



Spectrophotometers





The 74 series

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

Together, making light work

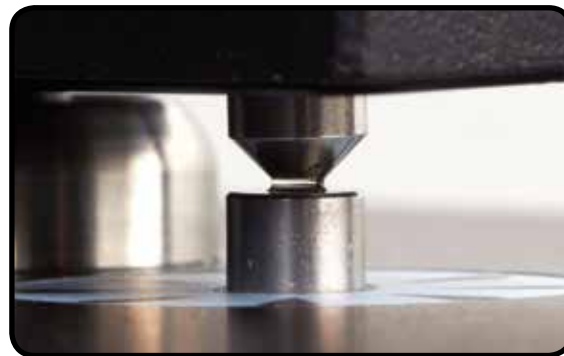


Since 1972

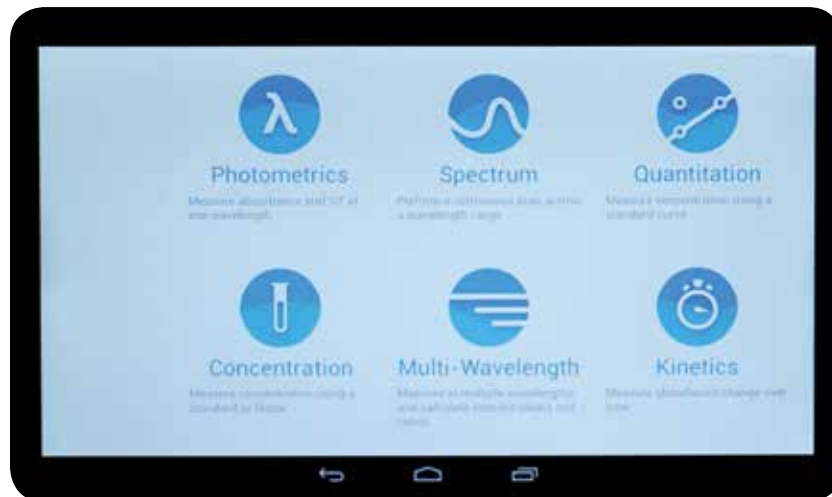
Versatile Sample Chamber



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



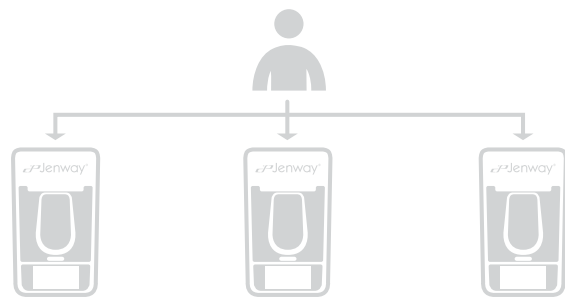
Securely upload and share data



Complimentary and unlimited storage



Protocols and data are only a click away



Simultaneously manage multiple devices

“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



PC, Tablet and Smartphone



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. | Description |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ML-83056-21 | Model 7410 Single beam, VISIBLE scanning spectrophotometer, White. Fitted with 10x10 cuvette holder |
| ML-83056-31 | Model 7410 Single beam, VISIBLE scanning spectrophotometer, Black. Fitted with 10x10 cuvette holder |
| ML-83056-22 | Model 7415 Single beam, UV/VISIBLE scanning spectrophotometer, White. Fitted with 10x10 cuvette holder |
| ML-83056-32 | Model 7415 Single beam, UV/VISIBLE scanning spectrophotometer, Black. Fitted with 10x10 cuvette holder |
| ML-83056-23 | Model 7415 Nano Single beam, micro volume UV/visible scanning spectrophotometer, White. Fitted with micro-volume accessory, includes calibration standards with certificate |
| ML-83056-33 | Model 7415 Nano Single beam, micro volume UV/visible scanning spectrophotometer, Black. Fitted with micro-volume accessory, includes calibration standards with certificate |
| ML-83056-26 | Model 7615 Split beam, UV/VISIBLE scanning spectrophotometer, White. Fitted with 10x10 cuvette holder |
| ML-83056-36 | 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.

ColeParmer.com

USA:

1-800-323-4340

1-847-549-7600

Canada: 1-800-363-5900

China: +86-21-5109-9909

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Germany: +49 (0) 9377 92030

India: 1-800-266-1244

Italy: +39 (0) 1313 89513

UK: +44 (0) 1480-272279

All other countries: 1-847-549-7600