

CONTICHROM® CUBE 30 TECHNICAL SPECIFICATIONS

Main system components	<ul style="list-style-type: none"> • 2x dual-head pump • 2x dual-head pump combined for single binary linear gradient • 2x external UV sensor, 4 variable wavelengths • 2x conductivity sensor • 1x temperature sensor • 1x pH sensor • 4x multi-position valve (actuated) • 2x drain valve (actuated) • 2x buffer selection valve (actuated) • 4x manual drain valve • 4x pressure transducer
Communication and control	<ul style="list-style-type: none"> • 1x operating computer • 1x ChromIQ® operating software
Maximum system pressure	<ul style="list-style-type: none"> • 100 bar (10 MPa, 1450 psi)
System dimensions	<ul style="list-style-type: none"> • Width: 450 mm • Height: 584 mm • Depth: 456 mm • Weight: 30 kg (67 lbs, top unit), 17 kg (38 lbs, bottom unit)
Power specifications	<ul style="list-style-type: none"> • Supply voltage: 100-240 V (AC) • Maximum power: 170 W • Fuses: 4x T2AL
Pump description	<ul style="list-style-type: none"> • Dual-head pump design for low pulsation • Biocompatible • Sapphire pistons • PEEK pump heads • Active piston seal wash • Flow rate 0.1 – 36 mL/min • Accuracy within 2 % above 0.80 mL/min • Precision of 0.5 % relative standard deviation • Pulsation within 2 % (1 mL/min, 50 bar) • 2 dual-head pumps combined to binary high pressure gradient pump
UV detector description	<ul style="list-style-type: none"> • Variable wavelength UV detector, 4 channels per column position • 200 – 600 nm • Light source: Deuterium lamp • 0.5 mm optical path length • Materials: PEEK / Quartz / PTFE
Multiport valve description	<ul style="list-style-type: none"> • Electrical valve drive • Materials: PPS, PAEK, PEEK, PTFE seals
Conductivity/temperature sensor description	<ul style="list-style-type: none"> • Conductivity 0 – 250 mS/cm • Temperature sensor
pH sensor description	<ul style="list-style-type: none"> • External pH probe with flow cell • pH measurement 1-14 • Pressure rating 7 bars (0.7 MPa, 100 psi)
Materials	<ul style="list-style-type: none"> • Tubing on high pressure side: PEEK, 0.75 mm inner diameter • Tubing on low pressure side: FEP, 1/8", 2.0 mm inner diameter • Fittings: PEEK

Process capabilities	<ul style="list-style-type: none"> • CaptureSMB with AutoMAB™ control and optimization • MCSGP with AutoPeak™ dynamic process control • N-Rich • Single column batch chromatography with linear gradient capability • Dual column batch chromatography with linear gradient capability • Dual column alternating batch chromatography • Integrated batch chromatography with inline dilution in-between the two columns
Fraction collector (optional)	<ul style="list-style-type: none"> • Fraction collector Foxy R1 with integrated diverter valve • Fraction capacity: All standard formats including 96-well plates, 15 mL and 50 mL tubes
Operation	<ul style="list-style-type: none"> • Cold room (4 °C) compatible • 8 buffer/solvent inlets on isocratic pumps • 1 buffer/solvent inlet per pump on binary gradient pump • Recommended column inner diameter: 0.5 – 2.7 cm
Operating software description	<ul style="list-style-type: none"> • ChromIQ® operating software (in English) • Integrated, intuitive software for operation and evaluation of batch and continuous chromatography • Wizards for batch chromatography, integrated 2-column chromatography, CaptureSMB, MCSGP, N-Rich • AutoMAB™ optimization and control toolbox for CaptureSMB • AutoPeak™ optimization and control toolbox for MCSGP • Run log stores all information for each experiment • Easy-to-use graphical user interface for method programming with full access to detailed method program for advanced users • Pause/continue functionality, also for continuous chromatography operations • Data evaluation module • OPC compatible • User management gives high operational and data security