conductivity.

With the CatControl EDI module, users have the opportunity to upgrade their existing measurement technology for cation and/or degassed cation conductivity to the latest technical standards. One of the advantages of EDI technology is the "in-situ" regeneration of the resin.



The color TFT graphic display allows for the differentiated display of operating states and errors during programming or measurement according to NAMUR recommendations. The user interface is multilingual and menu-driven..

#### **OPERATING PRINCIPLE**

Electrodeionization is a technology that has been used for several years for water treatment. With the CatControl EDI module, the principle of electrodeionization is used in such a way that only cations are removed from a sample using specific membranes that are only permeable to cations.

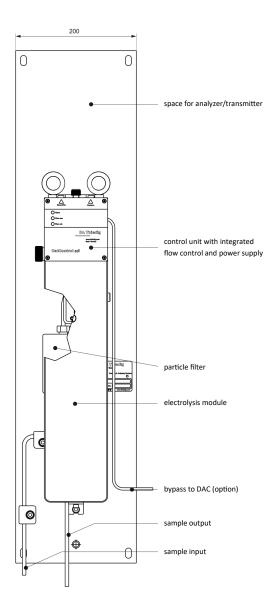
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Compatible with nuclear power plants

EDF DI 2024 approved!

1 www.arcys.fr





#### **TECHNICAL SPECIFICATIONS**

| General information               |   |                  |                   |
|-----------------------------------|---|------------------|-------------------|
| Dimensions                        | Standard panel mounting<br>850 x 200 x 198 mm (H x W x D) |                  |                   |
| Weight                            | 6,9 kg  |                  |                   |
| Power supply                      | 86 < 253VAC; ≤ 30W, 47 < 65Hz, 20 < 36 VDC, ≤ 30W         |                  |                   |
| Certificates                      | CEM   | EN 61326-1       | ( (               |
|                                   | Security  | EN 61010-1       | 7)                |
| Case                              | IP65, NEMA 4  |                  |                   |
| Characteristics of the meas       | urement   |                  |                   |
| Sample pressure                   | 0.5 to 2.0 bar g, sample outlet at atmospheric pressure   |                  |                   |
| Sample temperature                | 0 to 45°C   |                  |                   |
| Ambient temperature               | 0 to 45°C (Storage 0 to 50°C)                             |                  |                   |
| Response time                     | T <sub>90</sub> < 240 seconds @ speed 6 l/h               |                  |                   |
| Range adjustment (1)              | Low and High Conductivity                                 |                  |                   |
| Conductivity range <sup>(2)</sup> |   | Low conductivity | High conductivity |
|                                   | NH3   | Up to 30 μs/cm   | Above 60 μs/cm    |
|                                   | NaOH  | Up to 200 μs/cm  | Above 700 μs/cm   |
| Speed (3)                         |   | 6 to 9 l/h       | 4 to 6 l/h        |
| Electrolysis current              |   | 500 mA           | 1000 mA           |
| Digital outputs                   | 1x contact relay contact, max 2A @ 30VDC (CatControl edi) |                  |                   |

- (1) Range settings are made via a jumper on the CatControl EDI module controller board
- $(2) Conductivity\ ranges\ calculated\ at\ a\ flow\ rate\ of\ 7\ l/h\ for\ low\ conductivity\ and\ 5\ l/h\ for\ high\ conductivity\ and\ 5\ l/h\ for\ high\ conductivity\ low\ conducti$
- (3) Sample flow rate is measured using a digital flow meter

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Degassed version (without EDI on picture)

## CONTACT

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