iCinac Series

Acidification Analyzers

ANALYZE CULTURES ASSOCIATED WITH:

- Dairy
- Meat
- Fish
- Fruit
- Vegetables

SERIES HIGHLIGHTS:

- Only solution designed for acidification activity of lactic ferments
- For process studies, development, and control
- Test multiple samples simultaneously
- Scalable - Up to 32 channels with wired version, and 16 channels with wireless version
- Easy to use software
- Meets ISO 26323 | IDF 213

Multi-Probe pH Datalogging and Analysis of Lactic Acid Bacteria (LAB) Associated with Cultures and Fermented Foods

The iCinac analyzer is the only solution designed specifically to monitor and analyze the acidification activity of lactic ferments in starter, functional, bio-protective, and probiotic cultures. It has the ability to test multiple samples simultaneously and provide the insight needed for precise development, test, and process control of fermentation ingredients. The appropriate inocula can be defined and controlled by characterizing the acid formation of a specific phylum and knowing the specific test parameters' influence. Additionally, the iCinac meets ISO 26323|IDF 213, the industry standard for determining dairy cultures' acidification activity by continuous pH measurement.

FLEXIBLE AND SCALABLE

The iCinac is modular and scalable in multiple ways. Both wired and wireless versions are portable and can be configured with one to many digital probes. As experiments change, probes can be added or removed from the system with ease. The wired version of iCinac can also be optioned with up to 32 analog and digital outputs, which allow control for external equipment such as water baths.

SIMULTANEOUS PARAMETER MONITORING

The iCinac digital probes enable unique simultaneous monitoring of pH, temperature, and Oxidation Reduction Potential (ORP). Each probe or channel is independently monitored while providing full control and insight into each experiment.

COMPLETE DESCRIPTION OF STUDIED STRAINS

In addition to simultaneous monitoring of pH, temperature, and ORP for each sensor, the iCinac calculates the rate of pH change. Complex multivariate data analyses are integrated and performed automatically with the unique 'feature points' menu. The iCinac software calculates feature points of the studied strain in real-time. This allows users to define the feature points to match the specific application. Examples include pH_{4H}, pH_{6H}, time required to obtain pH_5, maximum speed, and time during which the speed exceeded 50% of the maximum speed.

USER-FRIENDLY SOFTWARE

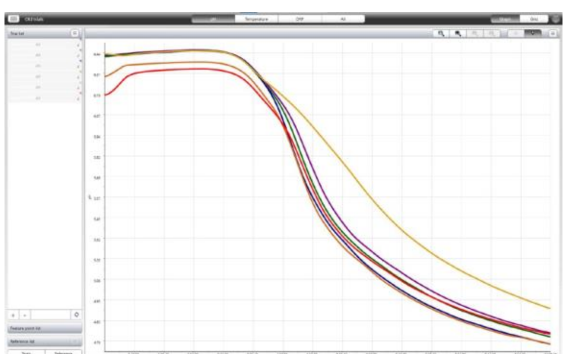
The Windows-based software brings productivity to your pH, temperature, and ORP measurement applications.

- Manage the temperature compensation
- Monitor and track trial set points
- Drive your water baths
- Calculate all your feature points
- Save all data in real time
- Draw a variety of curves
- Monitor the calibration history of the pH probes
- Create and manage your libraries (average curves, standard deviation, etc.)

By programming a thermal cycle, users can reproduce or simulate the changes in process conditions (e.g., variations in temperature or pH) and use the graphs or descriptors to compare the potential effects on the phylum studied.

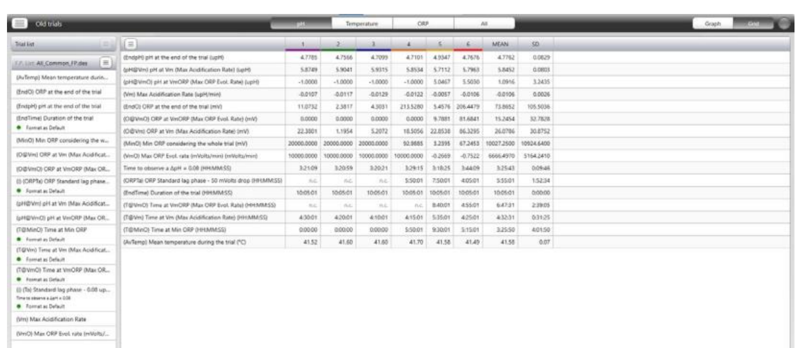
FEATURE POINTS EXPLANATION

The iCinac software can perform complex multivariate analyses of the trial curves in order to extract key characteristics of the curve associated with the kinetics of the fermentation. Feature points are useful in comparing the effects of variations in standard conditions on the overall acidification kinetics. Most common feature points for the determination of acidification activity are automatically programmed within the software, but a variety of feature points are user-customizable in order to automatically extract the most useful data from the specific fermentation curves being analyzed.



Real time graphical presentation of data and integrated preprogrammed data analysis capabilities display the key characteristics of the studied strain without additional user input. Users can create average curves to build a reference database to overlay and compare with new trials. And, personalized profiles can be created for ultimate characterization of the trial activity.

Tabular display of feature acidification characteristics for each curve can be automatically extracted from the raw data for simplified data analysis.



UP TO 32 MEASUREMENT CHANNELS & OUTPUTS

The wired iCinac system comes in either 16 or 32 channel versions scaling to your needs. All or a subset of the measurement probe inputs can be used during a test. The optional control outputs provide flexibility to match your lab equipment by coming in three forms: 4 - 20mA analog, 0-10VDC analog, and digital in any combination.

Wired Advantages

- Integrated touchscreeen industrial panel PC
- 16 or 32 channel capacity
- Optional output assembly and accessories to control external equipment or conditions

CONVENIENCE AND FREEDOM OF WIRELESS

The iCinac Wireless uses the same digital probe as the standard iCinac, but with the added convenience of a wireless transmitter with coverage up to 60 meters (indoors). Potential interference is avoided, and distance is maximized with a wide range of automatically selected 2.4GHz channels. The receiver is a USB device that operates with your PC and the installed software. To keep you informed during testing, data is transmitted and analyzed in real-time. On a single PC, up to two receivers can be connected, allowing up to 32 wireless transmitters to be managed by a single PC. And the rechargeable batteries along with the optional multi-transmitter charger ensures your system stays operational.

Wireless Advantages

- Lithium-ion rechargeable batteries
- Optional multi-transmitter charger
- USB receiver and software used with your PC
- Up to 16 transmitters and probes
- Transmitters can be used with the wired unit (standard probes connected by cables)

Ordering Information

MODELS AVAILABLE

Part Number	Description
16-03342-00	iCinac 16 Channel System
16-03342-01	iCinac 32 Channel System

OPTIONS AND ACCESSORIES FOR ICINAC WIRED VERSION

Part Number	Description
05-03360-00	Base required to house individual analog and digital output modules
05-03357-00	Optional iCinac digital output module. 4 outputs (green).
05-03358-00	Optional iCinac analog output module. 2 outputs (blue). 4-20 mA.
05-03359-00	Optional iCinac analog output module. 2 outputs (red). 0-10VDC.
FA17604	Input temperature module for PT100
FC12679	PT100 temperature probe

SYSTEM COMPONENTS – WIRELESS VERSION

Part Number	Description
05-05457-00	iCinac Wireless transmitter with rechargeable Li-ion battery. 1 to 16 transmitters per receiver and license.
05-05489-00	iCinac Wireless receiver, software, and license
10-05475-00	Optional iCinac wireless charger for up to five transmitters

SYSTEM PROBES – FOR BOTH ICINAC SYSTEMS

Part Number	Description
30027775	InLab® Smart Pro-ISM probe for iCinac (pH/ORP/temp)
30429195	InLab® Smart Basic ISM probe for iCinac (pH/temp)

SPECIFICATIONS

iCinac Wired Version	
Weight	11 to 13 kg depending on layout (24.25lbs to 28.7lbs)
Dimensions	510mm L x 450mm W x 300mm H (20” x 17.7” x 11.8”)
Power	12VDC 96W
iCinac Wireless Version	
Transmitter Battery	25-watt-hour rechargeable Li-ion
Time Between Charges	Typically 25 days under normal operation
Battery Charge Time	Approximately 5 hours (2 hours to 60%) with optional charger
Transmitter Dimensions	52mm diameter x 133mm length (2” x 5.2”)
Wireless Range	up to 60 meters (indoors)
Minimum PC Requirements	Windows® 10 OS, Intel® Core™ i5, 8GB RAM, 2 USB ports
Compliance	EMC EN 61326-1 and FCC Part 15; Safety EN 61010-1

**maximum transmission distance is dependent on installation site*

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