



On-line water quality analyser

Cu | NH₃ | NO₂ | NO₃ | PO₄ | Ni | Cr | Cl₂ | Zn | F | B |
Fe | Silica | **Hardness** | Phenol | Cyanide

instran



ON-LINE ANALYSER

INSTRAN is a platform of on-line analysing equipment, which allows measuring one or more physical or chemical parameters in liquid samples, preferably aqueous.

On this platform you can set different hardware and software options to achieve an analysing system that measures in the best conditions, taking into account:

- The nature of the sample
- The type of measure
- The measuring range
- The cleanings and calibrations required.

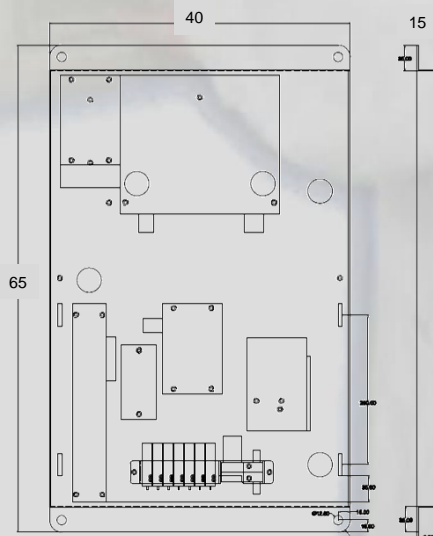
INSTRAN is an on-line analyser of high analytical precision, with low energy consumption. Its advanced technology permits a high accuracy in any operation with minimal reagent consumption, reducing the environmental impact.

The versatility of the instran on-line analyser allows installation without cabinet for indoor use or with insulated enclosure IP65 (or higher if required) for open air applications.

BENEFITS

- **Powerful** in its ability to do different functions.
- **Flexible.** easy to program in its different functions.
- **Reliable.** We've searched for strength and quality in its parts to prevent damage
- It works **with low volume of reagents** for increased autonomy and reduced costs for consumables
- Requires **very little maintenance.**
- **Economic.** We've chosen parts that are easy to manufacture and assemble. Its modular system allows large-scale production what improves the final price. The customer only pays for the options he chooses to include.

DIMENSIONS



FEATURES	
Mounting options	In wall or rack, for indoor use
	In an insulated cabinet: standard IP66 of fiber or polyester
Dimensions	In rack: 65x40x15
	In cabinet : 75x50x30
User Interface	Keypad with 4 keys and 4 indication leds
	Configurable menus in several languages
Display	Backlit Monochrome - 8 lines x 20 characters –
	Backlit, graphic and widescreen colour (optional)
Memory	Microprocessor with internal program (firmware) upgradable via miniUSB or MicroSD
	Registration of 64 analysis, 16 calibrations, and 32 alarms or errors
Communications	Two 4-20mA analogical outputs, separately configurable and galvanically isolated
	One RS485 two-wire bus output
	Optionally, the RS485 can use MOD-BUS or PROFIBUS protocol
	Two digital inputs assigned to the detection of lack of sample and reagents
	Five assignable digital inputs
	Two assignable digital outputs
	USB. Loading of programs and data I/O USD Card program and data I/O
Relays	Four relays with three contacts (C, NO and NC), potential free and assignable per program
Calibration	Automatic and scheduled
	Automatic On-demand
	Reagent blanks
	Up to three standards
Washing	Automatic after each trial
	With the sample itself
	Wash solution (op.)
Dispensing System	Syringe dispensing system
	Fast loop sampling system, which allows that the syringe never touches the sample or the reagents
	Solenoid valves with Kalrez seals give a high reliability
	Large step diameter (1.5 mm) in the solenoid valve
Reactor	Small volume reaction cuvette (12ml to 17ml)
	Drain solenoid valve with a large passage section (3 mm)
Fluis System	Tubing made of inert materials
	Teflon tube in the loop
	Tygon 2375 tube (reagent resistant)
	Solenoid valve union with direct connections and without coupling
Sample Inlet	Fast external loop with built-in filter (Optional)
	Inlet: 6/8mm diameter tube
	Atmospheric drain: Inlet fitting for 8/10mm diameter hose
Environmental conditions	Ambient temperature: 10°C to 50°C
	Maximum relative humidity: 95% non-condensing



MEASURING PRINCIPLE: COLORIMETRIC

- The calcium and magnesium form a complex with the cresolphthalein complexone, which on adding the buffer, which brings the pH to about 9.6, a characteristic purple complex is formed. If only the calcium is to be measured the magnesium may be complexed by the addition of 8-hydroxyquinoline to Reagent #1.
- Read absorbance at 570 nm.

ADVANTAGES OF THE METHOD

The reagents are exceedingly stable, especially the amine buffer. The method is also extremely sensitive permitting ppb ranges to be measured.

Consumption of reagents:	Reagent 1: 2 ml / analysis Reagent 2: 0'5 ml / analysis
Analysis time:	Less than 10 minutes
Measuring range:	0 to 2 ppm.
Calibration:	Automatic user-programmed (zero and FS)
Cleaning:	Automatic at the end of the test with the sample itself.
Type of analysis:	Bach scheduled time, or continuously.
Accuracy:	2% full scale.

Note: other ranges available upon demand.



instrumentación analítica s.a.

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