



68 Series

68 Series UV/Visible Double Beam Spectrophotometer

- Double beam spectrophotometer with highly stable optics
- 1.5nm spectral bandwidth
- Jenway Flight Deck software included as standard

With the 6800 Jenway introduces the first double beam spectrophotometer to the range. The highly stable optics and 1.5nm spectral bandwidth ensures high resolution and accuracy on every measurement. The Jenway Flight Deck software offers modes for all common measurement methods: photometrics and multi-wavelength, spectrum scanning, time scan and kinetics, quantitation, DNA/RNA and protein measurements. With extensive post-measurement tools and easy export to Excel® the 6800 ensures that all results are presented exactly to your requirements.

Technical Specification

Wavelength

Range	190 to 1100nm
Resolution	0.1nm
Accuracy	±0.3nm
Repeatability	±0.1nm
Spectral bandwidth	1.5nm

Photometrics

Transmittance	0 to 600%T
Absorbance	-3.0000 to 3.0000A
Accuracy	±0.3%T ±0.002A at 0 to 0.5A, ±0.004A at 0.5 to 1.0A, ±0.008A at 1.0 to 2.0A
Reproducibility	±0.15%T ±0.001A at 0 to 0.5A, ±0.002A at 0.5 to 1.0A, ±0.004A at 1.0 to 2.0A
Resolution	0.01%T, 0.0001A
Stray light	<0.05%T at 220 and 340nm
Noise	0.0003A
Stability	±0.0003A/h after 2h

Multi-wavelength

Data points	Up to 6 wavelengths
Calculations	Ratio, difference, formulae with factors

Spectrum

Range	Any range between 190 and 1100nm
Scan speed	10 to 3600nm/min (8 speed settings)
Scan interval	0.5, 1, 2 or 5nm, dependent on scan speed
Analysis	Auto peaks and valleys, zoom, addition, subtraction, peak ratios, smoothing, area under curve, wavelength table, derivatives, overlay

Time scan and Kinetics

Time limits	30 to 99999 seconds
Analysis	Slope and formula of line of best fit between any two points

Quantitation

Data points	Up to 3 wavelengths
Concentration range	0-99999
Calibration	Blank with standards or factor

DNA/RNA and Protein

DNA/RNA	Ratio, concentration, A_{320} correction
Protein	Bradford, Lowry, BCA, direct UV

Other

Light source	Tungsten halogen and Deuterium lamps
Lamp changeover	325 to 370nm selectable
Outputs	RS232
Operating system:	CPU: 1GHz Memory: 256Mb Hard disk: 500Mb
Power	200VA
Size (w x d x h)	540 x 560 x 235mm
Weight	27kg

Spectrophotometers

68 Series UV/Visible Double Beam Spectrophotometer

Ordering Information

Part Code	Description
680-SC	6800 double beam spectrophotometer supplied with single cuvette holders (for 10 x 10mm cuvettes in sample and reference), Flight Deck PC software on CD ROM and interconnection cable. (PC required but not supplied - cuvettes not supplied)
680-MC	6800 double beam spectrophotometer supplied with micro-cuvette holders (for 10 x 10mm cuvettes in sample and reference), Flight Deck PC software on CD ROM and interconnection cable. (PC required but not supplied - cuvettes not supplied)
680-LC	6800 double beam spectrophotometer supplied with long path length cuvette holders (for 10, 20, 30, 40, 50 or 100mm path length cuvettes in sample and reference), Flight Deck PC software on CD ROM and interconnection cable. (PC required but not supplied - cuvettes not supplied)
680-TC	6800 double beam spectrophotometer supplied with water thermostated single cuvette holders (for 10 x 10mm cuvettes in sample and reference), Flight Deck PC software on CD ROM and interconnection cable. (PC required but not supplied - temperature controlled water circulator required but not supplied, cuvettes not supplied)

*PC not supplied

6800 Series Accessories

Ordering Information

Part Code	Description
680 081	Single 10 x 10mm cell holder for standard measurements
680 031	Micro cell holder for medical and biochemical applications where sample volumes are strictly limited, allows measurements of sample volumes down to 50µl
680 131	Water heated cell holder for use where sample temperature is critical. This allows absolute temperature control from ambient to 40°C
680 101	Film holder used to record measurements of filters and film-like samples
680 061	Glass filter holder allows the measurement of solid sheet samples for thickness from 0.5mm up to 5mm
680 111	Rectangular long path cell holder, which can accept cell lengths of 10, 20, 30, 40, 50 and 100mm
068 020	Tungsten halogen lamp (6800)
068 021	Deuterium lamp (6800)

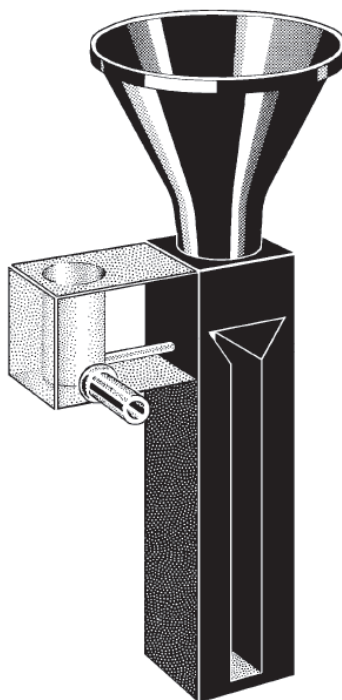


10x10mm Cell Holder



Cuvettes

Disposable Cuvettes and Test Tubes (10mm path length unless stated)



Part Code	Description
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060 084	Pack of 100 plastic cuvettes, visible wavelengths only, 2.4 to 4.5ml fill volume
060 229	Pack of 500 plastic cuvettes (5 boxes of 060 084)
060 087	Pack of 100 plastic cuvettes, visible wavelengths only, 1.5 to 3.0ml fill volume
060 230	Pack of 100 plastic cuvettes, UV and visible wavelengths, 2.5 to 4.5ml fill volume
060 232	Pack of 500 plastic cuvettes (5 boxes of 060 230)
060 231	Pack of 100 UV plastic cuvettes, 1.5 to 3.0ml fill volume
035 143	Pack of 100 plastic cuvettes, UV and visible wavelengths, 70µl to 1.5ml fill volume (use with micro cuvette holder)
060 331	Pack of 100 glass test tubes (12 x 75mm)
060 179	Pack of 100 plastic test tubes (12 x 75mm)
060 335	Pack of 50 glass test tubes (24 x 150mm)

Glass and Quartz Cuvettes (10mm path length unless stated)

Part Code	Description
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035 027	Visible (glass) 10mm path length cuvette
035 086	Visible (glass) 20mm path length cuvette
035 029	Visible (glass) 40mm path length cuvette
035 087	Visible (glass) 50mm path length cuvette
035 079	Visible (glass) 100mm path length cuvette
035 123	Visible (glass) micro (500µl) cuvette
035 126	Visible (glass) semi-micro (1ml) cuvette
035 028	UV (quartz) cuvette (2.0 to 3.5ml)
035 124	UV (quartz) ultra micro (50µl) cuvette
035 125	UV (quartz) micro (500µl) cuvette
035 127	UV (quartz) semi-micro (1ml) cuvette
035 138	UV (quartz) ultra-micro (100µl) cuvette
035 139	UV (quartz) ultra-micro (200µl) cuvette
035 249	UV (quartz) ultra-micro (20µl) cuvette



Flow Cells (10mm path length unless stated)

Part Code	Description
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035 026	Pour in/Suck out cell
035 025	Visible (glass) flow-through cell 1.8ml
035 045	Visible (glass) flow-through cell 80µl
035 044	UV (quartz) flow-through cell 1.8ml
035 047	UV (quartz) flow-through cell 80µl

Spectrophotometers

TrayCell

- Ideal for DNA, RNA and protein measurements
- Sample volumes as low as 0.7µl
- Sample concentration range from 25 to 4250µg/ml
- Sample is simply wiped away after the measurements, making the TrayCell quick and easy to use
- Prevents dilution and pipetting errors
- Fits all standard 10 x 10mm cuvette holders

The TrayCell is a fibre optic cuvette which can be used with as little as 0.7µl of sample. The cuvette has two caps which give path lengths of either 1mm or 0.2mm, thus creating a 'virtual dilution' of 1:10 or 1:50 of the sample when compared to a measurement with a standard 10 mm cuvette

Technical Specification

Light Path	0.2mm or 1mm
Error of light path	± 0.02mm
Volume	0.7-5µl
Wavelength range	190 to 1100nm
Maximum temperature	50°C

Ordering Information

Part Code	Description
035 262	Tray Cell for ultra-micro sample volumes from 0.7 to 5 µl compatible with Genova, 6705 and 6715 spectrophotometers, supplied complete with caps for 1mm and 0.2mm path length operation
035 263	Replacement 1mm path length cap for TrayCell
035 264	Replacement 0.2mm path length cap for TrayCell

