Get the most of your time

BioSystems
Y15

Multiparametric automatic system

Juice, fruits and vegetables analysis

Food & Beverage analysis

human - centred biotech

Our complete system of reagents and instruments provides information throughout all the production steps, from raw materials to end products in different matrices (juice, concentrates, puree, etc.).

Analytical solutions

The reagents have been designed together with the **Automatic Analyser BioSystems Y15**, optimizing their performance and offering a unique system in the market.

- Technical & scientific support
- Remote assistance
- Customized assessment
- Minimal manipulation
- Fast and convenient
- Reagent cost saving

We help you ensure food quality and safety

Through the analysis of lactic acid or ethanol, both byproducts of fermentative metabolism, we can monitor the hygiene of the juice using indirect microbiology.

Other parameters, such as sugars or other organic acids, can also be analyzed through the automatic system in a quick, efficient, and simple way to ensure the quality and authenticity of the product or to label nutritional parameters in all types of fruits and vegetables.

- NUTRITION FACTS
- ADDITIVES PRESENCE
- AUTHENTICITY
- BY-PRODUCTS (INDIRECT MICROBIOLOGY)

Analytical Methods present in CODEX 247 standards

BioSystems Y15

SUGARS	CODE
D-Glucose/D-Fructose	12800
Sucrose/D-Glucose/D-Fructose	12819
Lactose/D-Galactose	12882
Sucrose	12894

ORGANIC ACIDS	CODE
D-Lactic Acid	12801
L-Lactic Acid	12802
L-Malic Acid	12803
L-Ascorbic Acid	12828
Citric Acid	12825
Acetic Acid (liquid)	12930
Tartaric Acid*	12808
D-Gluconic Acid*	12811
L-Glutamic Acid	12830

ALCOHOLS	CODE
Ethanol	12847
Glycerol	12812

NITROGENOUS SUBSTANCES**	CODE
Primary amino nitrogen	12807
Ammonia	12809

OTHER PARAMETERS	CODE
Polyphenols	12815
Gluten ***	31000

Inmunoassays for alergens are available

* Validated only in grape juice
** Alternative to Formol index
*** Extraction and spike solution separately

BioSystems Y15

Automatic Random Access Analyser

Highlights

150 cycles/hour (75 results/hour).

Samples continuous loading.

Dedicated reagents, minimum handling.

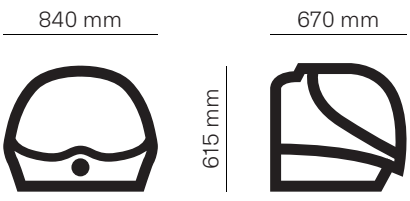
Automatic pre and post dilution.

User-friendly and adaptable software, direct results.

Item	Quantiy	Code
BioSystems Y15 analyser	-	83106
BioSystems Y15C analyser	-	83106C
Reaction rotor	10 units	AC11485
Concentrated Washing Solution	500 mL	BO13416
Concentrated System Liquid	1000 mL	12889
Sample wells (pediatric cups)	1000 units	AC10770
Reagent bottles 50 mL + caps	10 units	BO11493
Reagent bottles 20 mL + caps	10 units	BO11494
Amber reagent bottles 50 mL + caps	10 units	BO13442
Halogen lamp Y15 6V/10W	1 unit	LA10429U

Intended use: automated analyser for the measurement of different kind of food and beverage samples.
For professional use in analytical laboratories only.

Dimensions



Technical Specifications

THROUGHPUTS

Speed	150 cycles/hour
Mean throughput	75 results/hour

SAMPLE HANDLING

Positions for racks (reagents or samples)	4 or 2 in Y15c
Rack samples capacity	24 sample positions/rack
Max. capacity of samples	72 or 48 in Y15c
Barcode reader	External
Size of primary tubes	Ø 13 mm or 15 mm (max. height 100 mm)
Sample well diameter	13 mm
Sample types	Agri-food and beverage samples
Dispensing pump	Ceramic pump of high durability
Dispensing tip	Stainless steel 110 mm
Level detection	Capacitative
Sample pipetting volume	From 2 µL to 80 µL
Pipetting resolution	0.1 µL
Predilution ratio	From 1:2 to 1:40
Tip wash	Inside and outside

REAGENTS HANDLING

Volume of reagent bottles	20 mL, 50 mL
Reagents rack capacity	10 bottles of 20 or 50 mL
Cooled reagent	Yes, in Y15c. 20 reagents max.
Temperature range of cooler	10 °C below room temperature (at 25 °C)
Reagent volume	R1 volume, 10 µL to 600 µL R2 volume, 10 µL to 200 µL
Dispensing mode	Ceramic pump without maintenance
Pipetting resolution	1 µL
Tip wash	Inside and outside

REACTION ROTOR

Reaction volume range	From 180 µL to 800 µL
Number of wells	120
Well material	UV methacrylate
Type of incubation	Dry without maintenance
Temperature	37.0 °C
Temperature accuracy	±0.2 °C

OPTICAL SYSTEM

Light Source	Halogen lamp (6V, 10W)
Lightpath	6 mm
Wavelengths	340 - 405 - 420 - 520 - 560 - 600 - 620 - 635 - 670 nm (1 additional filter can be added by user)
Wavelenght accuracy	±2 nm
Spectral range	340 - 900 nm
Photometric range	-0.05 to 3.6 A
Photometric detection system	Silicon photodiode
Internal resolution	<0.0001 A
Baseline stability	0.004 A max., 30 minutes at 505 nm

SIZE AND WEIGHT

Size (w., d., h.)	840 x 670 x 615 mm
Weight	45 Kg
Packaging	120x80x94 cm; 116 Kg

ELECTRICAL AND ENVIRONMENTAL REQUIREMENTS

Mains voltage	115 to 230 V
Mains frequency	50 or 60 Hz
Electric power	150 A (200 A in Y15c)
Ambient temperature	From 10 to 35 °C
Relative humidity	<75%
Altitude	<2500 m

FLUID REQUIREMENTS

System liquid solution bottle	3 L
Washing solution bottle	3 L
Waste solution bottle	3 L

MINIMUM COMPUTER REQUIREMENTS

Operative system	Windows® 10 (x64) or Windows® 11 (x64)
CPU	Equivalent to IntelCore i3 (8th generation) @3.10 GHz or over
RAM	8 GB
Hard Disk	40 GB or over
DVD Lector	Yes
Monitor minimum resolution	1280x800
Connector of serial channel	USB

LABORATORY INFORM ON SYSTEMS (LIS)

Connectivity to LIS	Yes

BioS/02-25 99567

BioSystems S.A.
Costa Brava 30, 08030 Barcelona (Spain)
t. +34 933 110 000
www.biosystems.global
foodbeverage@biosystems.global