Compact Programmable Online Colorimetric Analyser



6 key factors

- Low capital cost and Low total lifetime expenditure (totex)
- Optimised reagent usage
- Easy to visually understand how it performs the analysis
- Small footprint and incorporates the latest in LED optical technology
- Programmable analysis features that users can understand
- Improved calibration and validation features to demonstrate compliance

The 3S Colorimeter is the analyser of choice for water treatment operators looking for performance with a low total lifetime expenditure.

Compact, robust and with a low sample volume to minimise reagent use, the 3S colorimeter is the perfect analyser for metals analysis, whether monitoring aluminium, iron and manganese for ensuring compliance with drinking water regulations, or phosphate and chlorine residuals in the network.

As well as featuring an intuitive touch screen interface and programmable test methodology for flexibility and ease of use, the unique ability to see the chemistry occurring inside the analyser makes the 3S colorimeter the ideal tool for operators. Enabling them to make decisions on site, rather than call for assistance, saving both time and money.

Analysis method

Colorimetry

Reference

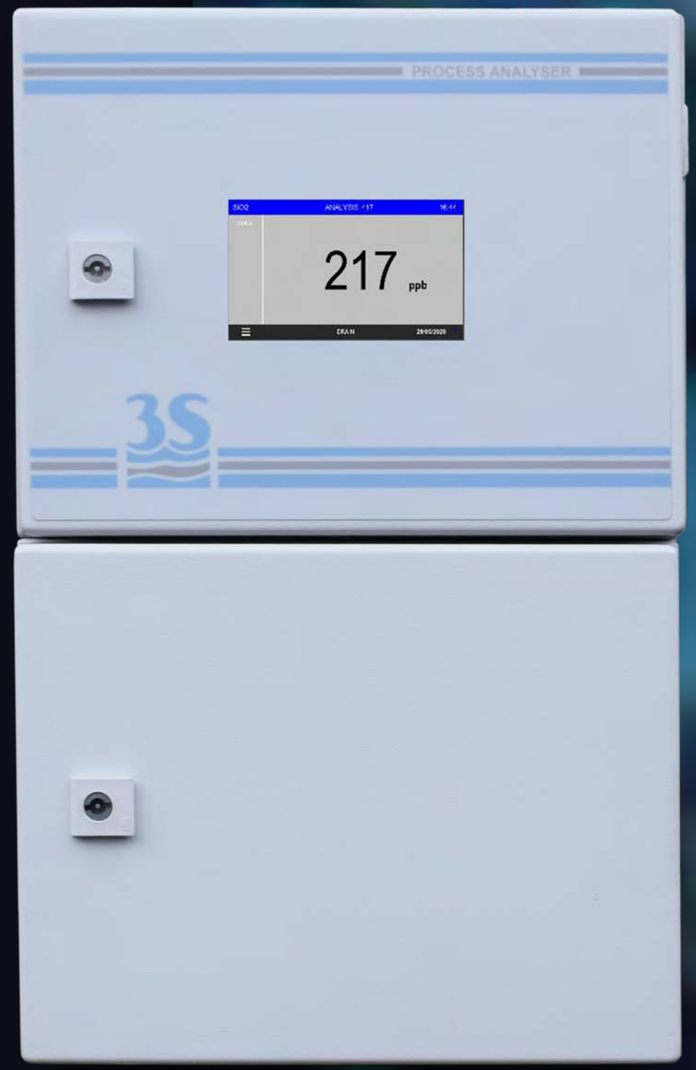
The first step is the measurement of the raw sample, enabling the analyser to compensate the final result for any inherent colour or turbidity.

Measurement

After careful control of the chosen PMA manufactured reagents, and allowing the chemistry to happen, the analyser measures the colour formed in the sample.

Result

The concentration is calculated from the two absorbance measurements by comparing the response to the calibration stored in the analyser.



Types of applications and parameters

Drinking water

Aluminium
Ammonia
Chlorine
Copper
Iron
Manganese
Phosphate
..and more.

Boiler/Cooling Water Treatment

Chloride
Hardness
Hydrazine
Nitrite
Silica
..and more.

Industrial Applications

Chromium VI
Formaldehyde
Nickel
Phenol
Sulphate
Zinc
..and more.

Specifications

Analysis time

ependent upon parameter - as low as 4 minutes per analysis but up to 20 minutes depending upon the chemistry used.

Analysis frequency

Programmable.

Test methodology

Programmable.

Display

Colour touchscreen.

Accuracy

<±5 % of reading or ±0.005 ppm (whichever is the greater)*.

Repeatability

<±5 % of reading or ±0.005 ppm (whichever is the greater)*.

Connections

Sample to the fast loop reservoir with flexible tubing O.D. 6 mm, outlet tubing O.D. 12 mm.

Sample flow for fast loop reservoir

100-500 ml / min.

Measurement units available

mg/l, ppm, ppb, µg/l.

Outputs

2 x 4-20mA outputs, Modbus, Profibus DP optional

Alarms

Customisable alarms / relays

Calibration

Automatic (frequency programmable) or Manual.

Filtration

Not required on samples with suspended solids <100micron. Optional extra if required.

Sample streams

Single or Dual as standard (three streams possible with external sequencer).

Datalog

Integrated (output via USB).

Consumables cost

Low - dependent upon parameter.

Dimensions

600mm x 370mm x 210mm.

Weight

Approx. 20kg

IP rating

IP54 rated instrument

*some parameters may differ but this is the accuracy/repeatability for most standard chemistries.

Support from an award winning team.

Our team of dedicated field support group technicians are vastly experienced in applications and installations. We therefore appreciate and understand how analysers work, why they were installed and what data they typically ought to produce.

If you need assistance, you can contact us at...

www.pma.uk.com/service

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