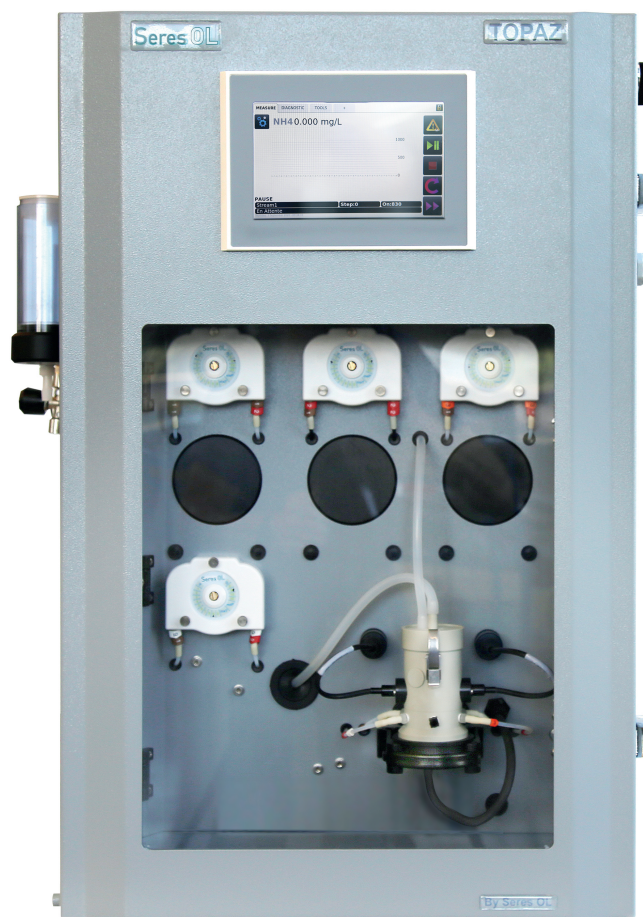


Complete monitoring system for the automatic, continuous measurement of phenol C_6H_5OH in process water, wastewater and effluents.

Analyzer Topaz Phenol

- For the continuous, colorimetric online determination of phenol per AFNOR T90-109.
- Available in separate measuring ranges :
Analyzer Topaz Phenol LR: 0 to 5 ppm
Analyzer Topaz Phenol HR: 0 to 20 ppm
- Complete system including measurement and control electronics, measuring unit, flow indicator, reaction chamber and reagent dosing system.
- With sample dilution for Topaz Phenol HR.
- Robust, high quality analyzer cabinet painted stainless steel, 316L.
- Automatic, electrical zero measurement prior to each measurement cycle.
- Automatic cell cleaning.
- 4 (LR) or 5 (HR) easily accessible peristaltic pump modules for accurate, automatic dosing of chemical reagents.
- 2 analog and 7 digital outputs for alarms for process values and diagnostic alarms for each sample stream.
- RS485 Modbus/JBUS RTU interface.
- Large back-lit touchscreen color LCD display for the reading of all measured values and status information simultaneously.
- Easy menu-guided operation in English or French.



Topaz Series Showcase

По вопросам продаж и поддержки обращайтесь:

Архангельск (8182)63-90-72
 Астана +7(7172)727-132
 Астрахань (8512)99-46-04
 Барнаул (3852)73-04-60
 Белгород (4722)40-23-64
 Брянск (4832)59-03-52
 Владивосток (423)249-28-31
 Волгоград (844)278-03-48
 Вологда (8172)26-41-59
 Воронеж (473)204-51-73
 Екатеринбург (343)384-55-89
 Иваново (4932)77-34-06
 Ижевск (3412)26-03-58
 Иркутск (395) 279-98-46

Казань (843)206-01-48
 Калининград (4012)72-03-81
 Калуга (4842)92-23-67
 Кемерово (3842)65-04-62
 Киров (8332)68-02-04
 Краснодар (861)203-40-90
 Красноярск (391)204-63-61
 Курск (4712)77-13-04
 Липецк (4742)52-20-81
 Магнитогорск (3519)55-03-13
 Москва (495)268-04-70
 Мурманск (8152)59-64-93
 Набережные Челны (8552)20-53-41
 Нижний Новгород (831)429-08-12

Новокузнецк (3843)20-46-81
 Новосибирск (383)227-86-73
 Омск (3812)21-46-40
 Орел (4862)44-53-42
 Оренбург (3532)37-68-04
 Пенза (8412)22-31-16
 Пермь (342)205-81-47
 Ростов-на-Дону (863)308-18-15
 Рязань (4912)46-61-64
 Самара (846)206-03-16
 Санкт-Петербург (812)309-46-40
 Саратов (845)249-38-78
 Севастополь (8692)22-31-93
 Симферополь (3652)67-13-56

Смоленск (4812)29-41-54
 Сочи (862)225-72-31
 Ставрополь (8652)20-65-13
 Сургут (3462)77-98-35
 Тверь (4822)63-31-35
 Томск (3822)98-41-53
 Тула (4872)74-02-29
 Тюмень (3452)66-21-18
 Ульяновск (8422)24-23-59
 Уфа (347)229-48-12
 Хабаровск (4212)92-98-04
 Челябинск (351)202-03-61
 Череповец (8202)49-02-64
 Ярославль (4852)69-52-93

Киргизия (996)312-96-26-47

Казахстан (772)734-952-31

Таджикистан (992)427-82-92-69

Phenol Measurement

Colorimetric method: determination of phenol after chemical reaction in an alkaline environment.
Reaction time 9-10 min.

Sensors/Measurement Equipment

Detection wavelength 555 nm
Temperature controlled measuring chamber.
Sample dilution for Topaz Phenol HR.

Analyzer Measuring range

Topaz Phenol LR 0-5 ppm
Limit of Detection 29 ppb
Repeatability ± 2 % FS or
± 0.03 ppm whichever is greater
Precision ± 3 % FS or
± 0.03 ppm whichever is greater

Topaz Phenol HR 0-20 ppm
Limit of Detection 0.2 ppm
Repeatability ± 2 % FS or
± 0.1 ppm whichever is greater
Precision ± 3 % FS or
± 0.1 ppm whichever is greater

Automatic baseline adjustment.
Sample flow surveillance.

Specifications and Functionality

Pump type: peristaltic
Pump quantity Topaz Phenol LR: 4
Pump quantity Topaz Phenol HR: 5

Power supply
Voltage: 110 - 240 VAC
Frequency: 50 /60 Hz
Power consumption: Typical 150 VA, 300 max.

Operation
Display: Color LCD, 7", touch-screen

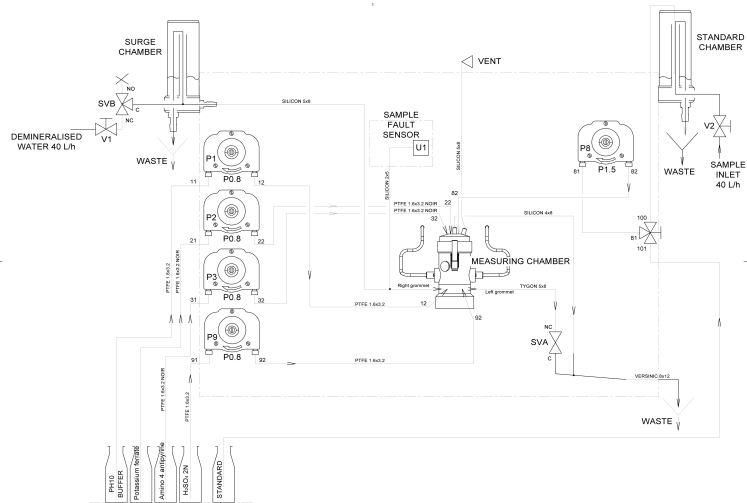
Display of process value, alarm status and time during operation.

Smart and intuitive interface based on separate menu sections: "Measurement", "Diagnostic" and "Tools".

User menus in English and French.

Password protection and storage of data records. Storage and graphical display of measurement history.

Topaz Phenol Measurement Scheme (HR with dilution)



Alarm Relays
1 summary alarm for "analyzer failure"

Maximum load: 1A / 24 V

Relay Outputs
2 potential-free contacts for each channel programmable as limit switches for measuring values (high/low thresholds)
1 sample flow alarm for each channel
1 output for indication of the active sample stream for each channel.
1 output for maintenance indication.

Rated load: 1A / 24 V

Signal outputs
2 programmable signal outputs for measured values (freely scalable, linear).

Current loop: 4 - 20 mA

Communication interface
RS485 interface (galvanically separated) with Modbus/JBUS RTU protocol included in standard.

Ethernet interface (TCP/IP) optional.

Analyzer Data

Sample conditions
Flow rate: min 30 l/h
optimum 40 l/h
5 to 40 °C
Temperature: 0.1 up to 2.0 bar
Inlet pressure_{Abs.} (25 °C): pressure-free
Outlet pressure: < 20 µm
Particle size:

Ambient Conditions
Temperature: 5 to 40 °C
Humidity: 10 to 80% rel.

Sample connections
Sample inlet: 1/4" BSP F
Sample outlet: soft tubing D INT 9
Sample outlet waste: soft tubing D INT 12
Sample outlet multi-channel (LR only): soft tubing D INT 19

Wall cabinet
Dimensions: 780 x 570 x 370 mm
Material: Stainless Steel 316L
Total weight: 35 kg
Protection degree: IP 55

Reagent specifications

Type	Code
pH Buffer Solution (pH10)	RXX143
Reagent Consumption	2.5 l/month
Potassium Hexacyanoferrate	RXX161
Reagent Consumption	3.0 l/month
Amino 4 Antipyrine	RXX160
Reagent Consumption	1.5 l/month
Sulfuric Acid 2N	RXX159
Reagent Consumption	2.0 l/month
Deionized Water (Dilution - for Phenol HR only)	
Reagent Consumption	~4000l/month