

Spectronic Genesys 20 Visible Spectrophotometer



Compact, low-cost spectrophotometer offers all the essentials for today's busy labs

The Spectronic™ GENESYS™ 20 spectrophotometer, from Thermo Electron Corporation, is an invaluable tool for the testing of a wide variety of samples with applications ranging from educational, to environmental, to QC and more. The system is compact, easy to use, and carries the same reputation, value and ruggedness that has been the hallmark of the SPECTRONIC 20 spectrophotometer for over fifty years. This system takes you to the next level with improved performance and expanded capabilities to meet the ever-increasing demands of your lab. The same tests you typically ran with the SPECTRONIC 20 system now run faster, with more efficiency, and yield more accurate results. And for your complete peace of mind, the Spectronic GENESYS 20 system is backed by our three-year warranty.

System Benefits:

- Easy operation and reliable design for fast, accurate results
- Small size saves valuable lab space
- Low cost to stretch your budget
- Multiple-purpose capabilities to measure a wide range of analytes
- Versatile accessories to increase your productivity and to enhance your results
- Can be used with test kits available from leading test kit manufacturers

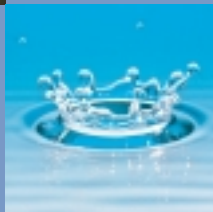
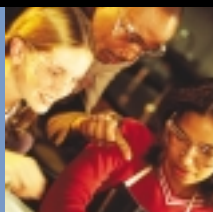
Easier Than Ever to Use

The simple operation of the Spectronic GENESYS 20 spectrophotometer makes it ideal for students and technicians. Every user can quickly get reliable results, maximizing your sample throughput.

- Only 10 keys simplify use
- 2-line, 20-character LCD readout displays data and gives easily understood instructions
- Clear messages indicate error conditions
- Read concentration directly – enter a factor or use a standard

Four simple steps to measure absorbance or transmittance:

1. Select wavelength
2. Select mode
3. Insert blank and press **0 ABS/100 %T** key
4. Insert sample and observe reading



Increase Accuracy in Recording your Results

For your data output, choose either the built-in printer or external parallel printer option. Both options offer automatic recording of results, which means fewer errors in your data. Select the option that best suits your lab needs:

- Built-in, fully functional bi-directional RS-232C interface permits remote computer operation or printer link which allows you to select hardcopy or electronic recording of data
- Built-in printer port for parallel-interface printers allows you to use existing printers which saves budget funds
- Internal 20-column printer allows you to record hard copy data and saves valuable bench space

Versatile Sampling Options Boost Productivity

The Spectronic GENESYS 20 sample compartment is designed to accommodate a wide array of tubes, cuvettes, vials and ampules to handle a broad range of analytes. Use 10 mm square cuvettes, 10 mm test tubes or the SPECTRONIC 20 test tubes – they all fit in the sample cell holder provided with the instrument. There's no need to change accessories when moving from test tube to a rectangular cell – this saves you time and increases productivity.

In addition, optional "click-in" holders are available to accommodate:

- COD test tubes such as those used in the HACH COD kit; no need to transfer your reacted sample to another cell
- 1" test tubes which allow you to measure low concentration samples without reducing sample volume, and test tubes are less expensive than glass cells
- Filters or lenses – measure the absorbance or transmittance of glass or plastic samples
- Cylindrical and rectangular longpath cells up to 50 mm long for increased sensitivity in the measurement of low concentration samples
- Spacers for short pathlength cells which are ideal for the measurement of high concentration or highly absorbing samples without dilution; prevent dilution errors and save time

Spectronic GENESYS 20 Spectrophotometer

Part Number 4001 & 4004 Series

Spectral Slitwidth	8 nm
Optical System	Grating-based, 1200 lines/mm
Wavelength	
Range	325 to 1100 nm
Accuracy	± 2.0 nm
Display	20-character, 2-line LCD
Photometric	
Range	0 to 125 % Transmittance – 0.1 to 2.5 Absorbance 0 to 1999 Concentration ± 0.1 to ± 9990 Factor
Accuracy*	0.003 A from 0.0 to 0.3 A 1.0% from 0.301 A to 2.5 A
Noise (at 500 nm)	≤ 0.001 A at 0 A ≤ 0.004 A at 2 A
Drift	0.003 A/hour
Stray Radiant Energy**	< 0.1%T at 340 nm and 400 nm
Lamp Source Lifetime	Approx. 1,000 hours
Standard Interfaces	RS-232C and Centronics ports
Languages	
Display	User selectable (English, Spanish, French or German)
Printer Output	User selectable (English, Spanish, French or German)
Operator's Manual	English, Spanish, French and German
Power Requirements	100/240 V ± 10 50/60 Hz ± 10%
Dimensions	30 cm W x 33 cm D x 19 cm H (12" W x 13" D x 7" H)
Weight	4.5 kg (10 lbs)

* Measured using NIST 930D filters

** 340 and 400 nm measurements made with Spectronic Standards (#333150)

The "click-in" design of these holders means no tools are needed. Simply click the holder in place, and you are ready to go.



Expand your Capabilities with Software

Optional software packages allow you to perform a wider range of analyses. Wavelength scanning, multiple-wavelength, rate (time scanning) and standard curve analyses can easily be performed with the software. In addition, the increased data manipulation features allow you to get your results in the form you need. Choose either Spectro Pro® or VISIONlite™ software. Contact your local sales representative for assistance in selecting the software package that best meets your needs.

* VISIONlite requires a standard PC with a 32-bit Microsoft® Windows operating system (Windows 95, 98, 2000, NT or XP) and an RS232 cable.



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