

Pump CM5160	Specifications
Maximum operating pressure	60,0 MPa (0,001 – 2500 ml/min); 30,0 MPa (2501 – 5000 ml/min)
Flow rate range	0,001 to 5000 ml/min
Flow rate accuracy	±2 µl/min (0,01 - 0,1 ml/min); ±1% (0,101 – 2,5 ml/min)
Flow rate precision	0,075% RSD
Optional accessories	6-channel degassing unit; 4-channel low pressure gradient; additional internal plunger washing pump; UI-PAD (Keyboard)
Pump CM5110	Specifications
Maximum operating pressure	40,0 MPa (0,001 – 5000 ml/min); 20,0 MPa (5001 – 9999 ml/min)
Flow rate range	0,001 to 9999 ml/min
Flow rate accuracy	±2 µl/min (0,01 - 0,1 ml/min); ±1% (0,101 - 5 ml/min)
Flow rate precision	0,075% RSD
Optional accessories	6-channel degassing unit; 4-channel low pressure gradient; additional internal plunger washing pump; UI-PAD (Keyboard)
Autosampler CM5260	Specifications
Maximum number of samples	120 (1,5 ml); 72 (4 ml) (option); 195 (1 ml) (option); 192 (96-holes microplate x 2) (option); 768 (384-holes microplate x 2) (option)
Sample injection method	Cut injection method; All volume injection method; Full loop injection method
Syringe capacity	175 µl (standard); 70 µl (option); 700 µl (option); 3,5 ml (option)
Reproducibility of injection volume	≤0,2% RSD (in 10 µl injection, Cut injection method); ≤1,0% RSD (in 1 µl injection, All volume injection method; ≤0,2% RSD (in 5 µl injection, Full loop injection method)
Carryover	≤0,003% (Cut injection method)
Linearity of injection volume	Correlation coefficient: ≥0,999 (Cut injection method)
Injection volume accuracy	±2%
Minimum injection operating time	Approx. 28 s (stand-alone)
Thermostat (option)	1 to 45 °C (in increments of 1 °C)
Optional accessories	UI-PAD (Keyboard)
Autosampler CM5280	Specifications
Maximum number of samples	200 (1,5 ml); 128 (4 ml) (option); 288 (96-holes microplate x 3) (option); 1152 (384-holes microplate x 3) (option)
Sample injection method	Direct injection method
Syringe capacity	100 µl (standard); 500 µl (option); 1 ml (option)
Reproducibility of injection volume	≤0,3% RSD (in 10 µl injection)
Carryover	≤0,003%
Linearity of injection volume	Correlation coefficient: ≥0,999 (Cut injection method)
Injection volume accuracy	±2%
Minimum injection operating time	Approx. 28 s (stand-alone)
Thermostat (option)	1 to 35 °C (in increments of 1 °C)
Optional accessories	UI-PAD (Keyboard)
Column oven CM5310	Specifications
Temperature Setting Range	1 to 85 °C (in increments of 1 °C)
Temperature Setting Accuracy	±1,0 °C (20 to 85°C in preheating)
Temperature Control Precision	SD ≤0,2 °C
Columns accommodated	300 mm columns x 3 pcs
Available valves	3-column selector valve (max. 350 bar); 6-way 2-position valve (max. 350 bar); 6-way 2-position vici-valve (max. 600 bar)
Optional accessories	UI-PAD (Keyboard)
Column oven CM6310	Specifications
Temperature Setting Range	4 to 90 °C (in increments of 1 °C)
Temperature Setting Accuracy	±0,5 °C (20 to 85 °C in preheating)
Temperature Control Precision	SD ≤0,1 °C
Columns accommodated	3 x 300 mm columns; 6 pcs (100 mm x 6 or 50 x 3, 100 mm x 3)
Available valves	6-column selector valve (max. 1200 bar)
UV detector CM5410	Specifications
Optical system	Double beam
Light source	D2 lamp
Measuring wavelength range	190 to 600 nm
Measuring mode	1-wavelength and dual-2wavelength-mode
Spectral bandwidth	6 nm
Wavelength accuracy	±1 nm
Noise	0,5 × 10 ⁻⁵ AU or less
Drift	1,0 × 10 ⁻⁴ AU or less
Flow cell	Quartz, SUS, Fluororesin (optical path length 10 mm, cell capacity 13 µl)
Withstand pressure of flow cell	1,0 MPa
Optional accessories	UI-PAD (Keyboard); Thermo. Cell
UV/Vis detector CM5420	Specifications
Optical system	Double beam
Light source	D2 lamp & W lamp
Measuring wavelength range	190 to 900 nm
Measuring mode	1-wavelength and dual 2-wavelength-mode
Spectral bandwidth	6 nm
Wavelength accuracy	±1 nm
Noise	0,5 × 10 ⁻⁵ AU or less
Drift	1,0 × 10 ⁻⁴ AU or less
Flow cell	Quartz, SUS, Fluororesin (optical path length 10 mm, cell capacity 13 µl)
Withstand pressure of flow cell	1,0 MPa

Optional accessories	UI-PAD (Keyboard); Thermo. cell
DAD detector CM5430	Specifications
Optical system	Single beam photometric system
Light source	D2 lamp, W lamp Hg lamp (for wavelength check)
Measuring wavelength range	190 to 900 nm (D2 and W modes)
Measuring mode	Spectrum
Wavelength accuracy	±1 nm
Noise	0,5 × 10 ⁻⁵ AU or less
Drift	0,4 × 10 ⁻³ AU or less
Flow cell	Quartz, SUS, Fluororesin (optical path length 10 mm, cell capacity 13 µl)
Withstand pressure of flow cell	1,0 MPa
Optional accessories	Thermo. cell
FL detector CM5440	Specifications
Optical system	Ratio photometry
Light source	Xe lamp (150 W) & Hg lamp (for wavelength check)
Excitation wavelength range	200 to 850 nm
Emission wavelength range	250 to 900 nm
Spectral bandwidth	15 nm
Wavelength accuracy	±3 nm
Sensitivity (15nm slit)	S/N ratio for Raman peak of water 700 or more (Baseline method) S/N ratio for Raman peak of water 525 or more (Tangent method)
Sensitivity (30nm slit)	S/N ratio for Raman peak of water 900 or more (Baseline method)
Flow cell	12 µl
Withstand pressure of flow cell	1,0 MPa
RI detector CM5450	Specifications
Optical system	Deflection type
Light source	Tungsten lamp
Refractive index range	1,0 to 1,75
Linearity range	600 µRIU or more
Noise	2,5 nRIU or less
Drift	0,2 µRIU/h or less
Flow cell	Quartz
Withstand pressure of flow cell	2 bar