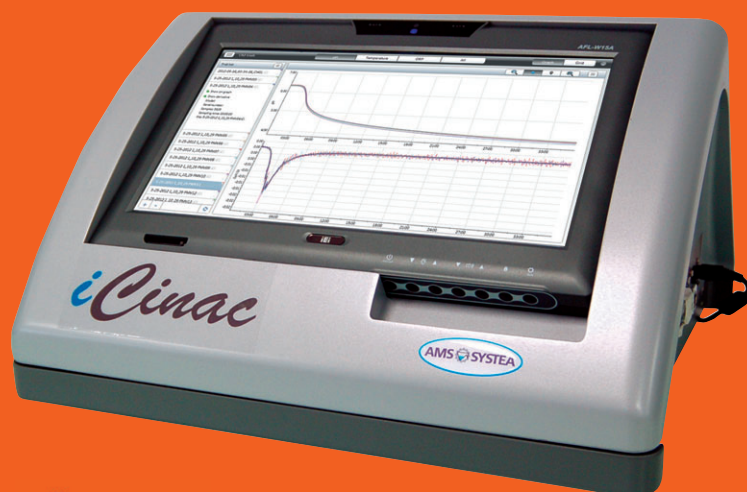


# ICINAC

NEW GENERATION ANALYZER  
TO CONTROL  
ACIDIFICATION PROCESS



## UNIQUE SOLUTION ON THE MARKET



The iCinac is the fourth generation of the Cinac system, an instrument developed in the 90s in partnership with INRA (UMR GMPA, lab G. CORRIEU) at the request of major French dairy companies.

It is currently the only system dedicated to monitoring the acidification activity of lactic ferments, which simultaneously observes the change in pH, temperature and redox potential of one or several samples in order to:

- **Determine the acid forming characteristics** specific to the phylum studied,
- **Evaluate and anticipate its impact** on process development,
- **Examine the influence of various parameters** on acid forming capacity: different media, temperature, etc.
- **Define adequate inocula** (mixing of phylum, complementary characteristics, etc.)

The only aspects of the Cinac system the iCinac has kept are its name (well, almost) and purpose...all the rest is entirely new!

This instrument, which has no real equivalent on the market, is very useful in Research & Development, to test, control and validate starter cultures during the development of numerous, increasingly sophisticated products, as well as in process control and quality control.

It is of course intended for the dairy industries (yoghurt, cheese, specialities, etc.) as well as any industry requiring continuous and multi-channel monitoring of pH: chemistry, pharmaceutical, cosmetics, agri-food (beer, spirits, meat, etc.).

**Furthermore, it meets the specifications of the new ISO 26323 standard exactly** (Determination of the acidification activity of dairy cultures by continuous pH measurement).

## THE ONLY ACID FORMING ANALYZER THAT PROVIDES:

- **Up to 96 simultaneous measurements**
- **High flexibility**
- **New digital sensors**
- **An integrated touch screen PC**
- **Dedicated, user-friendly software**

## THE SECRET: MULTI-PARAMETER DIGITAL SENSORS

The iCinac is equipped with the latest ISM<sup>®</sup> technology digital sensors developed by Mettler Toledo. This intelligent sensor management technology converts mV signals into digital signals.

It has the advantage of **simultaneously measuring, on the same channel, the pH, temperature and redox potential** of one sample.

Not only does this capacity triple the analysis capabilities, it also optimises the monitoring of the acidification process since each channel measures the pH while carrying out its own compensation by also measuring temperature and redox.



## COMPLETE DESCRIPTION OF THE STUDIED STRAIN

In addition to the 3 available curves for each parameter (data, kinetic and acceleration), the iCinac software calculates in real time all of the descriptors of the studied strain, such as: pH at 4H, pH at 6H, time required to obtain pH 5, maximum speed, time during which the speed exceeded 50% of the maximum speed, etc.

Each operator can create average curves to build a reference database to compare with new trials.

Each operator can thus create their own set of descriptors, providing them with a perfect characterisation of each test.

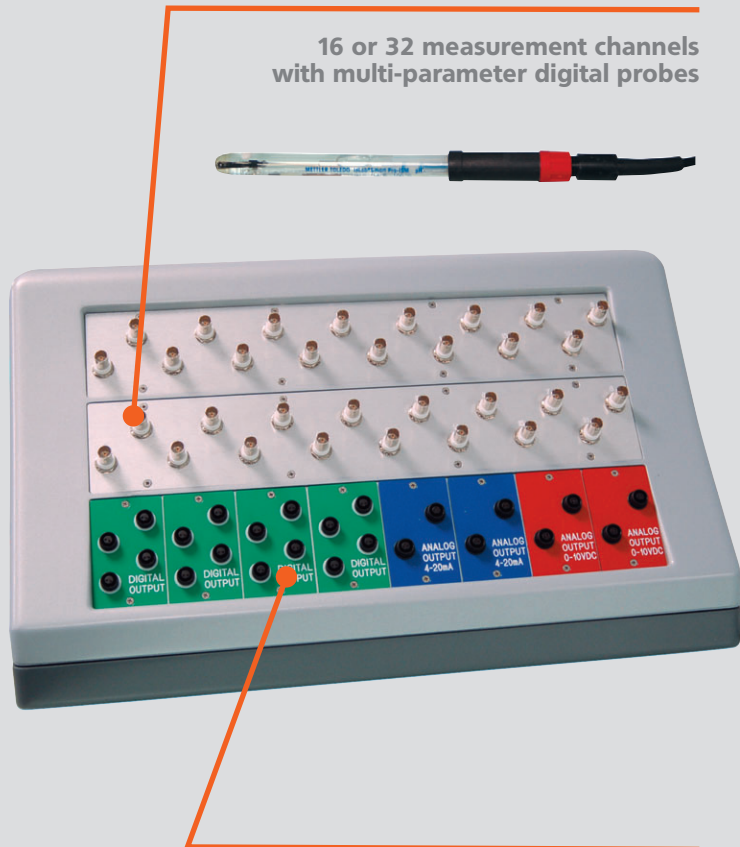




Dedicated, user-friendly and intuitive software



16 or 32 measurement channels with multi-parameter digital probes



Up to 32 outputs, your choice of analog or digital, to connect a control (water bath, for example)

## COMPLETELY MODULAR AND FLEXIBLE

### Up to 96 measurements

The system can include 16 or 32 measurement channels, or a total capacity of 96 simultaneous measurements using the multi-parameter sensors. In addition to measuring pH, temperature and redox, other parameters including conductivity or dissolved oxygen can be analysed.

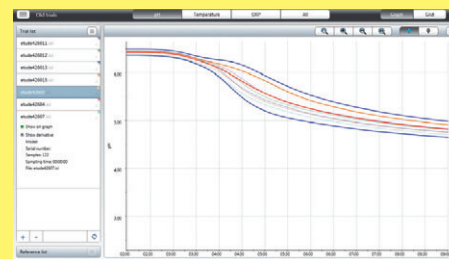
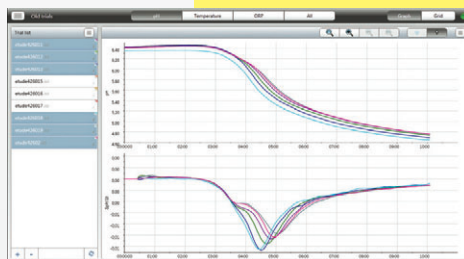
### Up to 32 control outputs

The control outputs are entirely modular. The total capacity of 32 channels can be configured as needed: digital outputs, or 2 types of analog outputs: **4-20 mA** or **0-10 VDC**. For example, if you choose to begin with a configuration of 8 digital channels and 8 analog channels, changes can always be made afterwards. Each channel is controlled independently, thus allowing several manipulations to be carried out, regardless of the number of channels used, and regardless of the time of the day. The instrument thus performs several tasks according to the desired configuration, at a user definable acquisition frequency, ensuring calibration validity.

## PROCESS SIMULATION

By programming a **thermal cycle**, each user can reproduce or simulate the changes in their process conditions (variations in temperature, pH), and compare, using graphs and/or descriptors, the potential effects on the phylum studied.

## NEW ULTRA USER-FRIENDLY SOFTWARE



Another major innovation of the iCinac is that the PC is now integrated in the system, allowing users to command iCinac via a large, easy-to-use, touch screen.

The software has been entirely rethought; the interface is user-friendly, clear and optimised making it easy to use by even inexperienced operators and technicians.

Extremely complete, the Windows@compatible software is used to automatically:

- Manage the temperature compensation
- Follow-up any set point (temperature, pH, time, etc.)
- Drive your water baths
- Calculate all your feature points
- Save all data in real time
- Draw all types of curves
- Follow up the calibration of your pH probes
- Create and manage your libraries (average curves, standard deviation, etc.)

# ACCESSORIES AND OPTIONS

## Output modules

All output modules are optional and directly integrated into the iCinac.

Up to 32 channels available, which can be divided into your choice of:

- Digital outputs
- Analog outputs 4-20 mA
- Analog outputs 0-10 VDC



Additional outputs may be added subsequently following the initial assembly.

## Multi-parameter digital probes

These digital sensors manufactured by Mettler Toledo, with ISM® technology, can simultaneously take 3 measurements on a single channel: pH, temperature and redox.



## Other sensors

Other probes and sensors are available to measure other parameters such as conductivity, dissolved oxygen.

Ask us what we have to offer!



## Cleaning solution and buffers

A complete range of solutions for the perfect use of your pH probes and a perfect calibration prior to each measurement, to reduce replacement frequency of your probes.



## Water baths

According to your laboratory setup, various types of water baths are available. Don't hesitate to ask us for advice in order to help you determine which solution best suits your needs.



## Dimensions of the iCinac

510 x 450 x 300 mm (length x width x height)

## Weight

11 to 13 kg depending on layout

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