



## Smart Analysis

# Smart and portable lab for beer quality control

Smart Analysis is the platform that simplifies the quality control of beer in the brewery and allows you to improve your product day after day. Portable and patented, Smart Analysis is the ideal analysis platform for brewers and brew masters who feel the need to know and monitor their product during all process phases through reliable and precise analyses.

Manage your beer in the best way. No more waiting times, make the right decisions at the right time.

#### **Optical Technology**

Smart Analysis is a portable, accurate and reliable enzyme analyser.

The new fiber optic and LED source technology makes Smart Analysis an extremely compact and robust spectrophotometer that does not require any particular maintenance.

We have developed a remote diagnostic system to check whether your device is working properly.

#### Mobile App

The Smart Analysis APP is simple and intuitive, designed for any type of user. You download the APP directly on your tablet and it allows you, even if you are not an expert, to manage all the analysis operations in a guided way, up to the final step, the data storage.

#### **Analysis Traceability**

Through the reagent kit QR code, the APP autonomously identifies the type of analysis, lot number and expiry date of the reagents, and the calibration curve as well, without the need to calibrate the machine.



#### Data Management

The results are saved on the tablet, with the possibility of being downloaded in the format most convenient for you. Furthermore, if you wish, they can be stored in the cloud, a dedicated and customised page where you can manage the results of your analysis. You can aggregate and process your data anytime and anywhere, from a PC or tablet. You can use the information to obtain, over time, the historical archive of your wine.

#### **Analysis Kit**

The reagent kits have an innovative format designed to simplify the analysis procedure and minimise the manual operations required. Disposable cuvettes with standard optical path are prefilled with the reagents, inserted in convenient packs of 20 tests to optimise consumption.

#### Smart Analysis Device - Beer

Includes device, Android tablet, software APP, all 15 parameters, dilution kit, and graduated pipette.







TECHNICAL SPECIFICATIONS							
Optical Module	Connectivity	Incubation Module	Software Interface	Dimensions/ Weight	Power Supply		
LED light sources; continuous spectrum 340-760nm	Bluetooth/Wi-Fi	37.0°C +\- 0.5	App for Android 6 or higher	85x75x200mm; 1kg	5V, 1.5A; 7Ah battery capacity [7hrs of operation]		

## Beer & Water Analysis Parameters

PARAMETER	RANGE	REACTION TIME	LIQUID
Total Sugars (glu+fru+suc)	0.50-25 g/L	20 mins hydrolysis + 10.5 mins	Beer/must
Bitterness (IBU)	5-100 IBU	5 mins	Beer/must
Alpha Amine Nitrogen	15-250 mg/L	10.5 mins	Beer/must
Total SO <sub>2</sub>	2-30 mg/L	3.5 mins	Beer/must
L-Lactic Acid	0.1-0.6 g/L	10.5 mins	Beer/must
Ethanol	1.5-15 %v/v	15 mins	Beer/must
Colour	VIS Scan, EBC/ASBC method VIS Scan, CIELab method	Immediate	Beer/must
Acetic Acid	0.5-1.2 g/L	10 mins	Beer/must
D-Lactic Acid	0.1-1 g/L	10.5 mins	Beer/must
Sugar (glu+fru+suc+mal)	0.5-25 g/L	40 mins hydrolysis + 10.5 mins	Beer/must
Chloride	5-500 mg/L	1.5 mins	Water
Sulphates	10-250 mg/L	2.5 mins	Water
Calcium	15-250 mg/L	1.5 mins	Water
Potassium 25-500 mg/L		2 mins	Water
Bicarbonate	70-500 mg/L	12 mins	Water

### **Optional Accessories**

#### **Smart Ring Test**

Standard to measure 5 parameters (Glucose/Fructose, Malic, Acetic, Free  $SO_2$ , Total  $SO_2$ ).

- Aids in-house training, ensuring staff are performing tests accurately
- Useful tool to ensure equipment and team are ready for vintage
- 6 monthly testing is recommended

#### **Thermoblock**

Perform up to 10 analyses simultaneously (analysis in parallel), significantly reducing analysis time.



#### Mini Centrifuge

Compact mini centrifuges with two rotor types. Speed can be adjusted to 4000 min-1 or 6000 min-1. Powerful motor for fast starting. Quick stop when the lid is opened.



#### Sonicator/De-gasser

Convenient degassing of samples. Eco-friendly, only needs warm water. By ultrasonic sound millions of small air bubbles are generated. Combined with a very high pressure fast and efficient degassing.

- Ready to use, no assembly required
- Automatic 3-minute-operation can be stopped anytime
- Removable lid
- Stainless steel tank











**Kauri Winemaking Innovation**