

Jenway Models 6500 & 6505 Scanning Spectrophotometers



High performance split beam optics
1.8nm bandwidth
Spectral addition and subtraction
1st-4th derivative and post scan analysis
Method and results storage
Application and data storage cards

The 6500 series are multi-capability scanning spectrophotometers designed to provide the user with a high quality system which offers all the features required by a scientist to manipulate and process spectral information.

The Model 6500 Visible range unit operates at 320-1100nm.

The Model 6505 UV/Visible range unit operates at 190-1100nm.

Features include:

A customised LCD gives a clear readout of calibration data, sample data and all set-up options.

Simple keypad layout and operating protocols facilitates the setting of experimental parameters and initiating sample analysis procedures.

Graphical user interface (GUI) allows interactive control of all operating parameters. Both keypad and mouse operation are fully supported.

Multi-language capability allows screen instructions to be presented in a choice of English, French, German, Italian, Portuguese and Spanish.

Five operating ranges are available - photometrics, spectrum, kinetics, multi-wavelength and quantitation. Full kinetics capability allows, usually in conjunction with the peltier cell block, full analysis of timed reactions

Calibration curves producing non-linear results can also be accommodated using in-built software. Up to twenty data points (standards), or up to seven when using the multi-cell changer, can be determined automatically and used to construct a calibration curve. A variety of statistical methods are available to ensure a close correlation to all curve shapes.

Full scanning capability allows scan range, speed and resolution to be user adjusted and the resultant scan to be auto scaled for enhanced visibility. Peaks and valleys are labelled with wavelength and absorbance values and can be readily downloaded to the optional internal printer, to a PC or a Centronics printer. A cursor facility allows the user to interrogate specific parts of the scanned data

A versatile sample compartment is fitted to the instrument to house the full range of accessories developed for the 6500 series.

An integral printer module is available and can be supplied as a factory fitted item at the time of ordering the product or as a customer installable module.

Full interfacing capability using RS232 interfacing or an analogue output is provided as standard. Utilising the RS232 facility allows results to be down loaded via the front panel print key.

Both models incorporate a bi-directional interface allowing remote operation, calibration and interrogation by an external computer.

An automatic results log allows readings to be stored in a data file either when the print key is pressed; at a user defined set time interval or by a multiple sample assay using the 8 position cell holder. Data files have a user entered ID and can be saved in internal memory or to an external data card. Results saved in internal memory can be transferred to an external data card.

Method storage allows all user set parameters to be saved against a user identification. A method can be subsequently recalled which configures the instrument to the saved parameters. The instrument settings for a recalled method can be altered and subsequently saved against the same or a different method identification. Methods can be saved in internal memory or to an external memory card. Methods saved in internal memory can be transferred to an external data card. The instruments memory has the capacity to store a minimum of fifty methods.

Traceable calibration standards provide the on-going assurance of accuracy required by Good Laboratory Practice (G.L.P.). A user set identification number (up to 20 digits in length) is entered and will be shown on any printouts produced by the instrument. In addition, each printout will show sample number, reading, unit of measurement, the wavelength analysis and the current time and date. Scans and concentration curves stored will also be time and date stamped. The 6500 series complies fully with EEC and US directives relating to ESD/EMC emission and susceptibility.

Specification

Optics	Split beam
Wavelength range	320-1100nm (6500) / 190-1100nm (6505)
Resolution	0.1nm
Accuracy	±1.0nm
Bandwidth	1.8nm
Grating	1200 lines/mm
Transmittance range	0 to 199.9%T
Resolution	0.1%T
Accuracy	±1%T@10%T
Stray light	<0.05%T@340 & 220nm
Absorbance range	-0.300 to 3.000A
Resolution	0.001A
Accuracy	0.005A@1.0A
Concentration range	-300 to 9999Conc (resolution dependent)
Resolution	0.001 / 0.01 / 0.1 / 1
Units	ppb, ppm, µg/l, mg/l, M, %, blank
Factor	0.000 to 9999.99
Lamp changeover	320-390nm
Photometric noise levels	<0.001A@0A
Photometric stability	<0.001A/hr
Readout	Custom graphics LCD
Outputs	Analogue / RS232 serial port
Light source	Tungsten halogen (Visible), Deuterium (UV/Visible)
Input voltage	115/230V a.c. -20% +10% 50/60Hz
Input power	200VA
Size	520(w) x 330(d) x 180(h) mm
Weight	15Kg

Accessories

641 001 Printer (packed)
641 002 Printer (factory fitted)
642 001 Sipper pump (packed)
642 002 Sipper pump (factory fitted)
643 001 Peltier Heated cell system, European, comprising heated cell block and external power supply module (packed)
643 002 Peltier Heated cell system, European, comprising heated cell block and external power supply module (factory fitted)
643 031 Peltier Heated cell system, US 110V, comprising heated cell block and external power supply module (packed)
643 032 Peltier Heated cell system, US 110V, comprising heated cell block and external power supply module (factory fitted)
647 001 Temperature controlled sipper system, 230V version (packed)
647 002 Temperature controlled sipper system, 230V version (factory fitted)
647 031 Temperature controlled sipper system, 110V version (packed)
647 032 Temperature controlled sipper system, 110V version (factory fitted)
644 001 8 position motorised multi-cell changer (packed)
644 002 8 position motorised multi-cell changer (factory fitted)
644 003 8 cell rack for 10mm cells
644 103 8 cell rack for 40mm cells
644 203 8 cell rack for 50mm cells
645 001 Vacuum pump (packed)
645 002 Vacuum pump (factory fitted)
648 001 Water heated single cell block
037 301 External Peltier Cooler for use with 648 001, 4-50°C±0.2°, 230V
037 302 External Peltier Cooler for use with 648 001, 4-50°C±0.2°, 110V
037 201 Water (refridgerant) Circulator for use with 648 001, -20 to +50°C, 230V
037 202 Water (refridgerant) Circulator for use with 648 001, -20 to +50°C, 110V
649 001 8 cell water jacketed cell holder When using with 6400 series item 644 001 is also required
646 001 Universal test tube holder (packed)
646 002 Universal test tube holder (factory fitted)
630 005 Universal cell holder (10 to 100mm path length)
035 088 Visible range calibration standards set
035 091 UV/Visible range calibration standards set
542 009 Interface cable kit
640 133 Dust cover
642 100 Sipper pump tubing kit
645 100 Vacuum pump tubing kit
012 075 Tungsten lamp - qty 1
640 508 Deuterium lamp (with plug fitted)
060 084 Pack of 100 (10mm) plastic cuvettes (square)
060 087 Pack of 100 (10mm) plastic (1ml) semi-micro cuvettes
060 229 Pack of 500 (10mm) plastic cuvettes (square)
060 231 UV semi-micro plastic cuvettes (1.6ml) - pack 100
035 026 Pour in/suck out cell
060 331 12x75mm glass test tubes - pack 100
060 179 12x75mm plastic test tubes - pack 100
060 335 24x150mm glass test tubes - pack 50
035 025 Visible flow-through cell 1.8ml

035 045 Visible flow-through cell 80µl
035 044 UV flow-through cell 1.8ml
035 047 UV flow-through cell 80µl
035 027 Visible (glass) 10mm path length cell
035 028 UV (quartz) 10mm path length cell
035 086 Visible (glass) 20mm path length cell
035 029 Visible (glass) 40mm path length cell
035 087 Visible (glass) 50mm path length cell
035 079 Visible (glass) 100mm path length cell
035 078 Plastic 100mm path length cell - pack 100
035 123 Micro (500µl) glass cuvette
035 124 Ultra-micro (50µl) quartz cuvette
035 125 Micro (500µl) quartz cuvette
035 126 Semi-micro (1ml) glass cuvette
035 127 Semi-micro (1ml) quartz cuvette
035 128 Flow-through (450µl) glass cuvette
035 129 Flow-through (450µl) quartz cuvette
035 130 Flow-through (750µl) glass cuvette
035 131 Flow-through (750µl) quartz cuvette