



BACCHUS³



Mid infrared analyser

Ultraviolet and visible
(IR-UV-Vis)

It is the only oenological analyser on the market-place that provides simultaneously the integral IR, UV and visible spectra.

Particularly well adapted for analysis in:

- ◆ Maturity control
- ◆ Reception bay level
- ◆ Must and fermenting must
- ◆ Sparkling wines
- ◆ Finished wines
- ◆ Sweet wines
- ◆ Spirits

BACCHUS³ COMPACT, RELIABLE, REVOLUTIONARY

ENOLUTION



SYSTEM MODULES

FTIR Thermo Fisher Scientific Is5 module: absorbance reading with 20µm proprietary transmission flow cell. Nicolet EZ Omnic FTIR software included.

UV/Visible module: High performance diode-array spectrophotometer. Spectral range: 200-850 nm; equipped with an easily interchangeable 0.2 mm flow-cell (in MultiSpec version only).

- Automation control and command module.
- Autosampler: 117 positions. (Optional).
- Full informatics.

PARAMETERS

Delivered with ALL available calibrations

- **Alcohol, Sugar (reducing, total, Glucose/Fructose), density, dry extract.**
- **Total acidity, total pH, volatile acidity.**
- **Organic acids: acetic, malic, lactic, tartaric, gluconic, succinic, citric, acetaldehyde.**
- **Glycerol, assimilable nitrogen, CO₂, anthocyanins and tannins, sorbic.**
- **Baume, Brix, probable alcohol, potassium.**
- **Colour intensity, hue, DO280 TPI (official method).**

PRECISION (standard deviation)

<i>Alcohol</i>	± 0,05 %	<i>Sugar</i>	± 0,30 g/l
<i>Total acidity</i>	± 0,07 g/l	<i>pH</i>	± 0,035
<i>Volatile acidity</i>	± 0,04 g/l	<i>Malic acid</i>	± 0,15 g/l
<i>Colour</i>	± 0,05	<i>TPI</i>	± 0,20

INSTALLATION

FTIR module dimensions:	W44 x D44 x H40 cm
Autosampler dimensions:	W30 x D44 x H37 cm
Weight:	~ 20 kg
Power supply:	220 v - 50/60 Hz



TECHNICAL SPECIFICATIONS

- Throughput: 120 samples/hour (online prefiltration)
- Universal calibrations for all types of wines and musts included.
- Tried-and-tested high-tech optical bench: insulated optics, controlled temperature and hygrometry. Constant dynamic alignment.
- Thermo-regulated transmission flow-cell at 28°C (± 0.1°C) by or PELTIER effect enabling the processing of samples from 5 to 35°C.
- Dual halogen/high brightness deuterium light source.
- Possibility of quick standard change of all modules.
- Automatic and/or counterflow cleaning.
- Easy upgradable system.

SOFTWARE

The software package of **BACCHUS 3** includes 2 powerful applications designed for a simple, intuitive and flexible operation of the system.

Bacchus Analyse

- Calibration adjustment.
- Real time adjustment of calibrations.
- Saving of spectra and possibility of reanalysis.
- Flow-cell standardization.
- Management of urgent samples.
- Troubleshooting functions (automation, optics).
- Different levels of interaction according to users.
- Results transmission by LAN, results upload with various file formats: MDB, TXT, etc.
- Product sheet definition (analysis programming by type of product and parameters).
- Total traceability of product sheets.
- Analysis post-control.
- Print-out of the working sheet.
- Automatic and/or manual rinsing cycles.

QL Analyst

- Development of PLS and/or MLR calibrations.
- Quantitative and qualitative calibrations.
- Display of spectra in graphics mode (overlay, zoom, cursor).
- Statistical tools for the definition of the optimal spectral bands, cross validation, selection of the number factors, variance analysis, etc.

