Complete monitoring system for the automatic, continuous measurement of color in potable water and surface water.

- For the continuous, absorptive online determination of color per **ISO 7887 (Pt) / ISO 6271 (Cr-Co) / SO 6271:2015 (Pt-Co).**
- Available in separate measuring ranges and measuring units:

  0 to 50 (Hazen or mg/l Pt or mg/l Cr-Co) or

  0 to 100 (Hazen or mg/l Pt or mg/l Cr-Co) or

  0 to 250 (Hazen or mg/l Pt or mg/l Cr-Co)

- Complete system including measurement and control electronics, measuring unit, flow indicator, reaction chamber, reagent dosing system and a cleaner system.
- Robust, high quality analyzer cabinet painted stainless steel, 316L.
- Automatic, electrical zero measurement prior to each measurement cycle.
- Automatic cell cleaning.
- 2 analog and 6 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.

Analyzer	Seres OL Topaz Color (0-50 or 0-100 or 0-250 Hazen [or mg/l Pt or Cr-Co])	SOL–55.351.000
Range Configuration	0-50 or 0-100 or 0-250	Contact Sales
Unit Configuration	Hazen or mg/l Pt or mg/l Cr-Co	Contact Sales
Configurations	2-Channel Setup	SOL-83.590.020
	4-Channel Setup	SOL-83.590.040
	6-Channel Setup	SOL-83.590.060
	Ethernet Interface (TCP/IP) Please, inform SERES about automatic or fixed IP-address (give address)	SOL-81.410.020
Options	1-Year Spare Part Package "Basis" (Analyzer + 1st channel)	SOL-84.110.070
	1-Year Spare Part Package "Multi-Channel" (add once if multi-channel config. was selected)	SOL-84.110.150
	Reagent Shelf in SS316L	SOL-89.610.010

Color Measurement

Absorptive method;
The measurement principle is based on the comparison of the color of a sample to that of a scale of Platinum-Cobalt or Cr-Co solutions.

Reaction time	4-5 min.

Sensors/Measurement Equipment

Detection wavelength	375 nm
Temperature controlled measuring chamber	

Analyzer	Measuring range
Topaz Color	**0-50 / 0-100 / 0-250 Hazen**
Limit of Detection	4 H
Repeatability	± 1-2 % FS
Precision	± 1-2 % FS
Interferences	Turbidity

Automatic baseline adjustment.

Sample flow surveillance.

Seres OL Topaz Color Measurement Scheme

Specifications and Functionality

Power supply

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

Operation

Display:	Color LCD, 7", touch-screen

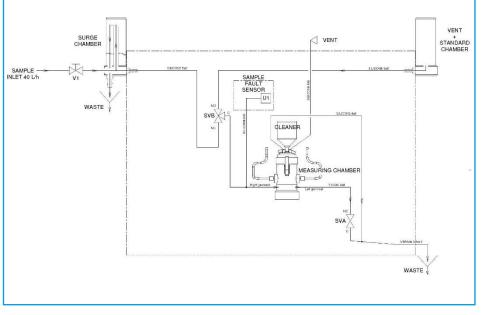Display of process value, alarm status and time during operation.

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.

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 inputs
One input for "stop command end of cycle".

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
Temperature:	5 to 40 °C
Inlet pressure$_{Abs.}$ (25 °C):	0.1 up to 2.0 bar
Outlet pressure:	pressure-free
Particle size:	< 20 µm

Ambient Conditions

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

Installation in a closed, protected, tempered room is recommended

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-ch.):	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

No reagents required.