BioSystems
Y15

Multiparameter analysis system for oenology



Simplicity and efficiency

Food & Beverage analysis

human - centred biotech

BioSystems Y15 has been designed to optimise analysis and adapt to the specific needs of each winery and laboratory.





- **Validated system.**
  BioSystems reagents validated with a wide variety of matrices from around the world, ensuring reliable and reliable results, consistent in each trial.

- **Minimal handling.**
  Liquid handling is minimal thanks to dedicated reagent bottles.

- **Continuous charge.**
  It streamlines workflow and enables greater efficiency in analysis.

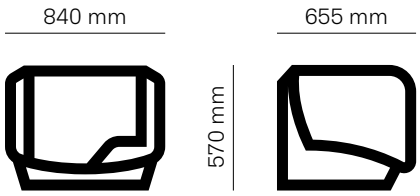
- **Intuitive and specific software.**
  Designed with the user in mind to facilitate and Simplify the work routine.

Analyser Overview

Highlights

- Multi-parameter enzyme-based system with a maximum throughput of 60 results per hour.
- Continuous loading of samples and reagents.
- Minimal handling and low water consumption (0.5–1 L/h).
- Automatic pre-dilutions and post-dilutions.
- Intuitive and customisable software with immediate results.

Dimensions



Product Configuration

	QUANTITY	CODE
BioSystems Y15	-	83106
BioSystems Y15C	-	83106C
Reaction rotor	10 units	AC11485
Concentrated Washing Solution	100 mL	BO13416
Concentrated System Liquid	1000 mL	12889
Paediatric sample trays	1000 units	AC10770
Reagent bottles 50 mL + caps	10 units	BO11493
Reagent bottles 20 mL + caps	10 units	BO11494
Opaque Reagent Bottles 50 mL + Caps	10 units	BO13442
Halogen lamp Y15 6V/10W	1 unit	LA10429U
Dispensing needle	1 unit	AC11500

Intended Use:

Automatic analyser for determining the concentrations of various analytes in oenological samples and derivatives by means of biochemical analysis. The analyser is intended exclusively for professional use, that is to say, for users with the appropriate training and skills.



Technical Specifications

THROUGHPUTS

Speed	150 cycles/hour
Average Thoughput	60 results/hour*

SAMPLE HANDING

Sample Type	Wine and its derived products, cider and other fermented products
Pipetting volume – sample	2 - 80 uL
Pipetting volume - reagent 1	10 - 600 uL
Pipetting volume - reagent 2	10 - 200 uL
Predilution Rate	1:2 - 1:60
Dispensing tip	Stainless steel
Tip wash	Interior y exterior
Dispensing pump	With high ceramic piston durability
Level Detection Sensitivity	> 150 uL
Refrigerator Temperature Range	10 °C below room temperature (at 25 °C)
Barcode Reader	Optional (external)

REACTION ROTOR

Number of wells	120
Reaction volume	180 – 800 uL
Material rotor	UV methacrylate (PMMA)
Thermostatization	37 °C ± 0,2 °C

OPTICAL SYSTEM

Light source	Halogen lamp (6V, 10W)
Wavelengths	340, 405, 420, 520, 560, 600, 620, 635, 670 nm (configurable filters and possibility to add one)
Wavelength accuracy	± 2 nm
Light passage	6 mm
Spectral range	340 - 900 nm
Maximum absorbance	3,6 Abs
Internal resolution	<0,0001 Abs
Baseline stability	0.004 A max., 30 minutes at 505 nm



LABORATORY INFORMATION SYSTEM (LIMS)

LIMS Connectivity	Yes

MINIMUM COMPUTER REQUIREMENTS

Operating System	Windows® 10/11 (x 64)
CPU	Equivalente a Intel Core i5 (8th gen) @3.10 GHz o superior
Memory	8 GB
Hard disk	40 GB or over
Recommended resolution	1920 x 1080
Serial channel connector	USB

ELECTRICAL AND ENVIRONMENTAL REQUIREMENTS

Mains voltage	115 - 230 V
Mains Frequency	50 o 60 Hz
Electric Power	500 VA
Ambient temperature	10 - 35 °C
Relative humidity	<75%
Altitude	<2500 m

*Average value; the final result will depend on the configuration of the run list and its analytes.

Available parameters

Organic acids

Acetic Acid 12810
Acetic Acid (liquid) 12930
Ascorbic Acid 12828
Citric Acid 12825
D-Gluconic Acid / Gluconolactone 12811
D-Lactic Acid 12801
L-Lactic Acid 12802
L-Malic Acid 12803
Sorbic Acid 12880
Tartaric Acid 12808

Sugars

D-Glucose/D-Fructose 12800
D-Glucose / D-Fructose / Sucrose 12819

Nitrogenous substances and sulphites

Ammonia 12809
Primary Amine Nitrogen (PAN) 12807
Sulphite Free 12813
Total Sulphite 12806

Ions

Calcium 12824
Copper 12814
Iron 12817
Potassium 12823

Other parameters

Acetaldehyde 12820
Total Acidity 12846
Anthocyanins 12831
Catechins 12834
CO_2 12832
Colour 12816/21816
Glycerol 12812
Gluten 31000
pH (3.0-4.4) 12876
Polyphenols 12815
Polymeric Pigments 12851
Tannins (precipitable) 12850
Tannins (predictive) 12815+12831+12834+12816

↗ Enzymatic and chromogenic methods with standards included.

Reference material

Red wine control 12822
White wine control 12821
High D-Glucose/D-Fructose Control 18069
Free & Total Sulfite Control (2 Levels) 12817

Iones Multical 12841
Iones Multireference 12935
Multical 12818
Multireference 12933
Sugar Multireference 12934

We offer comprehensive analytical solutions —analyser, software, reagents, and reference materials— specifically designed to simplify the work of wineries and winemaking labs.



BioS/11-26 99812

Want to know more about BioSystems Y15? Scan the code.

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