

## 67 Series Visible and UV/Visible Scanning Spectrophotometers

- Colour touch screen display
- High quality, sealed split beam optics for optimum photometric performance
- Secure multi-user operation
- Save to SD/USB memory cards
- Enhanced productivity
- Extensive range of accessories for flexibility and improve productivity

All three instruments have modes for photometrics, spectrum scanning, multi-wavelength analysis, kinetics and quantitation, giving direct concentration results against single or multi-point calibrations. With extensive post measurement tools to ensure results are presented exactly to each users requirements the 67 series also offers significant advances in data portability.

Together, the touch screen and colour display give the fastest, most flexible instrument interface possible. Where fine cursor control is required, using the QWheel™ makes the task easy and precise.

Jenway have developed Secure Multi User Operation for when instruments are shared by a number of users, so access to the instrument functions is controlled through a secure log-in procedure. For maximum security PIN codes can be allocated to individuals, groups or departments and to further increase flexibility each method can be given three levels of security:

Public	Access is free to all users.
Read only	Methods can be accessed by all users, but only modified by the originator.
Personal	Method can only be accessed by the logged in user

The high capacity internal memory of the 67 series can be configured from 256MB, enabling over 1000 methods and results to be stored, up to 2GB, which stores more than 10,000 methods and results.

Removable SD or SD/USB memory cards further increases the flexibility and data transfer and enables the direct transfer of results to a PC via a USB port. Here all data can be viewed, exported, saved or printed for generating reports and standard operating procedures. Copying the SD card to the instrument's internal memory enables the easy cloning of multiple instruments, ensuring common laboratory practice and speeding set-up in busy teaching establishments.

QWheel is a registered trademark of Quantum Research



6705

# Spectrophotometers

## 6700, 6705 and 6715 Visible and UV/visible Spectrophotometers

### Technical Specification

#### Wavelength

Range	320 to 1100nm (6700) 190 to 1100nm (6705, 6715)
Resolution	0.1nm
Accuracy	±1.0nm
Repeatability	±0.2nm
Spectral bandwidth	4nm (6700, 6705) 1.5nm (6715)

#### Photometrics

Transmittance	0 to 199.9%T
Absorbance	-0.300 to 3.000A
Accuracy	±0.005A at 1.0A
Resolution	0.1%T, 0.001A
Stray light	<0.1%T at 340nm (6700) <0.05% at 220nm (6705, 6715)
Noise	<0.001 at 0A, <0.002 at 2A at 340nm
Stability	<0.001A/h after warm-up

#### Quantitation

Range	-99999 to +99999
Resolution	Selectable 1, 0.1, 0.01 or 0.001
Calibration	Up to 20 with 5 replicates of each
Units	mEq/l, ppm, mg/l, g/l, %, µg/ml, mg/ml, g/dl, mg/dl, µg/l, ng/l, µg/dl, M, mM, µM, U/l, mU/l, U/ml, blank
Curve fit algorithms	Linear, quadratic and cubic functions

#### Multi-wavelength

Data points	Up to 4 wavelengths
Calculations	Ratio, difference, formulae with factors

#### Kinetics

Time limits	0 to 9999 seconds
Calibration	Standard or factor
Analysis	Curve details with mean rate of change plus formula of line of best fit

#### Spectrum

Range	Any range between 320 (6700) or 190 (6705, 6715) and 1100nm
Scan speed	1500nm/min
Scan interval	0.1nm
Analysis	Auto peaks and valleys, zoom, addition, subtraction, peak ratios, smoothing, area under curve, wavelength table, derivatives, analysis points, overlay

#### Other

Light source	Tungsten halogen lamp (6700) Xenon lamp (6705, 6715)
Configuration	Secure multi-user and free access
Number of users	10 users + supervisor
Methods/results memory	>1000 on internal flash memory or removable media
Removable media	MM/SD memory card or SD/USB memory card
Outputs	USB, Centronics, Analogue
Size (w x d x h)	490 x 390 x 220mm
Weight	7.5kg



6700



67 Series

## 6700, 6705 and 6715 Visible and UV/visible Spectrophotometers



Sample Holders



Eight Position Cuvette Holder



Modules

### Ordering Information

Part Code	Description
670 0B0	6700 (320-1100nm) fitted with a single 10 x 10 mm cuvette holder
670 0BP	6700 (320-1100nm) fitted with a single 10 x 10 mm cuvette holder and internal thermal 40-column printer
670 0A0	6700 (320-1100nm) fitted with an automated eight-position cuvette holder
670 0AP	6700 (320-1100nm) fitted with an automated eight-position cuvette holder and internal thermal 40-column printer
670 5B0	6705 (190-1100nm) fitted with a single 10 x 10 mm cuvette holder
670 5BP	6705 (190-1100nm) fitted with a single 10 x 10 mm cuvette holder and internal thermal 40-column printer
670 5A0	6705 (190-1100nm) fitted with an automated eight-position cuvette holder
670 5AP	6705 (190-1100nm) fitted with an automated eight-position cuvette holder and internal thermal 40-column printer
671 5B0	6715 (190-1100nm) fitted with a single 10 x 10 mm cuvette holder
671 5BP	6715 (190-1100nm) fitted with a single 10 x 10 mm cuvette holder and internal thermal 40-column printer
671 5A0	6715 (190-1100nm) fitted with an automated eight-position cuvette holder
671 5AP	6715 (190-1100nm) fitted with an automated eight-position cuvette holder and internal thermal 40-column printer

NOTE: All 67 Series spectrophotometers come supplied with 1GB of internal memory, 1GB\* SD/USB memory card, 100 disposable cuvettes, instruction manual, power cable and PC software on CD ROM with interface cable.

\* Subject to change

# Spectrophotometers

## 67 Series Accessories

The 67 series has been specifically designed to enhance productivity and simply adding an accessory automatically sets the instrument operating parameters. The automated eight position and temperature controlled six position cell holders are the key to improved productivity. Using the dedicated Automation option up to seven samples can be measured sequentially with all results saved or printed automatically.

The Peltier controlled cuvette holder allows precise control of temperature control in the range of 20 to 50°C to a resolution of 0.1°C. A programmable sipper pump enables controlled volumes to be injected into micro and standard flow-through cuvettes. For sensitive applications a combined peltier sipper module is also available. A full range of passive sample holders can also be easily fitted.

## Cell Holders

Part Code	Description
660 801	Single cell sample chamber module fitted with 10 x 10mm cuvette holder (630 204)
660 401	Sample chamber with automatic eight-cell changer module fitted
660 403	Additional carousel for automatic eight-cell changer (for use with 660 401)
660 503	Additional carousel for water heated automatic six-cell changer (for use with 660 501)
660 901	Single cell sample chamber module fitted with 10mm cuvette/16/24mm diameter tube holder (as Aquanova 637 071)
661 001	Single cell sample chamber module fitted with 10 x 100mm cuvette holder (630 005)
661 101	Single cell sample chamber module fitted with micro cuvette holder with reduced aperture (630 304)
630 204	10mm path length cuvette holder
637 071	Aquanova cell holder (for 10mm square cuvettes, 16 and 24mm diameter tubes)
630 005	10 to 100mm path length cuvette holder
630 304	Micro-cuvette holder with reduced aperture

## Heated Cell and Sipper Pump Options

Part Code	Description
648 001	Water heated single cuvette holder
660 501	Sample chamber with water heated automatic six-cell changer module fitted
660 201	Sample chamber with sipper module fitted
660 301	Sample chamber with Peltier module fitted
660 701	Sample chamber with sipper/Peltier module fitted
661 201	Single cell sample chamber module fitted with water heated cuvette holder (648 001)*

## Printers and PC Software

Part Code	Description
660 101	Internal printer (packed)
037 702	Paper roll for thermal printer
019 130	256MB SD card for external memory
019 131	512MB SD card for external memory
019 132	1GB SD card for external memory
019 133	2GB SD card for external memory
019 135	1GB SD/USB card for external memory
019 136	2GB SD/USB card for external memory

## Miscellaneous

Part Code	Description
660 001	Dust cover
060 422	Moulded cuvette rack for 16 10x10mm cuvettes
035 088	Visible range calibration standards (all models)
035 091	UV/Visible calibration standards (6705/6715)
012 075	Tungsten halogen lamp
012 146	Xenon lamp module