





NOVEL100 UV/Vis Spectrophotometer 190-1100nm

Single/Double Beam,

Price - €

-  LCD Touch Screen
-  Auto Scanning
-  S/Double Beam
-  Smart WI FI

[Download Catalogue](#)



NOVEL100 is UV/Visible spectrophotometer, combined with ARM processing core. Automatic wavelength makes the instrument have the test speed and function of high-end instruments. It can meet the qualitative and quantitative analysis of most samples in the visible spectrum range of conventional laboratories. It is suitable for application in the departments of medicine and health, clinical examination, biochemistry, petrochemical industry, environmental protection and quality control.

Technical Specification:

- 10.1-inch LCD colour touch screen, realize simple and effective human-computer interaction, and clearly display test data and scan results.
 - Built-in thermal printer (optional), to achieve the printout of test results, facilitates the formation and storage of data reports.
 - USB communication port and included COLO visible spectrum software, realize data and map processing functions, and storage of massive data files, and provide convenience for customers' secondary development. Instrument software control, recording and data processing
 - With full-band scanning, sub-band scanning, dynamic time scanning, automatic wavelength adjustment, automatic empty probe measurement, auto zero, linear regression, concentration direct reading, peak and valley detection, automatic concentration determination by the calibration curve, timing printing and other functions. Concentration factor setup and direct reading of concentration. Up to 10 calibration standard. Quantitative curve up to 3 wavelength.
 - Advanced power-off protection measures can memorize test data, scan spectrum, regression equations and instrument correction parameters to achieve rapid initialization.
 - The possibility of easy selection of different recording modules: spectral, photometric and kinetic.
 - Optical design double-beam monochromator with sample and reference cuvette
 - Internal memory for data storage
 - Auto light source changing (Deuterium or Halogen) according wavelength selected
- Options:
- Built-in thermal printer
 - COLO UV/Vis visible spectrum software Included
 - 5cm or 10cm cuvette holder manual or automatic (optional)
 - Standard 1cm variable cuvette holder included (automatic is optional)
- Power Supply:
- Power supply voltage: AC220V ± 10%V 50Hz-60Hz
 - Rated power: 100W

Wi Fi UV Lamp control-option

To ensure a longer lifespan of the UV lamp, with a built-in WI FI control connection, you can turn it on or off separately via your android device or by touch screen

LCD Touch Screen Digital Display

10,1-inch capacitive touch screen, to display curve, import test data, setting parameters

Professional Software

Professional COLO Software for bidirectional communication and control with PC is an optional configuration

Manual or Automatic Cell Holder

From micro cell to macro cell 100mm large 4 or 8 places manual or automatic cell change control according customer demand

Human Interface with Help menu

Built in help menu provide shortcut to the important information about main instruments parameter



Type	NOVEL-100	NOVEL-100S	NOVEL-102S
Price			
Cuvette holder	Auto WL Settings Manual 4 position	Auto WL Settings, Scanning 8 position Auto cell holder	Auto WL Settings, Scanning Manual
Optical System	Single Beam, Optical grating 1200 lines/mm		Double Beam, Optical grating 1200 lines/mm
Focal length	170mm		
Monochromator	Monochromator		
Wavelength Range nm	190-1100nm		
Spectral Bandwidth nm	2nm	2nm	2nm/5nm
Wavelength Accuracy	±1nm		
Wavelength Repeatability	±0.3nm		
Photometric Accuracy	±0.005 Abs at 1.0 Abs ±0.003 Abs 0.5 Abs		
Photometric Repeatability 1A	±0.0002 A		
Photometric Range	0-200%T, -4~4A, 0-9999C (0-9999F)		
Stray Light	0.05% at 220 nm (NaI)		
Baseline Stability	±0,005Abs/h at 700nm		±0,001Abs/h at 700nm
Baseline correction	Automatic correction		
Baseline Flatness	±0.001A		
Noise	0,0005 A at 500nm		
Baseline drift	0.003Abs / 0.5h		
Wavelength Setting	Auto		
Work Mode	T, A, C, E Multi-Function - Photometric, Quantitative, Spectral Scanning, Kinetics, DNA/protein...		
Scanning function Interval	0,1/0,2/0,5/1/2/5/		
Kinetics	999min with steps 0,1 to 30 sec range		
Light Source	Deuterium (D2)/Tungsten-Halogen Lamp (software monitoring of lamp operation time)		
Wavelength scanning speed	fast, medium and slow		
Display	10.1" LCD Colour Capacitive Touch Screen		
Detector	Dual Silicon Photodiode		
Output	USB Host/USB Drive/RS232/SD Card		
Power	AC220V±10% /50Hz 100W		
Instrument Size	590*450 x 200mm	590*450 x 200mm	590*450 x 200mm
Packing Size	595*660*390mm	880*690*520mm	880*690*520mm
Gross weight / Net Weight (kg)	22/20	22/20	22/20
Standard Configuration	Spectrophotometer with Euro plug power cable, 4 pcs glass cuvette 1x1cm, 4 pc quartz cuvette with lead 1x1cm, Instruction manual		
Option	Built in printer, Notebook with software for NOVEL100 series control, Printer with included COLO drive, professional software (Windows OS, all version) wireless lamp control, memory card		



Single hole film holder



Auto 8-cell holder



single hole cell holder-10mm



Manual 4-position film holder



Manual 4-cell holder-100mm



Integrating Sphere



Adjustable XY micro cell holder



Tube rack



Peltier/Sipper system

Optional Accessories:

- Flow cell
- Peltier/Sipper system
- Tube rack
- Adjustable XY micro cell holder
- Integrating Sphere
- Manual 4- position film holder
- Single hole film holder
- Manual 4 cell holder up to 100mm
- Single hole cell holder – 10mm
- Auto 8-cell holder
- Notebook Lenovo:
 - High resolution
 - Processor: Intel Pentium
 - Quad Core
 - 4 GB RAM
 - SSD 256GB
 - 1920 x 1080 px
 - 15.6 inch
- Printer with included COLO driver

Please note

If this Spectrophotometer does not match the specific needs of your application, or some options are not listed for sale, please feel free to contact us. Our manufacturing engineers will come up with technical solutions to meet your needs. We reserve the right to change technical specifications at any time.

COLO LabExperts



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