Colo Science
Laboratory & Scientific Equipment

COLO.SCIENCE · TECHNICAL SPECIFICATION

VISIBLE SPECTROPHOTOMETERS FOR ROUTINE AND TEACHING

MAVRICA-V

Visible Spectrophotometer Series · 4 models · 325 / 340 / 360–1000 nm · bandwidth 4 or 5 nm · LCD · RS232 · PC software included

MAVRICA-V is a series of four visible spectrophotometers for routine photometric measurement and teaching laboratories. All models share a Czerny-Turner monochromator with a 1200 lines/mm grating, a tungsten-halogen lamp, manual wavelength setting, automatic 0 A / 100 %T, direct concentration reading, RS232 output and PC software in standard delivery. They differ in the wavelength range, spectral bandwidth and the cell holder: **G models** take cuvettes up to 50 mm path length, **N models** have a 4 nm bandwidth and lower stray light.

Vis 325 / 340 / 360–1000 nm | Bandwidth 4 or 5 nm | Czerny-Turner | Manual wavelength | Auto 0 A / 100 %T | Concentration reading | RS232 | PC software included

Document type: **Technical Specification Sheet**
Product: **MAVRICA-V Visible Spectrophotometer Series**
Format: Print layout · A4 landscape

MAVRICA-V series page | UV/Vis spectrophotometers — overview | UV/Vis spectrophotometers catalogue

Request quote



MAVRICA-V series · visible spectrophotometers

WAVELENGTH RANGE 325 / 340 / 360–1000 nm	SPECTRAL BANDWIDTH 5 nm (G) · 4 nm (N)
INCLUDED PC software · 4 glass cuvettes	MODELS VEG · STG · VED · STU

SERIES
MAVRICA-V

ADDRESS / HQ
Polje ob Sotli 4
SI-3255 Buče, Slovenia

CONTACT
sales@colo.si
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MAVRICA-V · series overview

Four models on one platform — choose by range, bandwidth and cell holder

COMMON TO ALL MODELS

Czerny-Turner monochromator with holographic grating 1200 lines/mm, 160 mm focal length, silicon photocell detector.

Tungsten-halogen lamp for the visible range; the lamp can be replaced by the user.

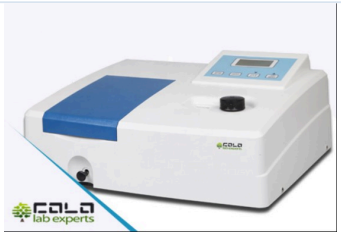
Manual wavelength setting with a knob; automatic 0 A and 100 %T adjustment.

Transmittance, absorbance and concentration — switching with one key, direct concentration reading and concentration factor.

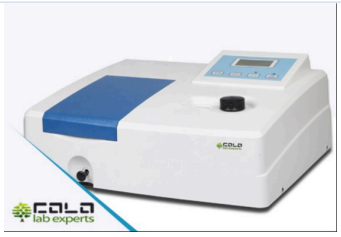
RS232 output and PC software for data processing in standard delivery; thermal printer as an option.

Compact benchtop design for teaching, water testing and routine colorimetric methods.

MODELS



MAVRICA-VEG
340–1000 nm · 5 nm · cell holder 50 mm



MAVRICA-STG
325–1000 nm · 5 nm · cell holder 50 mm



MAVRICA-VED
360–1000 nm · 4 nm · cell holder 10 mm



MAVRICA-STU
325–1000 nm · 4 nm · cell holder 10 mm

APPLICATIONS

Teaching laboratories

Water & environment

Clinical colorimetric tests

Food & agriculture

Routine quality control

Colour reactions

OPTICS	LIGHT SOURCE	PHOTOMETRIC ACCURACY	INTERFACE
Czerny-Turner · 1200 lines/mm	Tungsten-halogen lamp	±0.5 %T	RS232 · PC software

MAVRICA-V · model comparison

Technical parameters of the four models

TECHNICAL PARAMETERS

Parameter	MAVRICA-VEG	MAVRICA-STG	MAVRICA-VED	MAVRICA-STU
Best for	Teaching and routine work with long cuvettes (up to 50 mm), from 340 nm	Like VEG, with the range extended down to 325 nm	Routine methods needing a narrower bandwidth and low stray light, from 360 nm	Widest range in the series (from 325 nm), 4 nm bandwidth and absorbance up to 4 A
DIFFERENCES BETWEEN MODELS				
Wavelength range	340–1000 nm	325–1000 nm	360–1000 nm	325–1000 nm
Spectral bandwidth	5 nm	5 nm	4 nm	4 nm
Cell holder (standard)	50 mm	50 mm	10 mm	10 mm
Stray light at 360 nm ($NaNO_2$)	≤0.5 %T	≤0.5 %T	≤0.1 %T	≤0.1 %T
Photometric range	0–100 %T · 0–1.999 A · 0–1999 C	0–100 %T · 0–1.999 A · 0–1999 C	0–100 %T · 0–1.999 A · 0–1999 C	0–200 %T · −0.097–4.000 A · 0–9999 C
Power	130 W	130 W	80 W	120 W
Packing size / gross weight	560 × 480 × 290 mm / 14 kg	560 × 480 × 290 mm / 14 kg	590 × 460 × 340 mm / 16 kg	590 × 460 × 340 mm / 16 kg
COMMON TO ALL MODELS				
Included in standard delivery	PC software for data processing · 4 × glass cuvette, 10 mm			
Optical system	Czerny-Turner, grating 1200 lines/mm, focal length 160 mm, silicon photocell			
Wavelength setting · accuracy · repeatability	Manual · ±2 nm · ≤1 nm			
Photometric accuracy	±0.5 %T · ±0.004 A (0–0.5 A) · ±0.008 A (0.5–1 A)			
Photometric repeatability	≤0.2 %T · 0.002 A (0–0.5 A) · 0.004 A (0.5–1 A)			
Noise	≤0.3 %T at 100 %T · ≤0.2 %T at 0 %T			
Display · output	LCD · RS232			

Power supply AC 220 V ±22 V, 50 Hz ±1 Hz for all models. Conformity: CE.

MAVRICA-V · accessories and delivery

Standard delivery and options

ACCESSORIES

Standard delivery

Instrument	MAVRICA-V spectrophotometer (VEG, STG, VED or STU)
Cell holder	50 mm (VEG, STG) · 10 mm (VED, STU)
Cuvettes	4 × glass cuvette, 10 mm path length
Software	PC software for data processing
Cables and spares	Power cable · 2 fuses
Documents	Operation manual

Optional

Printer	Thermal printer
Cell holder	50 mm cell holder for VED and STU
Cuvettes	Additional glass or quartz cuvettes

The model is chosen by wavelength range and path length: G models for long cuvettes and low concentrations, N models for narrower bandwidth and lower stray light. COLO confirms the set with the quotation.

PATH LENGTH
10 mm or 50 mm

WAVELENGTH SETTING
Manual knob

DATA
RS232 · PC software

PRINTER
Thermal (option)

MAVRICA-V · configuration and support

Ordering information, model selection and contact

SELECTION, CONFIGURATION AND SUPPORT



MAVRICA-V series · visible spectrophotometers

Ordering information

MAVRICA-VEG	340–1000 nm · 5 nm · 50 mm
MAVRICA-STG	325–1000 nm · 5 nm · 50 mm
MAVRICA-VED	360–1000 nm · 4 nm · 10 mm
MAVRICA-STU	325–1000 nm · 4 nm · 10 mm

How to choose

Lowest wavelength needed: from 325 nm — STG or STU; from 340 nm — VEG; from 360 nm — VED.

Low concentrations: G models take cuvettes up to 50 mm path length in standard delivery.

Narrower bandwidth, lower stray light: N models (VED, STU) — 4 nm and ≤0.1 %T.

Automatic wavelength, scanning or UV: choose NOVEL2, NOVEL3S or a UV/Vis model.

SALES AND SUPPORT

COLO Lab Experts
Polje ob Sotli 4, SI-3255 Buče, Slovenia

Selection guidance: send your methods, wavelengths and cuvettes — we confirm the model, accessories and delivery time with the quotation.

QUICK CONTACT

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COLO.SCIENCE · SPECTROPHOTOMETRY SUPPORT

Not sure which MAVRICA-V model fits your methods?

Send the wavelengths and methods you use and the cuvettes you have — we propose the model and confirm it with the quotation.

Request quotation | sales@colo.si | +386 70 713 437

Specifications are subject to change without notice. Values refer to standard laboratory conditions.