

Online analyzer for TOC monitoring in water

With its innovative, powerful and multifunctional oxidation reactor, its analysis time reduced and its ability to self-control, the **TOC Evolution^{VUV}** is the optimal solution to measure the Total Organic Carbon in water.

WHY CHOOSE TOC Evolution^{VUV}

- Innovative design of the **oxidation reactor**
- **Multifunctional** reactor including all steps of measurement (oxidation + stripping)
- **Universal method** applicable to numerous **types of water**
- **Limited oxidant reagents** less 3 liters per month
- **Low maintenance**
- **Low operation cost**
- **Quick measurement** (4 to 8 minutes) high accuracy and repeatability



MAIN APPLICATIONS

Process water

- ◆ Boiler feed water for steam production
- ◆ Condensate return
- ◆ Cooling water
- ◆ Washing water

Waste water

- ◆ Water influent/effluent/discharge control

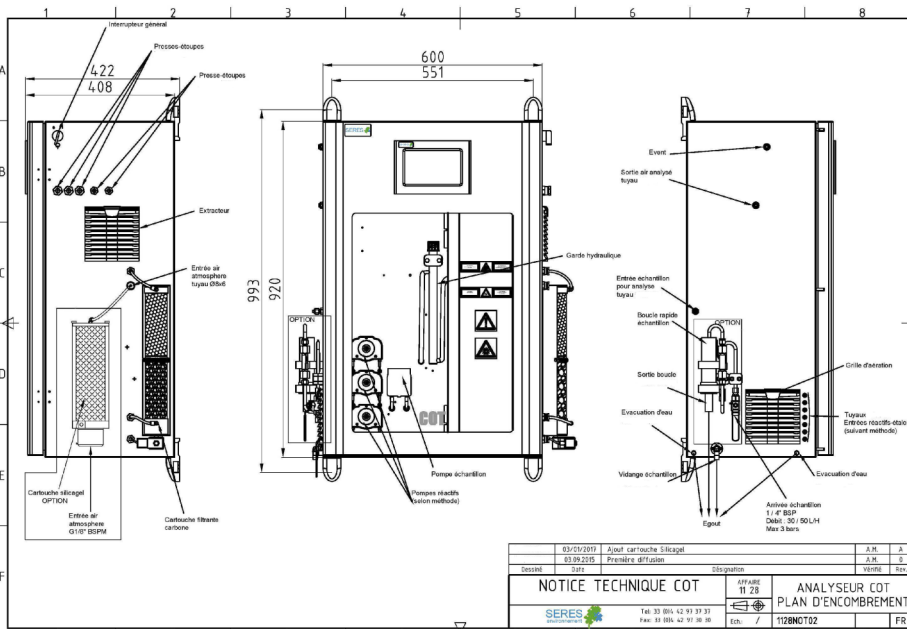
Service water

- ◆ Drinking water
- ◆ Ground water
- ◆ Surface water

Pure water



Principle



TOC Evolution_{VUV} measures the pollution load of **Organic Carbone (OC)** in any effluent by **oxidation** of this **OC** in **CO2 (Oxidation reactor)** and measures of produced CO2 (NDIR).



Technical specifications *

General Specifications

Power supply	110 or 230 VAC—50 or 60 Hz
Consumption	300 VA
Ambient temperature	5°C – 45°C
Protection	IP55 (standard)
Relative Humidity	5%-95%, without condensation
Dimension	993 x 600 x 422 mm
Weight	80 kg
Certification	NFEN 1484 and ISO 8245
Screen	Colour touch screen LCD
Language	French/English – others on request

Output/Input

Output signals	4 relays
Inputs	3 inputs
Outputs	2 outputs 4/20mA or 0/20mA
Modbus (RS485 or Over TCP/IP) - Ethernet	On option

ATEX / IECEx On option for zone 1 and 2

Maintenance Complete control every year

Analysis

Measuring method:	UV/VUV AOP** Heated persulfate version with minimum persulfate
Measuring principle	Measurement of CO2 by IR after oxidation
Parameters	TOC (NPOC)
Optional Parameters	TIC (Total Inorganic Carbon) TC (Total Carbon)
Others optional parameters	COD (by correlation)
Range	0-1 ppm - 0-100 ppm without dilution. Till 1 000 ppm with dilution
Accuracy	Range 0-2 to 0-5 ppm : ± 2% Range 0-10 to 0-100 ppm : ± 3% Range 0-100 to 0-1000 ppm : ± 5%
Repeatability	±3%
LOD	0.01 ppm for ranges 0-2/0-5 ppm 0.1 ppm for others ranges
Analysis time	4 to 8 min
Analysis interval	Programmable
Air	Compressor included
Calibration	Automatic / Manual

*Technical specifications could be modified
** AOP: Advanced Oxidation Process

