



## ■ HYPERLAB PLUS AND BASIC WINE ANALYZERS

### STEROGLASS

5404

Hyperlab wine analyzer 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 wavelength 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.

#### 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:

Acetic acid, Citric acid, D-Gluconic acid, D-Lactic acid, L-Lactic acid, L-Malic acid, Pyruvic acid, Tartaric acid, Acetaldehyde, Anthocyanin, Alpha Amino nitrogen, Ammoniacal nitrogen, Calcium, Catechins, Chlorides, Iron, Glycerol, Glucose/Fructose, Glucose/Fructose (for high sugar concentration analysis on musts), Magnesium, Total polyphenols, Potassium, Copper, Free and Total SO<sub>2</sub>, Optical reference solution

#### 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 micro-oxygenation process).

The optical reference solution gives the technical specifications of the instrument regardless its kit performances.

The best way to demonstrate Hyperlab precision is the use of bicromatic optical solution (suggested by IUPAC - International Union of Pure and Applied Chemistry).

#### TECHNICAL SPECIFICATIONS HYPERLAB PLUS and BASIC

##### VOLUMES (Hyperlab Plus and Basic)

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

##### DILUTION (Hyperlab Plus and Basic)

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

##### ANALYTICAL SPEED



-125...200 analyses/hour - Hyperlab Plus  
 -100...180 analyses/hour - Hyperlab Basic

TEMPERATURE CONTROL (Hyperlab Plus and Basic)  
 - Refrigerated reagent at 15°C below ambient temperature  
 - Reading cuvette with programmable heating  
 - Reagent preheating in sucking needle

TYPES OF TESTS (Hyperlab Plus and Basic)  
 Endpoint, Bichromatic endpoint, Differential endpoint, Differential endpoint sample blank, Derivatives, Fixed time, Kinetic.

SAMPLES TRAY  
 -60 samples positions - Hyperlab Plus  
 -30 vials and 20 cups - Hyperlab Basic

REAGENTS TRAY  
 -30 positions refrigerated tray - Hyperlab Plus  
 -26 positions refrigerated tray - Hyperlab Basic

SAMPLING NEEDLE  
 - Glass ceramics stroke needle, capacitance sensor, reagent pre-heating - Hyperlab Plus  
 - Stainless steel needle, capacitance sensor, optional reagent pre-heating - Hyperlab Basic

REACTION CUVETTE ROTOR (Hyperlab Plus and Basic)  
 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 - Hyperlab Plus  
 -4 dispensing needles for washing solution, 5 sucking needles, 1 drying needle, 6 washing cycles for each cuvette - Hyperlab Basic

OPTICAL GROUP (Hyperlab Plus and Basic)  
 1 halogen lamp (6V, 10W) 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 nm, 1 free position and 1 for dark reading.

DATA RE-PROCESSING (Hyperlab Plus and Basic)  
 Results can be re-calculated at the end of the analysis by correlating them to one or more samples with fixed value

INNOVATIVE SOFTWARE (Hyperlab Plus and Basic)  
 Extremely user-friendly. Optimized random system allows the user to work efficiently and comfortably.  
 Operating system: Windows

TANKS  
 -2x20lt plastic tanks for washing and discharge water- Hyperlab Plus  
 -2x5lt plastic tanks for washing and discharge water- Hyperlab Basic

SAFETY SHIELD SENSOR  
 -Available - Hyperlab Plus  
 -Not available: Hyperlab Basic

DIMENSIONS (Hyperlab Plus and Basic)  
 LxDxH 60x66x50 cm

WEIGHT  
 - 38Kg Hyperlab Plus  
 - 32Kg Hyperlab Basic

WORKING CONDITIONS (Hyperlab Plus and Basic)  
 - 16-30°C max relative moisture 80%

POWER SUPPLY (Hyperlab Plus and Basic)  
 240/100Vac, 50/60 Hz single phase with ground

POWER ABSORPTION (Hyperlab Plus and Basic)  
Less than 200 VA (external Pc excluded)

(r.080317)

Codice	Codice	Description
Steroglass	Fornitore	
SQRQ065038	BASIC	Hyperlab basic wine analyzer
SQRQ060129	HYPERLAB	Hyperlab plus wine analyzer
CDDS060963		19 inch flat monitor
SQRQ074351		Hyperlab basic no refrigerated station