

JENWAY

67 Series Spectrophotometers





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**67 SERIES SPECTROPHOTOMETERS
NOW WITH FULL 3
YEAR WARRANTY
INCLUDING LAMP**

Your Spectrophotometer

- Secure multi-user operation
- Colour touch screen display
- Save to SD/USB memory cards
- Protect and track data
- Enhance productivity

...Everyone's Spectrophotometer



The Jenway 67 Series Spectrophotometers are built on a solid foundation of high quality, sealed optics for optimum photometric performance.

Their cutting-edge user interface delivers the intuitive operation you have come to expect from Jenway instruments; while their operator-focus makes this advanced range of spectrophotometers fit to meet the demands of your laboratory, today and into the future.

With this series Jenway introduce Secure Multi-User Operation to protect the work of each designated user and enable full traceability of results. The range of plug-in accessories maintain flexibility and improve productivity.

Their high capacity internal, flash memory is complemented by external SD/USB memory cards that enable the 67 Series to transfer your spectrophotometer to another instrument, or to a computer for off-line working. Cloning a group of instruments with the same settings has never been easier.

Model 6700 covers the visible wavelength range from 320-1100nm, with a 4nm spectral bandwidth using a tungsten halogen light source.

Model 6705 covers the UV/visible wavelength range from 190-1100nm, with a 4nm spectral bandwidth using a pulsed xenon light source.

Model 6715 also covers the UV/visible wavelength range from 190-1100nm with a pulsed xenon light source. The enhanced 1.5nm spectral bandwidth of this model meets EP/USP requirements.

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 to your requirements the 67 Series also offers significant advances in data portability.

cutting-edge user interface

- Colour LCD with touch screen interface
- High capacity internal memory
- Sealed QWheel™ for cursor control
- Removable SD or SD/USB memory card

The durability of touch screen displays is proven daily by their use in commercial and domestic situations. With an expected life of 10 million cycles, the touch screen used on the 67 Series Spectrophotometers will last more than a lifetime. Impervious to most solvents, chemicals, foodstuffs and cosmetics, while sensitive to a gloved hand or stylus, this interface will be at home even in the most arduous environments.

A top quality colour TFT LCD is used to present results and graphics in a clear, unambiguous manner. Together, the touch screen and colour display work in harmony to give the fastest, most flexible instrument interface possible, while ensuring the operation of these units sets a benchmark for ease-of-use.



Where accurate cursor control is required - for instance, when selecting a data point on a spectrum scan – using the QWheel™ makes fine control easy and precise. Familiar to users of consumer electronics, this touch sensitive, sealed control forges the bond between operator and display.



The high capacity internal memory can be configured from 256MB, enabling over 1000 methods and results to be stored up to 2GB, storing more than 10,000 methods and results. This is complemented by similar capacities on the removable SD or SD/USB memory card.



secure multi-user operation

- Methods, data and settings secured by PIN codes
- Up to ten designated users + supervisor
- Tag methods with security levels
- Take away 'your spectro' on a memory card



Jenway has developed Secure Multi-User Operation for the many instruments that have to be shared by a number of users. When enabled, access to the instrument functions is controlled through a secure log-in procedure.

So that results can always be obtained (i.e. in an emergency, out of hours etc.) free operation is available at any time without access to stored data.

For maximum security PIN codes can be allocated to individuals, groups, laboratories or departments, restricting individuals' access to specific tests.

For further flexibility each method can be given three levels of security: Personal - where only the originator can access it: Public - giving access to all users: Read Only - methods can be accessed by all users but can only be modified by the originator.

Copying the SD card to the internal memory enables the easy cloning of multiple instruments with the same settings, ensuring common practice in related labs and speeding set-up in busy teaching establishments.

Saving your spectrophotometer to an SD/USB memory card enables the direct transfer of your work to a PC via a USB port. Data can be viewed, exported, saved or printed for generating reports and operating procedures.

sampling simplicity

- Automatic recognition of plug-in modules
- Temperature controlled cell holders
- Programmable sipper pump
- Single cuvette and test tube holders



The 67 Series spectrophotometers have been designed to enhance productivity while remaining flexible and adaptable.

Simply sliding in a new sampling accessory, that will automatically be recognised at power up, sets the instrument operating parameters and options to match its new functionality.

For precise control of sample temperature a peltier controlled cuvette holder is available in a compact sample chamber module, with no external components required. Temperature control to 0.1°C resolution from 20 to 50°C is possible.

A programmable sipper pump can also be fitted, enabling controlled sample volumes to be injected into micro and standard flow-through cuvettes. Air segmentation and rinse cycles can also be programmed for sensitive applications.

A peltier sipper module incorporates the features and functions of both these individual accessories. A full range of passive sample holders can also be easily fitted. These include the adjustable path length cuvette holder, (10 to 100mm), the universal test tube holder and single water heated cuvette holders.



Sampling accessories include (l to r) single cuvette holder, automatic eight position cuvette holder, sipper pump and peltier/sipper.

eight-cell and six-cell automation

- Auto measure / save / print
- Store multiple sample blanks
- Cuvette matching
- Parallel kinetics measurement

The automated eight and six-position cell holder accessories are the key to improved productivity in all modes of operation. Both accept standard 10mm path-length cuvettes while the six-position accessory has the added benefit of a water jacket for sample temperature control via an external circulating water bath.

Simply select the Automation option when creating a method, then choose to measure up to seven samples sequentially. The results will be saved or printed automatically while you prepare the next batch of samples. Up to 7000 samples can be measured in this way using multiple carousels, with just a simple prompt to swap them over as each set of measurements is completed.

Choose the multiple blanks option for methods that require individual sample blanks, for example; where turbidity, background colour or other interferences vary from sample to sample. Here the spectrophotometer will run a blank cycle and store the value for each position. The samples can then be prepared and the measure cycle run, when the stored blanks will be subtracted – ensuring the most accurate, corrected results.

For those detailed spectrum scans that would normally require expensive matched cuvettes, individual baselines can be stored for each cuvette fitted into the eight or six position cell holder, enabling the use of lower cost, un-matched cuvettes for most applications.

Multiple kinetics measurements can also be run in parallel by automatically staggering the time of measurement for each sample fitted in the cuvette changer.



Eight-position cell holder



Six-position cell holder



technical specification

| Specification | 6700 | 6705 | 6715 |
|--|--|--|--|
| Light Source | Tungsten halogen | Xenon | Xenon |
| Optics | Sealed, MgF Coated, Single Beam | Sealed, MgF Coated, Split Beam | Sealed, MgF Coated, Split Beam |
| Spectral Bandwidth | 4nm | 4nm | 1.5nm |
| Stray Light | <0.05%T at 340nm | <0.05%T at 220nm | <0.05%T at 220nm |
| Wavelength Range (nm) | 320 to 1100 | 190 to 1100 | 190 to 1100 |
| Wavelength Resolution (nm) | 0.1 | 0.1 | 0.1 |
| Wavelength Accuracy (nm) | ±1.0nm | ±1.0nm | ±1.0nm |
| Wavelength Repeatability (nm) | ±0.2nm | ±0.2nm | ±0.1nm |
| Photometric Ranges | -0.300 to 3.000A & 0 to 199.9%T | -0.300 to 3.000A & 0 to 199.9%T | -0.300 to 3.000A & 0 to 199.9%T |
| Photometric Resolution | 0.001A & 0.1%T | 0.001A & 0.1%T | 0.001A & 0.1%T |
| Photometric Accuracy | ±0.005 at 1A | ±0.005 at 1A | ±0.005 at 1A |
| Photometric Stability | <0.001A per Hour | <0.001A per Hour | <0.001A per Hour |
| Concentration Range | Up to 99999 | Up to 99999 | Up to 99999 |
| No of Standards | 20 with up to 5 replicates of each | 20 with up to 5 replicates of each | 20 with up to 5 replicates of each |
| Curve Fit Algorithms | Linear, Quadratic and Cubic Functions | Linear, Quadratic and Cubic Functions | Linear, Quadratic and Cubic Functions |
| Multi-wavelength Data Points Calculations | Up to 4 Wavelengths Difference and ratio | Up to 4 Wavelengths Difference and ratio | Up to 4 Wavelengths Difference and ratio |
| Kinetics Time Limits | 0 to 9999 Secs | 0 to 9999 Secs | 0 to 9999 Secs |
| Kinetics Calibration | Standard or factor | Standard or factor | Standard or factor |
| Scan Speed | 1500nm/minute at 0.1nm data steps | 1500nm/minute at 0.1nm data steps | 1500nm/minute at 0.1nm data steps |
| Post Scan Analysis | Peak/Valley pick, Area, Zoom, Wavelength Table, Overlays, Derivatives, Smoothing | Peak/Valley pick, Area, Zoom, Wavelength Table, Overlays, Derivatives, Smoothing | Peak/Valley pick, Area, Zoom, Wavelength Table, Overlays, Derivatives, Smoothing |
| Configuration | Secure Multi-User or Free access | Secure Multi-User or Free access | Secure Multi-User or Free access |
| No of Users | 10 + Supervisor | 10 + Supervisor | 10 + Supervisor |
| No of Methods | >1000 at 256MB to >10000 at 2GB internal memory | >1000 at 256MB to >10000 at 2GB internal memory | >1000 at 256MB to >10000 at 2GB internal memory |
| Results Storage | >1000 at 256MB to >10000 at 2GB internal memory | >1000 at 256MB to >10000 at 2GB internal memory | >1000 at 256MB to >10000 at 2GB internal memory |
| File Output | CSV or BMP | CSV or BMP | CSV or BMP |
| Removable Media | SD, SD/USB & MM memory card options from 256MB to 2GB | SD, SD/USB & MM memory card options from 256MB to 2GB | SD, SD/USB & MM memory card options from 256MB to 2GB |
| Interface | USB, Centronics, Analogue | USB, Centronics, Analogue | USB, Centronics, Analogue |
| PC Software | Supplied on CD ROM with USB Interface Cable | Supplied on CD ROM with USB Interface Cable | Supplied on CD ROM with USB Interface Cable |
| Mains Supply | 100 to 230V ac 50 or 60Hz | 100 to 230V ac 50 or 60Hz | 100 to 230V ac 50 or 60Hz |
| Size | 490 x 390 x 220 mm | 490 x 390 x 220 mm | 490 x 390 x 220 mm |
| Weight | 9.0Kg (14Kg packed) | 9.0Kg (14Kg packed) | 9.0Kg (14Kg packed) |



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