

# WineScan™ Flex



*WineScan™ Flex for analysis of wine quality parameters in 30 seconds.*

## Features and Benefits

- A dedicated solution – WineScan™ Flex is a fast and robust FTIR solution for analysis of main quality parameters in wine
- Major quality parameters are determined in a single analysis
- Low reagent cost per analysis and easy sample preparation
- Ready-made calibrations for wine, must under fermentation and must, covering most quality parameters of all major types of wine
- Flexible Foss Integrator software platform with traceability tools, prediction performance and outlier detection to ensure safe data handling and storage
- The optional WinISI™ III software package facilitates development of customised calibrations or new parameters
- Possibility of  $A_{420}$ ,  $A_{520}$  and  $A_{620}$  by visual spectroscopy
- A flexible solution with a variety of optional modules and applications to match your analysis needs

## Description

The WineScan Flex is the solution for the busy wine laboratory requiring fast, accurate analysis. Ready-made calibrations allow for the simultaneous analysis of major wine quality parameters.

Sample preparation is easy, as no preheating or chemical pre-treatment is required. Cost per sample is low, as no expensive

reagents are needed. The automatic flow system and zero setting function ensure reliable and consistent results.

The WineScan Flex analyses main product components such as Ethanol, pH, sugars, and organic acids in wine and must under fermentation. The wine samples in the calibrations represent red, white and rose wines, which gives you a reliable and robust calibration.

See application notes for up-to date and detailed information about available calibrations.

## Technology

The WineScan Flex has a FTIR (Fourier Transform Infrared Spectroscopy) interferometer that scans the full infrared spectrum. Collection of data from the entire spectrum allows you to analyse many parameters. Analysing new parameters is only a matter of calibration development.

## System Description

The WineScan Flex consists of the Analyser and Foss Integrator software. The personal computer is not included.

Options for WineScan Flex include the possibility to upgrade with colour (VIS) module and to automatic version with XY Auto Sampler. For must sample preparation a manual or automatic filtration unit (XPress) is offered.

### Performance data

Components: One of the following calibration packages is included:

**Wine calibration:** Ethanol, Glucose/Fructose, Malic Acid, Volatile Acid, Total Acid, pH.

**Must under fermentation calibration:** Ethanol, Glucose/Fructose, Malic Acid, Total Acid, pH, Density.

**Must calibration:** pH, Malic Acid, Tartaric Acid, Total Acid, Brix, Density.

More calibrations are available. A large number of components can be analysed simultaneously, and the number of measure profiles that can be set-up is unlimited.

Analysis time:	30 seconds
Carry-over:	< 1%
Sample Temperature:	5 - 35°C
Sample Volume:	Programmable 4 - 25 ml, standard volume is 7 ml.
Optical System:	Hermetically sealed, humidity control.
Cleaning:	Automatic and programmable.
Calibration routines:	Slope & Intercept Adjustment.
Options in WinISI™	
SW package:	PLS (Partial Least Squares) and modified PLS calibrations and PCA (Principal Component Analysis). Flexible selection of spectral intervals.

### PC Requirements (Minimum)

- 1 GHz CPU speed (minimum)
- 512 MB RAM (Emulator: 256 MB)
- 3 GB free disk space (Emulator: 1GB)
- SVGA at 1024\*768, min. 16bit colours
- Windows® XP (Emulator can run on Windows® 2000)
- Microsoft® office
- CD drive
- 2 USB Ports
- Mouse/trackball
- Windows-based printer

### Installation requirements

#### WineScan™ Flex

Power supply:	100-240 VAC ±10% – 50/60 Hz
Power consumption:	Max. 500 VA during measurement, 150 VA in standby
Ambient temperature:	5 - 40°C
Ambient humidity:	< 80% RH, cyclic up to 93% RH when going from low to high ambient temperature
Weight:	86 kg
Dimensions (H×W×D):	54×88×47.3 cm (excl. PC)
Environment:	For best performance, place the instrument on a stable surface away from excessive and continuous vibration.
Degree of protection:	IP43 IP43 PC is optional
Noise Level:	<70 dB
Fuse:	T 10.0 A
Installation category:	II
Pollution degree:	2
Altitude:	≤ 2000 m

### Standards and Approvals

WineScan™ Flex is CE labelled and complies with the following directives:

- EMC Directive 89/336/EC and amendments  
EN 61000-6-3  
EN 61000-6-2
- Low voltage directive 73/23/EC and amendments  
EN/IEC 61010-1 version 2
- Machinery directive 98/37/EC and amendments
- Classification, packaging and labelling of dangerous preparations directive 99/45/EC and amendments
- Packaging and packaging waste directive 94/62/EC
- Directive on waste electrical and electronic equipment (WEEE)
- Food and Drug Administration (FDA), Title 21, CFR, chapter J

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