

Spectrophotometers

Genova Plus

JENWAY

Dedicated life science spectrophotometer based on the Jenway 7315.

- ◆ 5nm spectral bandwidth
- ◆ Pre-programmed for DNA/RNA analysis, protein assay determination, cell density measurement, purity scan, multi-wavelength and concentration measurement modes
- ◆ GLP compliant, with logging of time, date and user i.d., instrument and method locks
- ◆ USB output port and USB flash drive supplied for results storage, analogue and RS232 outputs for connection to external recorder or user's PC
- ◆ Accessory internal printer module available

Nucleic acid determination

Pre-programmed with methods for the measurement of ssDNA, dsDNA, RNA and oligonucleotide concentration at wavelengths 260, 280 and 230nm, with optional concentration at 320nm. This mode has the 260/280nm and 260/230nm ratios pre-programmed, as well as a variable ratio option enabling up to 3 wavelengths to be entered in addition to the correction wavelength. A dilution option is also available to calculate the original concentration of diluted samples.

Protein assay determination

Pre-programmed for Bradford, Lowry, Biuret, Bicinchoninic acid (BCA) and Direct UV assays. Allows up to 12 standards, with 3 replicates of each standard, to be measured to create the standard curve. Replicate measurements can be set to automatically perform 3 readings sequentially from the same sample, or to enable a single measurement to be undertaken on three separate samples of the same concentration.

Cell density measurement mode

Bacterial cell cultures are routinely grown until optical clarity reaches 0.4 at 600nm, indicating the optimum cell number for harvesting. Measurements to monitor cell growth can be performed at any user-selected wavelength.

Purity scan measurement mode

For checking nucleic acid purity, particularly where impurities may be present at 230nm but undetectable using the 260/280nm ratio measurement method. Full wavelength range scanning available to identify any distorted peaks.

Multi-wavelength measurement mode

4 alternative wavelengths can be used for sample measurements with ratio calculations and formulae with various factors to calculate concentration.

Concentration measurement mode

Performs simple absorbance, % transmittance and concentration calculations with choice of up to 27 concentration units.



SJ372-80

Catalogue No.	SJ372-80	
Model	Genova Plus	
Wavelength range	nm	198 to 1000
Bandwidth	nm	5
Wavelength accuracy	nm	±2
Light source	Pulsed xenon	
Repeatability	nm	±0.5
Photometric ranges	Transmittance	0 to 199.9% x 0.1% resolution, ±1% accuracy
	Absorbance	-0.300 to 2.500A x 0.100A resolution, ±0.01A accuracy (at 1.000)
Concentration modes	range	-300 to 9999
	resolution	selectable 1/0.1/0.01/0.001
	calibration factor	blank and 1 factor/standard 1 to 10000
	standard	1 to 1000
Quantitation modes	range	-300 to 9999
	resolution	selectable 1/0.1/0.01/0.001
	calibration curve fit	blank and up to 12 standards quadratic, linear interpolate and through zero
	analysis	
Kinetics modes	time, secs	2 to 9999
	calibration	blank and 1 factor/standard
	resolution	selectable 1/0.1/0.01/0.001
	analysis	conc. rate of change, initial and final absorption or % transmission
Scanning modes	interval, nm	selectable 1/2/5
	analysis	absorption, % T, peaks and valleys
Outputs	USB, analogue, RS232	
Dimensions H x W x D	mm	220 x 275 x 400
Weight	kg	6

Genova Plus Spectrophotometer, Jenway

As described. Supplied with micro-cuvette holder, USB memory stick and universal power supply for 100-240V 50/60Hz single phase supplies.

SJ372-80 Genova Plus

Accessories

- SJ364-18** Cell holder, adjustable, for 20 to 100mm cells
- SJ373-14** Xenon lamp module for SJ372-80
- SJ373-20** Cuvettes, micro, pack of 100
- SJ373-25** Tray cell for ultra-micro (5µl down to 0.7µl) volume samples. Fibre optic cuvette with two caps giving 1mm or 0.2mm path lengths, creating a "virtual dilution" of 1:10 or 1:50 compared to standard 10mm cuvette
- SJ377-94** Internal printer module (user fittable)