

Robustness & Optimisation

BioSystems
Y15

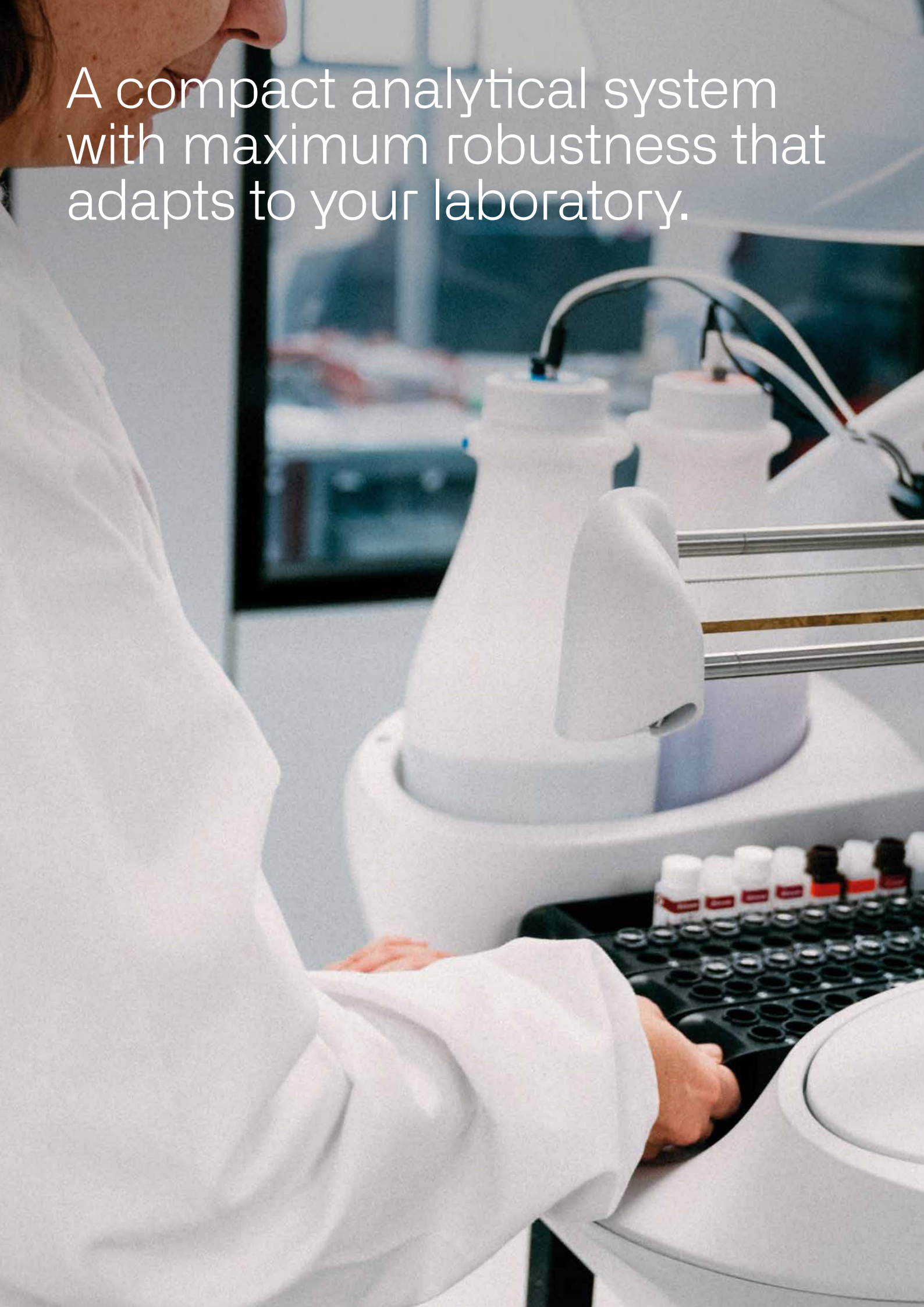
Y15 multiparametric analyser

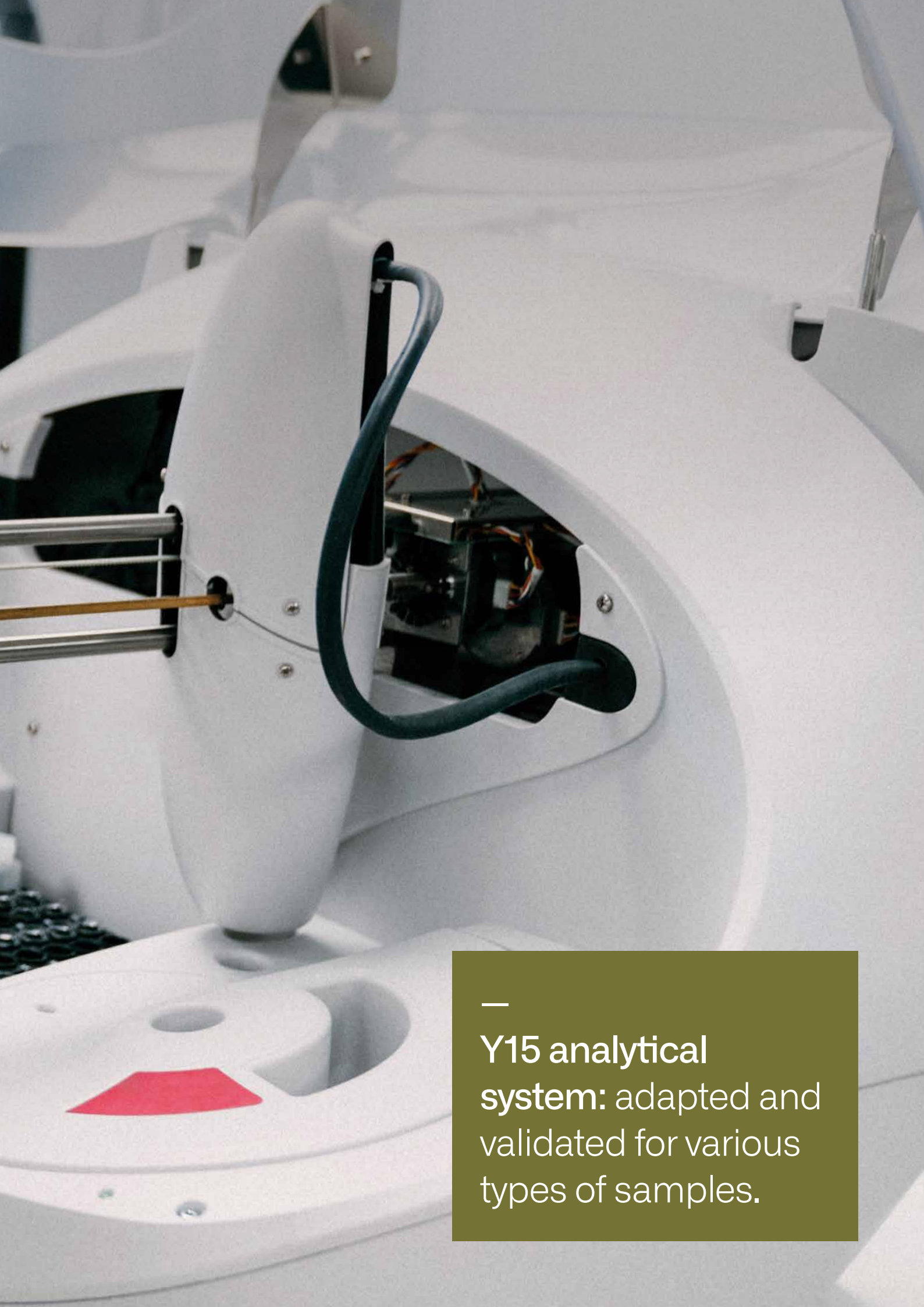
Food & Beverage analysis

human - centred biotech



A compact analytical system
with maximum robustness that
adapts to your laboratory.





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Y15 analytical system: adapted and validated for various types of samples.

Technological innovation



Efficiency in lab automation

Y15 is an **open analyser** that easily adapts to any need. Thanks to its **multiple configuration options**, it can work with and monitor different sample types simultaneously.

Reliable and validated analysis system

Y15, in conjunction with the BioSystems line of reagents, is a **fully developed system validated for use in food and beverage industries and laboratories**. It provides rapid and accurate analytical results during the manufacturing process and facilitates quality control.

Minimum handling

Reagents adapted and dedicated to the analyser, avoiding the manual liquid handling.



Continuous loading

Samples continuous loading to streamline laboratory tasks.

Stable onboard temperature

Y15c is the version equipped with a cooling system, which increases the *onboard* stability of reagents and ensures a constant temperature during work lists.

Simple and intuitive interface

A user-friendly software, designed specifically for these analysis types. The flexible and simple interface makes the Y15 a versatile analyser that can adapt to any need.





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We help you
to ensure quality
and food safety.

Analytical solutions

Since 2008, we offer solutions for food and beverage analysis in order to improve their quality and safety.

From discussions with industry and understanding sector needs, our professional team and technical colleagues help the experts of the food industry. We develop and validate analytical systems that are accurate and reliable to offer you an excellent user experience.

Finding the best solution at the same time we continuously improve together. Thus, we offer a personal assistance, giving you technical and scientific support in any moment.

At BioSystems, our main aim is to help our users and customers in their daily job monitoring food and beverages to make the right decisions during all the process.



**Technical &
scientific support**



**Remote
assistance**



**Customized
assessment**



BioSystems

SUCROSE /
D-GLUC / D-FRUC

REF 12819 40 mL

A1

20°C / 8°C

LOT 039XA
2026-06-30

Y15

parameters

ORGANIC ACIDS

D-Lactic Acid	12801
L-Lactic Acid	12802
L-Malic Acid	12803
Acetic Acid	12810
Acetic Acid (Liquid)	12930
Gluconic Acid	12811
Tartaric Acid	12808
Pyruvic Acid	12826
L-Glutamic Acid	12830
Ascorbic Acid	12828
Citric Acid	12825

SUGARS

Total Starch	12848
D-Glucose/D-Fructose	12800
Sucrose/ D-Glucose/D-Fructose	12819
Maltose/Sucrose/D-Glucose/D-Fructose	12893
Lactose/D-Galactose	12882
D-Sorbitol/Xylitol	12895

IONS

Calcium	12824
Iron	12817
Copper	12814
Potassium	12823
Phosphate (Phosphorus)	12877

SULFITES

Sulfite	12845
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HISTAMINE

Histamine	12829
Histamine Spike Solution	12891

GLUTEN

Gluten	31000
Gluten Spike Solution	31002
Gluten Extraction Solution	31003

NITROGENOUS SUBSTANCES

Nitrite	12842
Primary Amine Nitrogen (PAN)	12807
Ammonium	12809
Urea	12879

OTHER PARAMETERS

Ethanol	12847
Polyphenols (Folin-Ciocalteu)	12815
Glycerol	12812
Acetaldehyde	12820

MULTICALIBRATORS

Multical	12818
Ions Multical	12814

PRETREATMENTS

Carrez Reagent	12837
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Technical specifications

Dimensions



Highlights

- 150 test/hour (75 sample/hour).
- Samples continuous loading.
- Dedicated reagents, minimum handling.
- Automatic pre and post dilution.
- Low water consumption (0.5-1 L/h).
- User-friendly and adaptable software, direct results.

Item

Quantity

Code

Y15 analyser	-	83106
Y15C analyser	-	83106C
Reaction rotor	10 units	AC11485
Concentrated Washing Solution	500 mL	AC16434
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.



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	Capacitive
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)
Wavelength 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

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

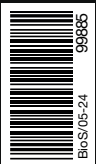
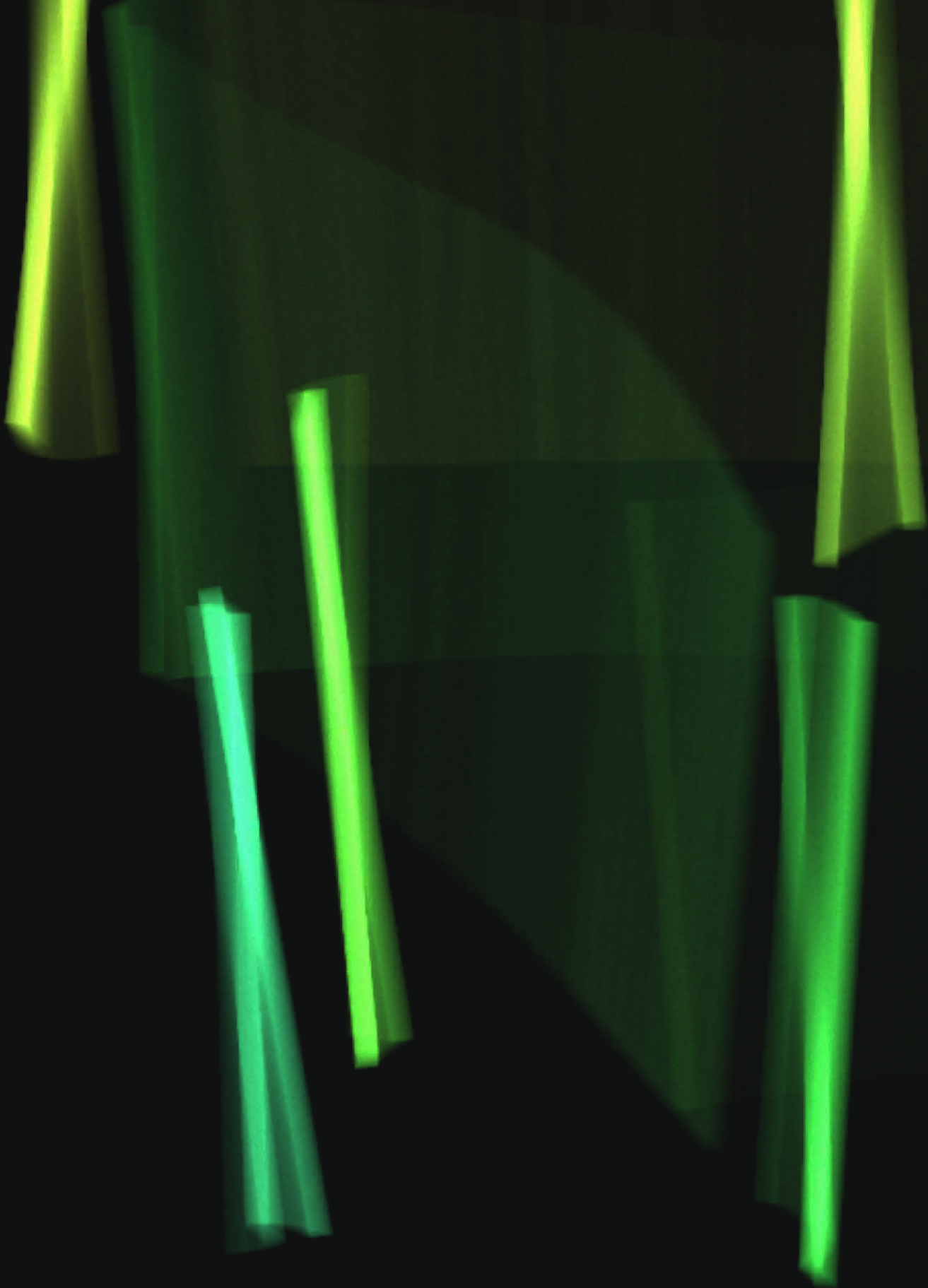
System liquid solution bottle	3 L
Washing solution bottle	3 L
Waste solution bottle	3 L

MINIMUM COMPUTER REQUIREMENTS

Operative system	Windows® 10 (x64) or Windows® 11 (x64)
CPU	Equivalent to Intel Core 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
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