

FTIR Analyzer

Lyza 5000



Lyza 5000 Wine

The evolution of wine analysis

The novel multiparameter FTIR analyzer Lyza 5000 Wine is your solution for the analysis of must, must in fermentation, and wine.

Fast measurements for a multitude of parameters ensure that you have all the information you need – during all stages of wine production. Thanks to a quick setup and preinstalled models, all important results for wine analysis, including ethanol, sugars, and acid profile, are just a tap away.

Lyza 5000 Wine can be used as a stand-alone device, automated for high throughput, or can be connected to your existing benchmark instruments – Anton Paar density and alcohol meters – for the most powerful wine analysis.

The FTIR analyzer you have been waiting for.

- ✓ Results in less than a minute
- ✓ Models for must, must in fermentation, and wine included
- ✓ 15+ parameters in 1 measurement
- ✓ Up to 48 samples in a row
- ✓ Zero proprietary reference solutions needed
- ✓ 30+ subsidiaries and 50+ distribution partners



FIND OUT MORE



[www.anton-paar.com/
Lyza5000Wine](http://www.anton-paar.com/Lyza5000Wine)

Lyza 5000 Wine: Features

Lifelong superior performance

Lyza 5000 Wine's precisely temperature-controlled 12-bounce ATR measurement cell is designed to deliver fast measurements in less than one minute as well as stable results throughout the whole wine production process.

User-friendly touchscreen interface

With Lyza 5000 Wine's state-of-the-art user interface, single measurements, adjustment of models, or even complex measurement routines are only one tap away. Quick setup and minimal measurement times for more than 15 parameters in one go let you handle huge workloads with ease.

Live notifications and guided workflows

Based on a water reference measurement, the patented Cleaning Performance Index advises you when to clean in order to guarantee precise results at any time. After an automatic reminder, integrated workflows guide you through water and ethanol reference measurements – no proprietary reference standards are necessary.



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LYZA 5000 WINE
WITH XSAMPLE 370



Automation with Xsample sample changers

Xsample 370 provides fully automated filling, referencing, cleaning, and drying for the most convenient user experience. Increase your sample throughput with Xsample 520, allowing up to 48 samples in a row. Water reference measurements are performed automatically and new measurements can be queued at any time, even during running measurements.

More parameters in one setup

The combination of Lyza 5000 Wine with your existing Anton Paar instruments, such as a density meter, an alcohol meter, a pH meter, a turbidity meter, and a sample changer, provides the most powerful measurement system in wine analysis. Receive results from all instruments in a single report with only one sample preparation, one filling, and one measurement.

Data handling and LIMS integration

Lyza 5000 Wine supports you in every way to efficiently process and distribute your measurement results. Reports can be automatically printed and digitally exported to your hard drive or network storage. For the highest degree of automation, Lyza 5000 Wine is completely integrated into your LIMS system via Ethernet and Wi-Fi.

Lyza 5000 Wine



MEASURING SPECIFICATIONS MUST AND MUST IN FERMENTATION

Parameter	Units	Range	Repeatability
Ethanol	%v/v	0 to 14	0.03
Glucose	g/L	0 to 50	0.2
Glucose	g/L	50 to 160	0.2
Fructose	g/L	0 to 50	0.3
Fructose	g/L	50 to 160	0.4
Titrateable acidity ²	g/L	0 to 13	0.07
Volatile acids	g/L	0 to 1	0.01
Malic acid	g/L	0 to 7	0.06
Tartaric acid	g/L	1 to 9	0.17
Lactic acid	g/L	0 to 2	0.04
pH	-	3 to 4	0.02
Density	g/mL	0.99 to 1.12	0.0001
Must weight ³	°Bx	-2 to 29	0.04
Extract	g/L	0 to 350	0.4
Glycerol	g/L	0 to 10	0.1
Yeast assimilable nitrogen	mg/L	0 to 300	8

MEASURING SPECIFICATIONS WINE

Parameter	Units	Range	Repeatability
Ethanol	%v/v	6 to 20	0.02
Glucose	g/L	0 to 150	0.2
Fructose	g/L	0 to 160	0.1
Sucrose	g/L	1.5 to 50	0.2
Titrateable acidity ²	g/L	0 to 12	0.04
Volatile acids	g/L	0 to 1.5	0.02
Malic acid	g/L	0 to 7	0.06
Tartaric acid	g/L	0 to 5	0.05
Lactic acid	g/L	0 to 3	0.05
Gluconic acid	g/L	0 to 5.5	0.03
pH	-	3 to 4	0.01
Density	g/mL	0.98 to 1.1	0.0001
Must weight ³	°Bx	-4 to 24	0.03
Extract	g/L	0 to 350	0.3
Glycerol	g/L	0 to 25	0.2
Total polyphenols	g/L	0 to 3	0.08

¹ Repeatability for 90 % of samples in a representative set of wines and musts
² Stated as tartaric acid equivalents to pH 7.0; additional outputs: sulfuric acid equivalents, endpoint pH 8.2, meq/L
³ Available units: °Bx, °Oe, °KMW, °Bé, g/L
⁴ After temperature equilibration
⁵ Via external Wi-Fi dongle

Trademarks

Lyza (16731507), Xsample (13856059)

Lyza 5000 Wine



TECHNICAL SPECIFICATIONS

Ambient temperature	15 °C to 32 °C (59 °F to 89.6 °F), non-condensing
Sample temperature	15 °C to 35 °C
Cell type	12-bounce ATR Ge flow-through cell
Minimum sample volume	14 mL
Measurement time per sample ⁴	31 seconds
Dimensions (L x W x H)	450 mm x 340 mm x 240 mm (17.7 in x 13.4 in x 9.4 in)
Cell temperature control	Peltier element / Stability ±0.005 °C / Accuracy ±0.03 °C
Power supply	AC 100 V to 240 V / 47 to 63 Hz / DC 24V, 3A
Weight	15.2 kg (33.5 lbs)
Communication interfaces	5 x USB / RS-232 / CAN / Ethernet / Wi-Fi ⁵
Display	10.1" in PCAP touchscreen, TFT WXGA (1280 px x 800 px)
Laser class	Class 1, enclosed hermetically

How to achieve superior performance

A hermetically sealed, desiccated spectrometer core contains all optical components to ensure the most stable conditions for precise measurements: a permanently aligned cube-corner interferometer with potassium bromide beam splitter, gold-coated mirrors, and a pyroelectric DLATGS detector.

The heart of Lyza 5000 Wine, the 12-bounce attenuated total reflection (ATR) measurement cell, consists of Ge for maximum robustness and longevity. 12 interactions with the sample and accurate cell temperature control result in ideal signal intensities.



