

MICROMAC CADMIUM DISSOLVED

ON LINE ANALYZER FOR
CADMIUM DISSOLVED MONITORING IN WATER

MICROMAC CADMIUM is a microprocessor controlled On Line analyzer specifically designed for automatic Lead monitoring on several types of water matrix.

✓ **ROBUST AND RELIABLE**

Designed for industrial and Environmental On Line applications ensures the highest level of robustness in the electronics, mechanics and hydraulics components. Complete separation between electronics and hydraulics plus a simple and robust batch type CFA* hydraulics allows easy maintenance and long terms reliable operations.

**CFA: Continuous Flow Analysis*

✓ **EASY TO INSTALL**

The analyzer is delivered after a long and successful series of factory tests ready for installation and setup; it is provided with complete set of spares for start up. To start monitoring is enough to connect reagents, sample line, waste line and power supply.

✓ **AUTOMATIC CALIBRATION**

When the Calibration Time interval expires the analyzer performs a Calibration Cycle, storing and checking the new calibrant O. D. If new O.D. exceeds selected limits, an alarm contacts is closed.

✓ **SAMPLE DILUTION**

Sample can be analyzed as it is or after automatic dilution. Automatic dilution is factory adjusted for high range applications.

✓ **MEASURING INTERVAL**

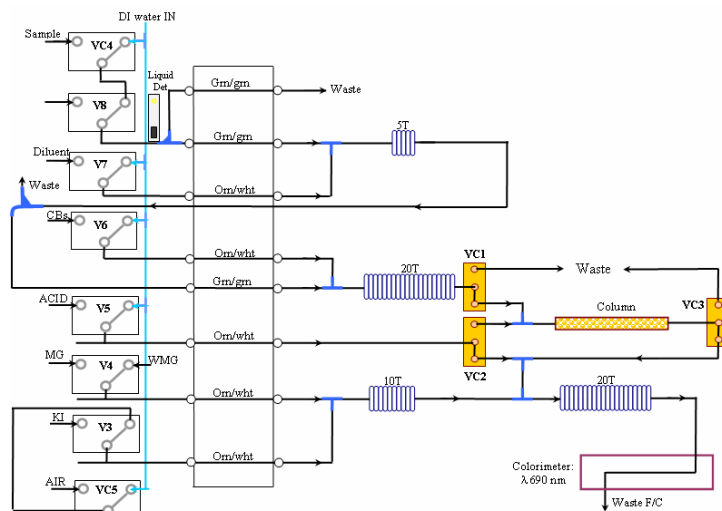
User selectable; between two measurements the analyzer remains in stand by mode, without reagents consumption.

✓ **FEATURES AND BENEFITS**

- Fully automatic operation
- Long autonomy; low maintenance, low operating cost
- Low reagents consumption; short preparation time; low disposable costs
- Easy operation; plug in analyzer, no special training is required
- Electronics and hydraulics completely separated
- Serial interface for local o remote PC connection (option)

Cadmium dissolved measuring principle and hydraulic diagram

The sample after proper filtration is passed into a cationic exchange resin, to subtract the Pb anions which are not complexed with the Cl⁻ from the solution, while Cd cations pass. The solution is then aspirated by the system into the analytical loop, and malachite green and KI are added to the sample: the complex between Cd and the malachite green in presence of KI is read at 700 nm.



Technical Specifications

MEASURING PRINCIPLE: Colorimetric.

COLORIMETER: dual beam, silicon detector

MEASUREMENT TYPE: cyclic

MEASURING INTERVAL: programmable

MEASURING TIME: less than 30 minutes

MEASURING RANGE: 0 - 0.1/0.5/1 ppm Cd; other ranges available on request

DETECTION LIMIT: typically better 2% of the full scale, calculated as for EPA p. 136 appendix B

REPEATABILITY: better than 2%

OUTPUT SIGNAL: 4-20 mA

INPUT SIGNALS: n. 1 Analysis, n. 1 calibration; digital contacts

ALARMS: n. 1 High Limit, n. 1 General, n. 1 Calibration; potential free contacts

SAMPLE AND WASTE DELIVERY: pressure free;

SAMPLE TEMPERATURE: 10 °C - 30 °C

REAGENTS REPLACEMENT: 3/4 weeks depending on the operating temperature

PROTECTION: IP55

HARDWARE: PC104 industrial standard, Integrated keyboard and graphics display, RS232 option

POWER SUPPLY: 12 V DC external power supply included; 4W Standby; 10 W (mean) analysis

WEIGHT: 33 Kg without reagents;

DIMENSION: 800x450x300 mm (hwxwd)

Subject to change without notice



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