

WINE ANALYZER

The most reliable robot for wine quality control



oenological division

STEROGLASS



Hyperlab represents the most advanced solution for analytical control automation in the oenological field. The results of the analyses are extremely accurate and permit the user to work in an extremely time-efficient manner thus allowing for both quality analysis improvement and cost-benefit optimization.

Hyperlab is an automatic multi-parametric analyzer with Flexible Random Access, i.e. it can fully perform all the manual operating procedures automatically. The sampling arm, controlled by a microprocessor, carries out the sample taking, its dilution (if required by the method) and the reagents suction. Both the sample and the reagents are dispensed in the reaction cuvette and remain there long enough, under constant and controlled temperature, to allow for a reaction to fully take place.

The reaction product is given by means of a preset wavelenght and the absorbance obtained is expressed in a concentration value with appropriate algorithms. During the process the washing phases take place between the aspiration and dispensation cycles, thus avoiding any contamination risks between the reagents and samples. After the cuvette is dried, it undergoes an accurate optical control before a new analysis is run.

Minimum n° of analyses/hour: 180



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Best quality and economical

Hyperlab automation guarantees the greatest data results accuracy and precision, thus significantly reducing analysis costs by about seven times when compared with manual methodologies. With Hyperlab reagents are reduced to minimum: a single determination requires less than 300 microlitres.

Main features

- **Innovative software**: Windows system, user-friendly functions, touch screen technology, switch-on/off with programmable start-up, on-line support.
- Monitor: Information on programmed methods, selected analyses, n° of analyses to be run, calibration and check status.
- **Reagent panel**: Displays the samples position and their volumes.
- Samples: Samples status display. Possibility of adding, removing or modifying samples during the analysis.
- Working lists: Unlimited working lists can be used simultaneously. Tests may be added or removed and automatically repeated if wrong. Inspection of kinetics reaction can be performed for single tests.
- Calibrations: Reagent blank subtraction, 1 to 8 calibrators for single test. Linear and non-linear regressions with three types of data extrapolation: cubic, polynomial and log-logit.
- **Data processing**: Results can be re-calculated at the end of the analysis by correlating them to one or more samples with fixed value. The new regression line will show the value obtained by the re-calculation.



Tests: All the analyses regarding a spectrophotometric determination can be automatized.

Methods in memory

METHODS	CONCENTRATION	CV%≤
ACETIC ACID	1.0 g/l	0.8
CITRIC ACID	2.0 g/l	1.2
D-GLUCONIC ACID	2.0 g/l	1.0
D-LACTIC ACID	0.6 g/l	2.0
L-LACTIC ACID	0.6 g/l	2.0
L-MALIC ACID	1.0 g/l	0.6
PYRUVIC ACID	0.6 g/l	1.5
TARTARIC ACID	5.0 g/l	0.5
 ACETALDEHYDE 	100 mg/l	1.5
 ANTHOCYANIN 	500 mg/l	0.4
 ALPHA AMINO NITROGEN 	150 mg/l	1.5
 AMMONIACAL NITROGEN 	50 mg/l	1.5
• CALCIUM	100 mg/l	1.9
CATECHINS	25 mg/l	0.5
• CHLORIDES	1.0 g/l	1.0
• IRON	20 mg/l	1.5
• GLYCEROL	10 g/l	1.5
GLUCOSE/FRUCTOSE	2.0 g/l	0.5
 GLUCOSE/FRUCTOSE (for high sugar 		
concentration analysis on musts)	250 g/l	1.5
MAGNESIUM	100 mg/l	1.0
TOTAL POLYPHENOLS	4000 mg/l	1.8
POTASSIUM	1500 mg/l	1.5
◆ COPPER	2.0 g/l	2.0
● FREE SO ₂	20 mg/l	1.0
● TOTAL SO ₂	150 mg/l	1.0
 OPTICAL REFERENCE SOLUTION 	50 O.D.	0.3

Other methods:

IC (colour intensity 420+520), shade (420/520), ICM (modified colour intensity 420+520+620), GRB (% yellow, red and blue colour on total colour. This is an indispensable determination for products undergoing refining or microoxygenation process).

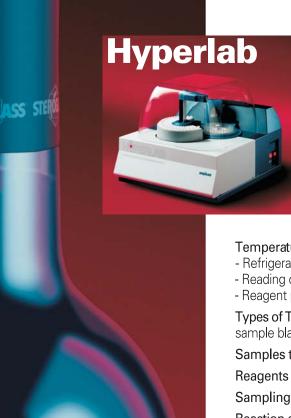
The optical reference solution gives the technical specifications of the instrument regardless its kit performances. This solution therefore guarantees Hyperlab system precision (as recommended by IUPAC - International Union of Pure and Applied Chemistry).



How to order

HYPERLAB	SQRQ060129
ACCESSORIES NEEDED	
PC CENTRAL UNIT WITH RAM ≥2 GB - NET	
TOP WITH 4 OR MORE USB DEVICES	CDDS060962
19" FLAT MONITOR	CDDS060963
2.0 USB CABLE FOR PRINTER L=1,5 m	CDDS060901
COLOUR INKJET PRINTER	CDDS060860
OPTIONAL ACCESSORIES AND SPARE PARTS	
HALOGEN LAMP	SQRR060788
FUSES KIT	SQRR060800
SAMPLING NEEDLE	SQRR060789
20 ml 30 POSITIONS REAGENT BOTTLE (30 pcs)	SQRP060790
50 ml 30 POSITIONS REAGENT BOTTLE (30 pcs)	SQRP060792
20ml 30 POSITIONS REAGENT BOTTLE ADAPTER (15 pcs)	SQRP060794
5 ml, 12x85 mm TUBES (1000 pcs)	SQRP060796
3 ml SAMPLE CUPS	SQRP060797
1 ml SAMPLE CUPS	SQRP060798
SAMPLE CUPS ADAPTER / 12 mm TUBE	SQRP060802
CAPS PACK FOR 30 POSITIONS REAGENT BOTTLE (30 pcs)	SQRP060803
CAPS WITH ATTACHMENT KIT FOR 30 POSITIONS	
REAGENT BOTTLE (30 pcs)	SQRP060804
REACTION CELLS PACK (200 pcs)	SQRP060807
CUVETTES EXTRACTION PLIER	SQRP060809





Technical specifications

Volumes

- Sample: 2-300 µl, precision 1% at 10 µl
- Reagent: 5-350 μl, precision < 1% at 250 μl
- Reaction (sample + reagent) 220-350 μl
- Mixing in cuvette after dispensation

Diluition:

- Automatic programmable diluition for each sample
- Factors: 1:1 1:4 1:10 1:40 1:100

Analytical speed: - n° 150 analyses/hour with dual reagent method

- n° 180 analyses/hour with monoreagent method

Temperature control:

- Refrigerated reagent at 15°C below ambient temperature
- Reading cuvette with programmable heating
- Reagent preheating in sucking needle

Types of Tests: Endpoint, Bichromatic endpoint, Differential endpoint, Differential endpoint sample blank, Derivatives, Fixed time, Kinetic.

Samples tray: 60 samples positions

Reagents tray: 30 positions refrigerated tray

Sampling needle: Stroke needle, capacitance sensor, reagent pre-heating

Reaction cuvette rotor: 80 BIONEX® cuvettes replaceable singularly, over 20.000 tests

Washing station: 6 dispensing needles for washing solution, 6 sucking needles, 1 drying needle. 8 washing cycles for each cuvette

Optical group: 1 halogen lamp (6 V, 10 W) with extended UV emission, 2 focusing lenses, 10-position interference filters, 8 positions provided with interference filters of 340, 420, 520, 546, 578, 620, 650, 700 mm, 1 free position and 1 for dark reading.

Data re-processing: Results can be re-calculated at the end of the analysis by correlating them to one or more samples with fixed value

Innovative software: Extremely user-friendly. Optimized random system allows the user to work efficiently and comfortably. Operating system: Windows.



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CERTIFICATED TECHNICAL ASSISTANCE

Our experience at your disposal

- Technical/analytical advice
- Technical maintenance contracts
- Repair/setting/calibration

STEROGLASS s.r.l Via Romano di Sopra, 2/C

06132 S.Martino in Campo PG - Italy Tel. +39 075-609091 Fax +39 075-6090950

Internet: www.steroglass.it E-mail:info@steroglass.it

