

NE-KIT530

NEMo XT TC - Trichloramine

Trichloramine - CO₂ - LVOC - Temperature - Humidity - Pressure

NEMo TC is the world's first monitoring station to continuously measure trichloramine with required air quality level in indoor pools.

As it is designed for permanent installation, it is usually powered by electricity. However in the standard configuration, it can run on battery for 1 year. Compatible with IoT or local networks, it is easy to install NEMo XT in any type of aquatic facilities.



Wall-mounted tablet for displaying live data



Cloud solution with alerts management

Applications

- ◆ Monitoring indoor air quality in natatoriums, water parks, spas, hotels, indoor aquatic facilities and thalassotherapy centres etc.
- ◆ Managing air quality in the agri-food industries using Clean-In-Place (CIP) with chlorinated products
- ◆ Improving energy efficiency by managing ventilation systems in indoor pools
- ◆ Helping improve the efficiency of chlorine-removing system

Advantages

- ◆ Ethera's patented, exclusive technology enabling continuous, specific trichloramine measurement
- ◆ Technology validated by CSTB (Scientific and Technical Centre for Building)
- ◆ Measure real exposure to the pollutants and identify pollution peaks
- ◆ Modular and upgradable, possible to integrate additional sensors (PM 1 / 2.5 / 10, TVOC, Radon...)
- ◆ Real-time access to measurement results (via Sigfox, LoRa, Bluetooth, Modbus RS485, LTE...)
- ◆ User-friendly data management software, Cloud interface and mobile application



TRICHLORAMINE

Detection method	Optical reading of nanoporous material (Ethera patented technology)
Measuring range	15 ppb to 100 ppb (74 - 492 µg/m ³)
Measuring time with 1 cartridge	From 1 to 24 hours
Sampling method	Passive diffusion
Accuracy	Between 0 - 40 ppb : ±10 ppb ±10%; Between 40 - 100 ppb : ±20 ppb ±10% (average in one day)
Storage condition for cartridge	Storage before use: 6 months from the manufacturing date. Store at ambient temperature (between 15 and 25°C). To be used within 10 minutes after opening the package. Cartridge's maximum life time: 24 hours (subject to trichloramine concentration)

CO₂/CONFINEMENT

Detection method	Non Dispersive Infrared spectrometry (NDIR)
Measuring range	0 to 5000 ppm
Resolution	1 ppm
Accuracy	± 50 ppm ± 3% of reading value
Response time 90%	< 30 seconds

LVOC (Light Volatile Organic Compounds)

Detection method	Electrochemical
Measuring range	30 ppb to 5 ppm
Resolution	1 ppb
Accuracy	±40 ppb
Response time 90%	< 30 seconds
Definition	Compounds containing up to 4 carbon atoms (aldehydes, alcohols, etc.)

TEMPERATURE

Type of sensor	CMOS
Measuring range	-55°C to +125°C
Resolution	0.08°C
Accuracy	± 2°C between -25°C and 100°C (±0.5°C after calibration)

HUMIDITY

Type of sensor	Capacitive
Measuring range	0 to 95%
Resolution	0.08%
Accuracy	± 3% between 11% and 89% (± 7% for the rest of the range)

PRESSURE

Type of sensor	CMOS
Measuring range	260 to 1260 hPa
Resolution	± 0.02 hPa
Accuracy	± 2 hPa

GENERAL SPECIFICATIONS

Sampling interval	10 minutes (customisable) for CO ₂ , T, P, RH, LVOC 10 minutes for trichloramine (moving average from the previous 30 minutes)
Conditions of use	Temperature between 22°C and 30°C. Humidity between 40 and 70 %
Approx. dimensions (Lxhxh) / Total weight	190x135x70 mm / 520 grams
Power supply and autonomy	· Lithium battery 3.6V - 17Ah (type D with connector), autonomy up to 1 year with measurements every 10 minutes and standard configuration · Power supply (DC 5V - 1A) mandatory when adding new parameters or integrating additional cards
Display	LED indicator and NEMo Cloud web interface
Data communication	Connection to PC via MicroUSB or to smartphone via mobile application NEMo View Connecting to Cloud via Sigfox or LoRa as well as other possibilities (Modbus, LTE, etc.)
System requirements	Operating system: Windows 7 or higher, Mac OS 10.9 or higher
Warranty	2 years excluding consumables
Contents	1 wall-mounted station 1 5V power supply 1 user guide 1 calibration set Ref. 094 for NEMo TC

RELATED PRODUCTS

	REFERENCE	QUANTITY
Box of 5 trichloramine cartridges for NEMo TC or NEMo XT TC	NE-TRI011	1
Box of 25 trichloramine cartridges for NEMo TC or NEMo XT TC	NE-TRI012	1
Annual subscription of 200 trichloramine cartridges for NEMo TC or NEMo XT TC	NE-TRI015	1
Additional card Particulate Matter (PM 2.5 / 10)	NE-COP020	1
Other additional cards: NO ₂ , NO, O ₃ , CO, NH ₃ , SO ₂ , H ₂ S...	[various]	1
Additional Card TVOC (PID) for NEMo or NEMo XT	NE-COP040	1
Annual subscription to NEMo Cloud	NE-CLO030 / NE-CLO040	1
Additional Subscription to Sigfox	NE-CLO050	1
NEMo - Annual Preventive Maintenance	NE-MAI010	1
NEMo Cartridge Container Pack	NE-ENT011	1
Adapter for NEMo CO ₂ Sensor Calibration	NE-ETA010	1