

Total Phosphorus Colorimetric Online Analyzer

CL213

CL213 is a microprocessor controlled online analyzer specifically designed for automatic total phosphorus monitoring on several types of waters matrix.

* Easy configuration

With our modular configuration we can automate your color laboratory method with up to four reagents

* Dual compartment enclosure

To ensure complete separation between electronics and hydraulics

* Touch screen interface

Simple and user friendly menus and functions

* Separate waste line for sample containing reagents

* Long autonomy, low maintenance, low operating cost

* Rugged and reliable

Designed for industrial and environmental on-line applications, ensures the highest level of robustness in the electronics, mechanics and hydraulics components

* Easy installation and operation

To start measurement is enough to power the analyzer and connect reagents, sample and waste line.

* Loss of sample input

* Low reagent level alarm

Benefit:

* Programmable photometer

* Low measurement range

* Automatic calibration / validation / cleaning

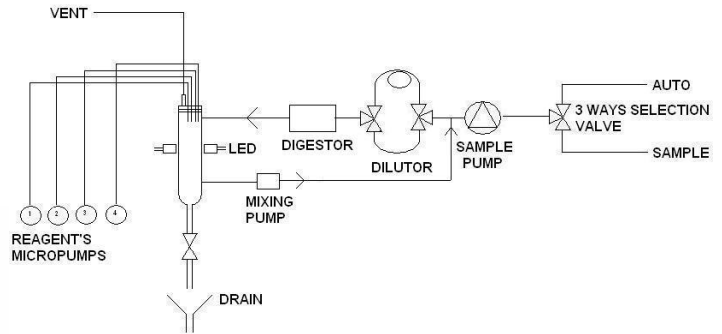
* Free selectable measuring, cleaning and calibration intervals



Measuring Principle and Hydraulics diagram:

After rinsing the cuvette, sample will pump into dilutor followed by distilled water into the Cuvette. Mixing pump will then mix the sample with distilled water (Dilution process applies to high range models only. For low range models sample will pump directly into Cuvette).

Next Potassium persulphate reagent 1 will introduce to the cuvette. With the present of UV digester and reagent, Phosphorus that present in the sample will be converted into Orthophosphate by Photo-oxidation.



After Oxidation, first measurement takes place (reference) to eliminate the interfering factors (e.g. sample own colour or turbidity, miscellaneous reagents own colour and refractive index variations).

Next another reagents (Subjected to required range) is added into the cuvette and mixing pump will mix the liquid from lower part to upper part of the cuvette. Color developed when Orthophosphates is present in the sample and reacts with reagents, then second measurement takes place.

The concentration is measured by absorbance calculated based on the difference between the two measurements and the stored calibration parameters.

Technical Specifications:

Measuring Principle	Colorimetric, acid mineralization, and UV digestion
Colorimeter	LED (Specific wavelength), photodetector, Thermostated measuring cell
Measurement type	Cyclic
Measurement Interval	Programmable
Measurement time	About 25-40 min (depending on the sample)
Range	0-2 0.0; 0-200; 0-1000mg/L
Detection Limit	±2%
Repeatability	±2% on absorbance value with turbidity < 80 NTU
Output signal	4-20mA, RS232
Input signals	2 configurable relays
Alarms	2 configurable relays
Sample and waste delivery	No pressure
Reagents consumption	2500 measurement/liter/each
Sample Temperature	5-50°C
Protection	IP55
Hardware	Color touch screen
Power Supply	220VAC , 50-60 Hz, 80VA
Weight	Approx. Kg. 17 kg.
Dimension	380 x600 x210 mm (W*H*D)