Colo Science
Laboratory & Scientific Equipment

COLO.SCIENCE · TECHNICAL SPECIFICATION

VISIBLE SPECTROPHOTOMETERS WITH AUTOMATIC WAVELENGTH SETTING

# NOVEL2

## Touch Screen Vis Spectrophotometer Series · 2 models · 325–1000 nm · bandwidth 4 nm · automatic wavelength · 7″ touch screen · USB

**NOVEL2** is a series of two split beam visible spectrophotometers with automatic wavelength setting and a 7″ colour touch screen. Both models cover 325–1000 nm with a 4 nm spectral bandwidth, measure up to 4 A and offer kinetics, linear regression and direct concentration reading. **NOVEL2S** adds wavelength scanning for finding the absorption maximum and checking spectra.

Vis 325–1000 nm · Bandwidth 4 nm · Split beam · Automatic wavelength · 7″ touch screen · Kinetics · USB · Scanning (NOVEL2S)

Document type: **Technical Specification Sheet**
Product: **NOVEL2 Touch Screen Vis Spectrophotometer Series**
Format: Print layout · A4 landscape

NOVEL2 series page · UV/Vis spectrophotometers — overview · UV/Vis spectrophotometers catalogue

Request quote

| WAVELENGTH RANGE | SPECTRAL BANDWIDTH |
|---|---|
| 325–1000 nm | 4 nm |
| **DISPLAY** | **MODELS** |
| 7″ colour touch screen | NOVEL2 · NOVEL2S |




NOVEL2 series · Vis spectrophotometers with touch screen

| SERIES | ADDRESS / HQ | CONTACT |
|---|---|---|
| NOVEL2 | Polje ob Sotli 4<br>SI-3255 Buče, Slovenia | sales@colo.si<br>+386 70 713 437 |

# NOVEL2 · series overview

Two models on one platform — with or without wavelength scanning

## COMMON TO ALL MODELS

**Split beam optics** with Czerny-Turner monochromator, holographic grating 1200 lines/mm, 160 mm focal length and silicon photocell detector.

**Automatic wavelength setting** from the touch screen — accuracy ±1 nm, repeatability ≤0.5 nm.

**Tungsten-halogen lamp** 12 V / 20 W with lifetime protection; automatic 0 A / 100 %T and T/A changeover.

**Methods on the instrument:** T, A and concentration, concentration factor, linear regression, kinetics (time scan), timed printing.

**7″ colour touch screen**; measured data, regression equations and calibration are kept after switching off.

**USB port** for PC connection; PC software and built-in thermal printer available as options.

## MODELS



**NOVEL2**
325–1000 nm · 4 nm · automatic wavelength · fixed-wavelength, kinetics, regression



**NOVEL2S**
Same as NOVEL2 · plus wavelength scanning (fast / medium / slow) and peak detection

## APPLICATIONS

Medical & clinical tests

Water & environment

Biochemistry

Food & agriculture

Quality control

Teaching & research

| OPTICS | WAVELENGTH | PHOTOMETRIC RANGE | INTERFACE |
|---|---|---|---|
| Split beam · Czerny-Turner | Automatic · ±1 nm | −0.301–4.000 A | USB |

# NOVEL2 · model comparison

Technical parameters of NOVEL2 and NOVEL2S

## TECHNICAL PARAMETERS

| Parameter | NOVEL2 | NOVEL2S |
|---|---|---|
| Best for | Routine fixed-wavelength, kinetic and concentration methods with automatic wavelength setting | Like NOVEL2, plus wavelength scanning to find the absorption maximum and check spectra |
| DIFFERENCES BETWEEN MODELS | | |
| Wavelength scanning | — | Yes · fast / medium / slow |
| Peak / valley detection on spectrum | — | Yes |
| Baseline flatness · baseline drift | — | ≤±0.002 A · ≤0.003 A/h at 500 nm |
| COMMON TO ALL MODELS | | |
| Included in standard delivery | 4 × glass cuvette, 10 mm · cell holder 10 mm (PC software and printer are options) | |
| Optical system | Split beam, Czerny-Turner, grating 1200 lines/mm, focal length 160 mm, silicon photocell | |
| Light source | Tungsten-halogen lamp 12 V / 20 W with lifetime protection | |
| Wavelength range · spectral bandwidth | 325–1000 nm · 4 nm | |
| Wavelength setting · accuracy · repeatability | Automatic · ±1 nm · ≤0.5 nm | |
| Stray light at 360 nm ($NaNO_2$) | ≤0.1 %T | |
| Photometric range | 0–200 %T · −0.301–4.000 A · 0–9999 C | |
| 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 | ≤0.2 %T at 100 %T · ≤0.1 %T at 0 %T | |
| Functions | T · A · C, concentration factor, linear regression, kinetics, timed printing | |
| Display · interface | 7″ colour LCD touch screen · USB | |
| Sample compartment | Cell holder 10 mm standard; 50 mm and 100 mm holders as options | |
| Power · packing size / gross weight | 100 W · 630 × 510 × 500 mm / 25 kg | |

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

# NOVEL2 · accessories and delivery

Standard delivery and options

## ACCESSORIES

### Standard delivery

| | |
|---|---|
| **Instrument** | NOVEL2 or NOVEL2S spectrophotometer |
| **Cell holder** | 10 mm |
| **Cuvettes** | 4 × glass cuvette, 10 mm path length |
| **Cables and spares** | Power cable · 2 fuses |
| **Documents** | Operation manual |

### Optional

| | |
|---|---|
| **Software** | PC software for data processing and spectra |
| **Printer** | Built-in thermal printer |
| **Cell holders** | 50 mm and 100 mm path length |
| **Cuvettes** | Additional glass or plastic cuvettes |

Choose NOVEL2S when you need the spectrum as well as fixed-wavelength results. COLO confirms the set and options with the quotation.

PATH LENGTH
**10 mm (50 / 100 mm option)**

WAVELENGTH SETTING
**Automatic**

DATA
**USB · PC software (option)**

PRINTER
**Built-in thermal (option)**

# NOVEL2 · configuration and support

Ordering information, model selection and contact

## SELECTION, CONFIGURATION AND SUPPORT




NOVEL2 series · Vis spectrophotometers with touch screen

### Ordering information

| | |
|---|---|
| NOVEL2 | 325–1000 nm · 4 nm · automatic wavelength |
| NOVEL2S | 325–1000 nm · 4 nm · automatic wavelength · scanning |

### How to choose

**Fixed wavelength, kinetics, concentration:** NOVEL2.

**You also need the spectrum** (absorption maximum, spectrum check): NOVEL2S.

**Manual operation, lowest cost, software included:** MAVRICA-V series.

**2 nm bandwidth, 8-cell changer or UV range:** 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, options and delivery time with the quotation.

QUICK CONTACT

colo.si

sales@colo.si

+386 70 713 437

COLO.SCIENCE · SPECTROPHOTOMETRY SUPPORT

### NOVEL2 or NOVEL2S — which one fits your methods?

Send the wavelengths and methods you use — we propose the model and options and confirm them 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.