





## NOVEL100M UV/Vis Scanning Spectrophotometer 190-1100nm

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

[Download Catalogue](#)



Single/Double Beam,

Price - €

NOVEL100M 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:

- 8-inch color 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.
- 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.
- Automatic light door technology, no need for black body, protect photoelectric sensor.

Options:

- Built-in thermal printer
- 5cm or 10cm cuvette holder manual or automatic (optional)
- Standard 4x1cm cuvette holder included (automatic is optional)

Power Supply:

- Power supply voltage: AC220V  $\pm$  10%V 50Hz-60Hz
- Rated power: 110W



### **Wi Fi** 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 Windows OS Software as a standard configuration with internal program and memory storage 526MB



### Manual or Automatic Cell Holder

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



### Human Interface with Help menu

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

| Type                           | NOVEL-100M  | NOVEL-100S  | NOVEL-102S                                 |
|--------------------------------|---|---|--|
| Price                          |   |   |  |
| Cuvette holder                 | Auto WL Settings<br>Manual 4 position   | Auto WL Settings, Scanning<br>8 position Auto cell holder | Auto WL Settings, Scanning<br>Manual       |
| Optical System                 | Single Beam, Optical grating 1200 lines/mm  |   | Double Beam, Optical grating 1200 lines/mm |
| Focal length                   | 170mm   |   |  |
| Wave Length Range nm           | 190-1100nm  |   |  |
| Spectral Bandwidth nm          | 5nm   |   |  |
| Wavelength Accuracy            | ±0,3nm  |   |  |
| Wavelength Repeatability       | ≤0,1nm  |   |  |
| Photometric Accuracy           | 0.2%T(0~100%T), ±0.002A(0-0.5A), ±0.004A(0.5-1A)  |   |  |
| Photometric Repeatability      | ≤0.10%T (0-100%T), 0.001A(0-0.5A), 0.002A(0.5-1A)   |   |  |
| Photometric Range              | 0-200%T, -3~3A, 0-9999C (0-9999F)   |   |  |
| Stray Light                    | ≤0.03%T (at 360nm)  |   |  |
| Stability                      | ≤±0,0005A/h at 500nm  |   | ≤±0,0003A/h at 500nm                       |
| Baseline Flatness              | ±0.0002A  |   |  |
| Noise                          | 0,0005 A at 500nm   |   |  |
| Baseline drift                 | 0.003Abs / 0.5h   |   |  |
| Units                          | (None) (%) (ppb) (mol/L) (g/L) (mg/ml) (ug/ml) (ng/ml)  |   |  |
| 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  |   |  |
| Wavelength scanning speed      | fast, medium and slow   |   |  |
| Display                        | 10.1" TFT Color Capacitive Touch Screen   |   |  |
| Detector                       | Silicon Photodiode  |   |  |
| Output                         | USB Host/USB Drive/RS232/SD Card  |   |  |
| Power                          | AC220V±10% /50Hz 110W   |   |  |
| Instrument Size                | 500*395 x 200mm   | 500*395 x 200mm   | 500*395 x 200mm                            |
| Packing Size                   | 595*660*390mm   | 595*660*390mm   | 595*660*390mm                              |
| Gross weight / Net Weight (kg) | 15/12   | 15/12   | 15/12                                      |
| Standard Configuration         | Spectrophotometer with Euro plug power cable, 4 pcs glass cuvette, 2 pc quartz cuvette, Instruction manual, |   |  |
| Option                         | Built in printer, professional software (Windows OS, all version) wireless lamp control, memory cards...    |   |  |





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

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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