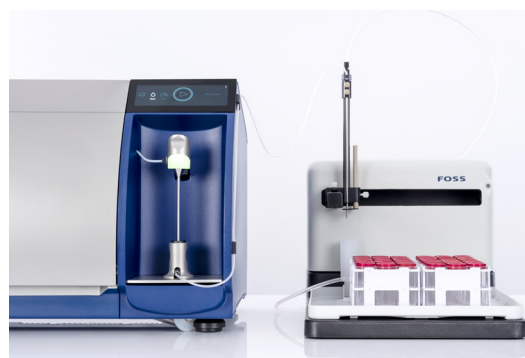
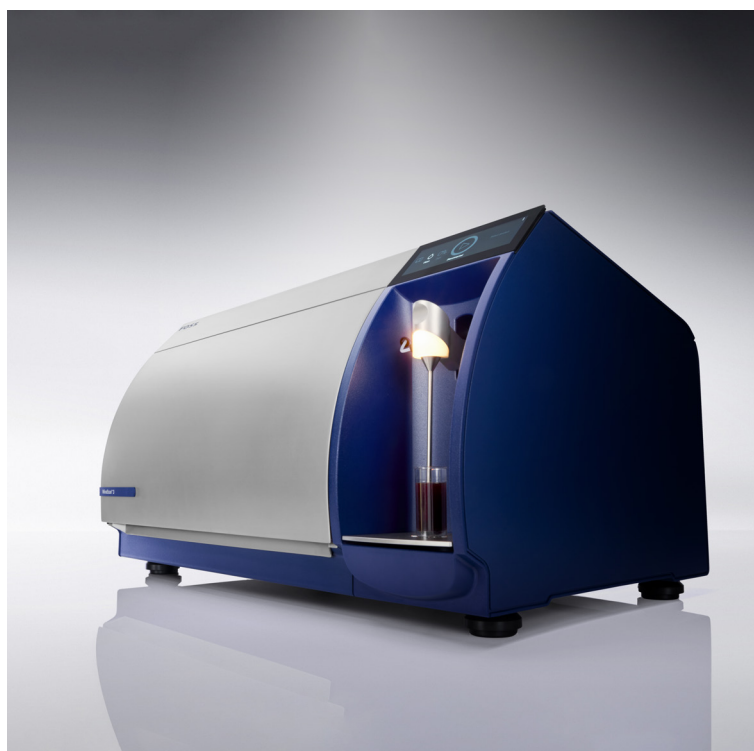


WineScan™ 3 & WineScan™ 3 SO₂

Your expanding world of analytical insight



ANALYTICS BEYOND MEASURE

WineScan™ 3 and WineScan™ 3 SO₂ solutions provide an all-new analytical platform for rapid, multi-parameter wine analysis.

Accurate data when it is needed

Outstanding reliability built on the unique WineScan calibration database representing reference data across seasons, wine types and regions. Subsampling technology captures the data required for highly representative results. Multiple parameters delivered in 30 seconds or in 2 minutes, if free and total SO₂ is included.

Results that just keep on flowing

Robust flow system and SO₂ analysis ensures that you can test more with less maintenance. Automatic instrument standardization maintains top performance. An autosampler option can deliver up to 130 tests per hour, unattended.

More time for winemaking

Use less time getting results and more time using them to improve wine quality. Highly consistent results cut the need for replicate measurements to confirm the validity. Software and connectivity enable unprecedented levels of support while keeping valuable analysis data safe, traceable and accessible.

Sample type

Must, must under fermentation, finished wine

Ready-to-use analytical models

Models cover over 30 key quality control parameters, including free and total SO₂

Technology

Fourier Transform Infrared Spectroscopy (FTIR). For SO₂ analysis, SO₂ gas is released from the sample and the gas is subsequently scanned using UV light.

Specifications

Parameters		Ranges within product type			Comments
Components	Unit	Must	Must under fermentation	Finished wine	
Alpha amino nitrogen	mg/L	0 - 460			Reference method: NOPA Used for calculating YAN
Ammonia	mg/L	0 - 300			Used for calculating YAN
Citric acid	g/L	0 - 5.4		0 - 1.0	
CO ₂	mg/L			0 - 1200*	
Density	g/mL	1.0200 - 1.2500	0.9900 - 1.1400	0.9800 - 1.1900	Density for must can be presented with other units, i.e. Babo, Baumé, Oechsle. The model can be converted to such unit using calculated component feature and right formula.
Ethanol	% Vol.	0 - 19.0	0 - 19.0	0 - 19.0	
Extract	g/L	0 - 300			
Fructose	g/L	0 - 170	0 - 137	0 - 170	
Gluconic acid	g/L	0 - 9.0		0 - 5.7	
Glucose	g/L	0 - 200	0 - 138	0 - 90	
Glucose + fructose	g/L	0 - 390	0 - 260	0 - 265	
Glycerol	g/L	0 - 12.0		0 - 21.0	
Lactic acid	g/L	0 - 4.3	0 - 4.0	0 - 7.5	
Malic acid	g/L	0 - 26.0	0 - 7.3	0 - 6.3	
Ochratoxin A (OTA)	ppb			0 - 7	
pH		2.4 - 4.6	2.8 - 4.3	2.8 - 4.4	
Potassium	mg/L	0 - 5300			
Reducing sugar	g/L	0 - 430	0 - 259	0 - 200	
Sorbic acid	mg/L			0 - 940	
Tartaric acid	g/L	0 - 16.0		0 - 8.1	
Total acidity by end point pH 7.0	g/L	0 - 25.0	0 - 13.0	0 - 7.6	Expressed as sulphuric acid
Total acidity by end point pH 8.2	g/L	0 - 39.0	0 - 20.3	0 - 12.8	Expressed as tartaric acid
Total polyphenols				0 - 120	
Total soluble solids	g/100g (°Brix)	16 - 30			Total soluble solids for must can be presented with other units, i.e. g/L sugar. The model can be converted to such unit using calculated component feature and right formula.
Volatile acidity	g/L	0 - 2.3	0 - 2.0	0 - 1.7	Expressed as acetic acid

*) The upper limit varies from sample to sample since it is dependent on the formation of CO₂ bubbles in the system

Parameters		Ranges within product type			Comments
Options	Unit	Must	Must under fermentation	Finished wine	
Alpha amino nitrogen	mg/L		0 - 350		Part of YAN for must under fermentation package
Ammonia	mg/L		0 - 300		Part of YAN for must under fermentation package
Tannin by BSA	mg/L**			0 - 1100	Part of tannin package
Tannin by MCP	mg/L***			0 - 3700	Part of tannin package
Free SO ₂	mg/L	0 - 75		0 - 100	Included in WineScan 3 SO ₂
Total SO ₂	mg/L	0 - 130		0 - 250	Included in WineScan 3 SO ₂
A420 nm				0 - 1.0 0 - 2.5****	Included with color module
A520 nm				0 - 1.2 0 - 3.5****	Included with color module
A620 nm				0 - 0.3 0 - 1.4****	Included with color module
Ascorbic acid	g/L			0 - 5.0	
Fumaric acid	g/L			0 - 5.0	
Sucrose	g/L			0 - 50.0	
Grey rot (A)	(Index)	0 - 60			
Grey rot (B)	(Index)	0 - 60			
Fermentative activity	(Index)	0 - 30			
Lactic rot	(Index)	0 - 2			
Other parameters					Contact your local FOSS office

***) Catechin equivalent

****) Epicatechin equivalent

*****) Wide range with reduced performance

Instrument specifications

Sample capacity	Manual: 120 samples per hour Autosampler: 130 samples per hour SO ₂ : 27 samples per hour
Sample volume (finished wine)	5.5 mL for manual. 9 mL for autosampler
Sample preparation	Clarification by filtration or centrifugation. Particle size less than 25 µm.
Sample temperature	10 °C to 35 °C
Power supply	100 - 240 VAC ±10%, overvoltage category II, pollution degree 2, 50/60 Hz.
Power consumption	400 VA
Ambient temperature	10 °C to 35 °C
Relative humidity	< 93% RH
Altitude	< 2000 m
Vibration	Place the WineScan 3 on a stable bench free of vibration

Instrument specifications

Weight	43 kg (+10 kg with SO ₂)
Dimensions (W x D x H)	750 x 450 x 408 mm
Bench space (W x D) with PC	130 x 55 cm operated with an external PC
Minimum space between WineScan™ 3 and walls	20 cm

Maintenance

Cleaning	Automatic and programmable
Instrument self-test	Automatic, integrated (additional test sequences available)

Options

Color module	Built-in or add on later		
SO ₂ module	Built-in or add on later		
Autosampler (external, add later)	Power supply	Dimensions (W x D x H)	Weight
	100 - 240 VAC ± 10% 50 - 60 Hz ; 1,04 A Autosampler input: 24 V DC; 3,33 A	62 × 33 × 59 cm (with sample probe, cables and tubing mounted)	11,7 kg