



# Spectrophotometers





# The 74 series

Single-beam standard and Nano spectrophotometers. Visible and UV/visible.

# Together, making light work

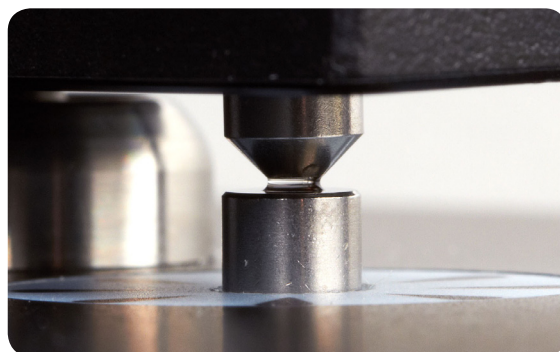


Since 1972

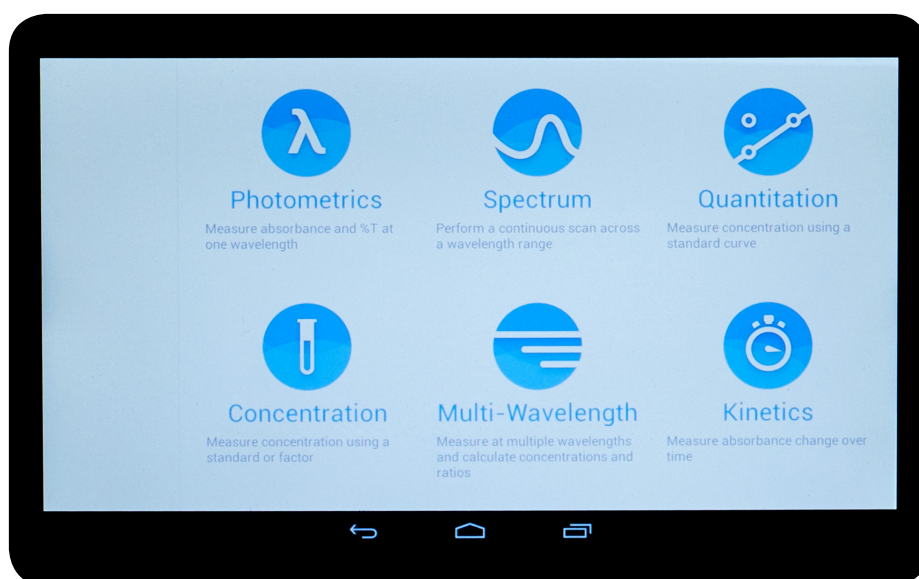
## *Versatile Sample Chamber*



## *Precision Nano Read-head*



## *Intuitive 7" HD Touchscreen*



## *Measurement Modes*

**All variants:** photometrics, full spectrum scan, quantitation, concentration, multi-wavelength and kinetics.

**Nano variant:** also includes, nucleic acid and protein methods.



# The 76 series

Split-beam spectrophotometers. UV/visible.



# Intuitive Cloud-enabled technology



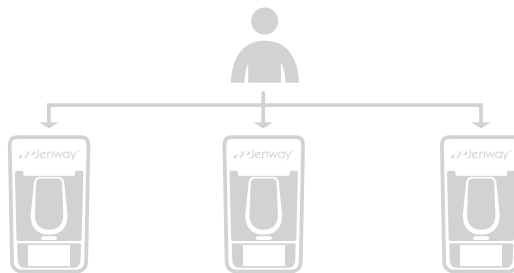
*Securely upload and share data*



*Complimentary and unlimited storage*



*Protocols and data are only a click away*



*Simultaneously manage multiple devices*



*PC, Tablet and Smartphone*



*“CPLive connectivity will significantly simplify your workflows by enabling you to securely archive & share your data, easily scale your research, quickly add future devices and intuitively manage multiple machines – all with a simple touch of a button”*

Neil Pomeroy, New Product Development Director

# Technical Specifications

		7410	7415	7615
Wavelength	Range	320 to 1000nm	198 to 1000nm	198 to 1000nm
	Accuracy	±2.0nm	±2.0nm	±2.0nm
	Repeatability	± 1.0nm	± 1.0nm	± 0.5nm
	Spectral bandwidth	5.0nm	5.0nm	1.5nm
Photometrics	Transmittance	0 to 199.9%	0 to 199.9%	0 to 199.9%
	Absorbance	-0.300 to 2.500Abs	-0.300 to 2.500Abs	-0.300 to 2.500Abs
	Accuracy	± 1%T, ± 0.010Abs at 1.000Abs	± 1%T, ± 0.010Abs at 1.000Abs	± 1%T, ± 0.010Abs at 1.000Abs
	Stray light	<0.5% at 340nm	<0.5% at 340nm and 220nm	<0.5% at 340nm and 220nm
Concentration / Quantitation / Kinetics	Curve fit algorithms	Linear through zero, Linear, Quadratic through zero and Quadratic	Linear through zero, Linear, Quadratic through zero and Quadratic	Linear through zero, Linear, Quadratic through zero and Quadratic
	Measurement time	2 to 9999 seconds	2 to 9999 seconds	2 to 9999 seconds
	Calibration	Blank with a single standard or factor	Blank with a single standard or factor	Blank with a single standard or factor
	Display	Graphical	Graphical	Graphical
	Analysis	Concentration, rate of change, initial and final absorbance / %T	Concentration, rate of change, initial and final absorbance / %T	Concentration, rate of change, initial and final absorbance / %T
Spectrum	Range	320 to 1000nm	198 to 1000nm	198 to 1000nm
	Scan interval	Selectable 1, 2, 5 or 10nm	Selectable 1, 2, 5 or 10nm	Selectable 1, 2, 5 or 10nm
	Analysis	Absorbance or % transmittance and peaks and valleys and area under curve	Absorbance or % transmittance and peaks and valleys and area under curve	Absorbance or % transmittance and peaks and valleys and area under curve
Other	Light source	Tungsten halogen lamp	Xenon lamp	Xenon lamp
	Lamp save	Yes	Not applicable	Not applicable

		7415 Nano			
Photometrics Wavelength	Range	198 to 1000nm	Concentration Quantitation	Maximum concentration	6000ng / µl (dsDNA) (at 0.2mm)
	Accuracy	±2.0nm		Detection limit	2ng/µl (dsDNA) (at 0.5mm)
	Spectral bandwidth	5.0nm		Measurement time	< 6.5 seconds
	Path length	0.2 or 0.5mm (auto-ranging)		Minimum sample size	0.5µl (at 0.2mm), 1.0µl (at 0.5mm)
	Absorbance accuracy	± 0.01Abs at 1.000Abs		Maximum sample size	5µl
Modes	Nucleic acid	dsDNA, ssDNA, RNA, Oligonucleotides, 260/280, 260/230, Variable Ratio	Other	Sample pedestal material	Quartz stainless steel
	Protein	BCA, Bradford, Lowry, Biuret, Direct UV		Light source	Press to read Xenon lamp

All variants: **Internal Memory:** 10GB for results and methods. **Dimensions:** (w x d x h) 280 x 500 x 156mm, **Weight:** 9kg. **Outputs:** USB type A x2, USB type B x1, ethernet connection (RJ45), **Power Supply:** 24 DC, 2.5A, **Voltage / Frequency:** 100 - 240VAC at 50 to 60Hz. **Warranty:** 3 years (in Xenon Lamp)

## Ordering Information

Cat. No.	Model No.	Description
83056-21	741 001	Model 7410 Single beam, VISIBLE scanning spectrophotometer, White. Fitted with 10x10 cuvette holder
83056-31	741 001B	Model 7410 Single beam, VISIBLE scanning spectrophotometer, Black. Fitted with 10x10 cuvette holder
83056-22	741 501	Model 7415 Single beam, UV/VISIBLE scanning spectrophotometer, White. Fitted with 10x10 cuvette holder
83056-32	741 501B	Model 7415 Single beam, UV/VISIBLE scanning spectrophotometer, Black. Fitted with 10x10 cuvette holder
83056-23	747 501	Model 7415 Nano Single beam, micro volume UV/visible scanning spectrophotometer, White. Fitted with micro-volume accessory, includes calibration standards with certificate
83056-33	747 501B	Model 7415 Nano Single beam, micro volume UV/visible scanning spectrophotometer, Black. Fitted with micro-volume accessory, includes calibration standards with certificate
83056-26	761 501	Model 7615 Split beam, UV/VISIBLE scanning spectrophotometer, White. Fitted with 10x10 cuvette holder
83056-36	761 501B	Model 7615 Split beam UV/VISIBLE scanning spectrophotometer, Black. Fitted with 10x10 cuvette holder

All units supplied with a universal power supply, UK, EU & US power leads, and instruction manual.