



*Advanced Technology
For Advanced
Performances, In Elisa*

Alisei

 **RADIM**

Alisei

ALISEI is a fully automated equipment for immunoenzymatic assays. Six microplate supports, each independent for incubation and shaking at different temperatures, constitute an ideal configuration for test-runs (up to 16 tests on line and 380 samples), which offers fast and excellent performances.

Alisei is able to handle different test-methods during the same test run, such as ALLERGY and AVIDITY, together with other ELISA tests.

The advanced and easy-to-use software, the highly sophisticated electronic as well as mechanic technology and the compact design make Alisei a complete instrument.



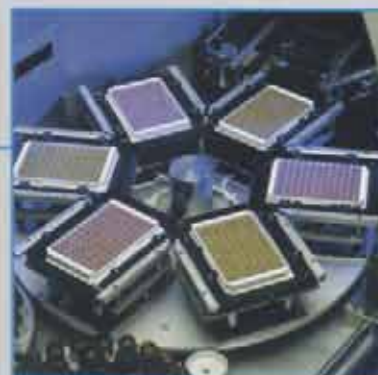
SAMPLES AND REAGENTS

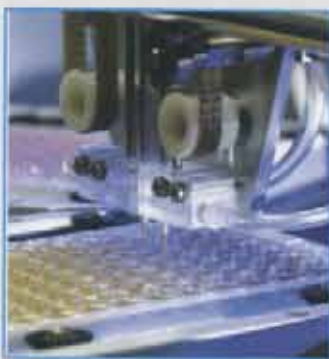
The sample rack is made up of two rotating removable plates. The reagent rack consists of two refrigerated and rotating plates which can carry reagents and standards up to 16 tests on line. A barcode system, centred among the four racks, allows positive identification of both samples and reagents.



REACTION PLATE

The reaction plate is a rotating support for 6 microplates, which can be independently heated (from R.T. to 45 °C) and shaken at different speed, software handled.





DISPENSING SYSTEM

The dispensing system includes two independent needles able to aspirate from two adjacent samples or from the same reagent, to be dispensed into two separate wells at once. Each needle is associated to a dilutor with two syringes (2500 μL and 1000 μL), respectively for reagent and sample dispensing. A liquid and clot detector is provided for each needle in order to grant a correct functioning of the system.

PHOTOMETER

The reading station is an 8 channel optical fiber photometer with interferential filters, holded by a support for a maximum of 8 filters. Wavelengths can be accepted from 400 to 700 nm and are software selected.



WASHING STATION

The microplates are automatically carried into an independent washing station (software-mediated) for the procedure. It consists of an 8 channel manifold with double and parallel needles, capable of washing both "U" and flat bottomed microwells. Up-to 4 different washing solutions can be handled separately.

SOFTWARE FEATURES

The handling software extremely advanced (Windows), user-friendly and self-explanatory includes a Service Module for checking instrument mechanical functioning.

Some other main features are:

- T.M.S. (Time Management System) to optimize the time scores of each single test
- Automated error recovery
- Curve storage, whereby a new curve can be calculated

by using only two calibrators

- Historical Patient Record, with statistical evaluation of results
- Quality Control Program
- Host connection with ASTM protocol

New options

- Possibility of aliquoting samples
- Viewing and print out of results out of range

OPTIONAL CONFIGURATION

Triple Sample Rack

The "Triple Sample Rack" option allows the use of an additional sample rack in place of one of the two reagent racks (Fig. 1). This additional

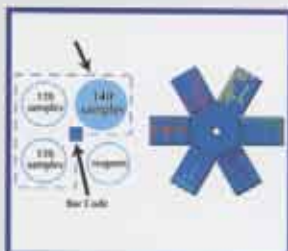


Fig. 1

rack can hold 140 12mm tubes (70 of which are barcode readable) or 120 16mm tubes (60 of which barcode readable). With this configuration the total number of samples in a single assay can be increased from 240 to 380 (190 of which are barcode readable).

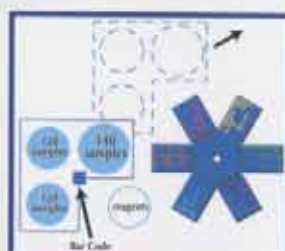


Fig. 2

Double Sample Plate

This option allows the software to handle two sample plates (rack sets), so as to double the number of samples readable by barcode, from 190 to 380.

Once the first plate has completed the barcode reading, the operator can replace it with a second sample plate.

After the second reading, the system will process the patient list in sequence asking for the appropriate plate replacement (Fig. 2).

TECHNICAL SPECIFICATIONS

Serum dispensing speed:	700 samples/h with 500 μ L of flush solution
Reagent dispensing speed:	1500 wells/h in normal multidispensing
Sample Volume:	10 - 300 μ L with steps of 1 μ L
Reagent Volume:	10 - 300 μ L with steps of 1 μ L
Sample precision:	CV < 3% with 10 μ L (OD = 0.700) CV < 1% with 100 μ L (OD = 0.700)
Reagent precision:	CV < 3% with 100 μ L
Sample Carry-over:	< 1 ppm (1×10^{-6})
Reagent Carry-over:	< 1 ppm (1×10^{-6})
Level Sensor:	Capacitive, 150 μ L sensitivity with possibility to detect liquid contact
Mixer:	1300 rpm (max)
Incubator:	R.T. - 40 °C, precision +/- 0.5 °C; heating time: 5 minutes
Reagent Refrigeration:	standard at 12°C (settable)
Photometer:	8 channel manifold with 2 parallel needles
Wavelengths:	405 - 450 - 492 - 540 - 620 nm
Reading range:	0-3000 O.D. Monochromatism and Bichromatism 0-9000 O.D. in Polychromatism
Resolution:	0.001 O.D.
Precision at 405 nm:	CV < 3.0% at 0,150 OD CV < 1.5% at 0,600 OD CV < 2.5% at 2,000 OD
Power supply:	220 VAC 50 - 60 Hz
Power absorbance:	800 W (instrument + PC + auxiliary services)
Operative Conditions:	15 - 32 °C (in function)
Safety Standards:	CEI EN 601010-1 Class I Installation Category II CE certification
Dimensions:	L.140 x W.73 x H.60 cm
Weight:	140 Kg

