

# LIRA 2000

## Liquid Irradiation Analyser

- Water analyser LIRA 2000 allows detection of low gamma activity concentration and further analysis of nucleides contents.

The water is sampled in the measuring chamber and then analyse.

Filling and draining of the tank is automatically managed by LIRA electronics and two electrovanes.

LIRA 2000 measures the activity concentration in Bq/l in four energy windows:  $^{131}\text{I}$ ,  $\text{Cs}^{134}$ ,  $\text{Cs}^{137}$  and  $\text{Co}^{60}$  and gives total counting (c/s).

A pre-alarm and alarm can be adjusted for each measurement.

### Technical Characteristics

#### Measuring chamber:

- NaI probe dived in a shielded cell,
- Two electrovanes for filling and draining (24 VDC and AC supplied by electronics)
- 1 ampli-discr-multi-fonction board and PHA analyser board

#### Electronics:

- Industrial PC
- Telemecanique TSX plc
- Power supply: 230V/50 Hz

**Detection limits:** 14 Bq/l in 300 s and 8 Bq/l in 900 s ( $\text{Co}^{60}$ )

**Outputs:** De-energised relay for Measuring, Pre-alarm, Alarm, Anomaly

**Inputs:** Total countings, Inhibition



- 4 energy windows countings
- Sampled volume: 4 liters
- Automatic and permanent calibration
- Option: LIRA 2000 software