Yokogawa Cell Voyager CQ3000

The CQ3000 is the latest member of Yokogawa´s integrated high content imaging line. With the standard setting microlense enhanced double Nipkow spinning disc it provides "Yokogawa-style" image quality and with the option for a second camera even more speed than it´s smaller brother CQ1. Furthermore the CQ3000 offers water immersion objective options for even more resolution and brightness.

The powerful CellPathFinder analysis and visualization software is part of the standard CQ3000 package and helps to turn images into data with maximum ease and speed.
Due to its extra speed the CQ3000 is suited for medium to large screening campaigns and can be easily integrated in robotic setups.

Specifications

Model	CQ3000
Optics	Microlens enhanced dual wide Nipkow disk confocal
Fluorescence	Laser: Up to 4 colors Standard: 488 nm, 561 nm Option: 405 nm, 640 nm High power laser option: 488 nm, 561 nm EM filter: Max. 10 filters (Including 1 filter for transillumination) Observation method: Confocal image, Wide-field image[1]
Transmitted illumination	Bright-field LED
Camera	Up to 2 units, simultaneous excitation of 2 wavelengths Number of effective pixels: sCMOS 2000 x 2000 pixels Field of view size: 13.0 x 13.0 nm
Objective lens	Up to 6 lenses (Water immersion lens: Up to 2 lenses) Dry: 2x, 4x, 10x, 20x, 40x, 60x Long working distance: 20x, 40x Water immersion: 20x, 40x, 60x
Water supply function for immersion lens	Automatic supply
Flat-top beam shaper (Option)	Uniformizer
Sample vessel	Microplate (6, 12, 24, 48, 96, 384, 1536 wells), glass slides[2], cover glass chamber[2], 35mm dish[2]
Stage incubator	Temperature control range 35-39°C Settable temperature resolution 0.1°C Time stability: +-0.2°C[3] Spatial stability: +-1°C[3] Humidity holding Automatic water supply function for incubator
Autofocus	Laser autofocus, Image-based autofocus
Analysis software (CellPathfinder)	Granule analysis, Neurite analysis, Nuclear morphology analysis, Nuclear translocation analysis, Membrane translocation analysis, Machine learning, Label-free analysis, 3D analysis, Texture analysis, Deep Learning, etc.
Size (WxDxH), Weight	Main unit: 1031mm x 401mm x 600mm, 84kg With Uniformizer on 2nd camera: 1177mm x 401mm x 600mm, 102 kg Utility box: 275mm x 432mm x 298mm ,17.6kg Gas mixer: 275mm x 432mm x 298mm, 9.3kg Workstation: 176.5mm x 452.1mm x 417.9mm, 21kg
Power consumption	Main unit and Utility box: 100-240 VAC, 400 VAmax Gas Mixer: 100-240 VAC, 60 VAmax 2nd camera: 100-240 VAC, 120 VAmax Workstation: 100-240 VAC, 750 VAmax
Operating environment	15 to 30°C, 30 to 70% RH, no condensation

*1 Required Uniformizer   *2 Required sample holder (sold separately)   *3 Ambient temperature of 21-25°C

Yokogawa Cell Voyager CV8000 - By the way, should your goal be the ultimate throughput and flexibility in High Content Screening, ask us about the Cell Voyager CV8000, Yokogawa´s top line multi-camera system which sets industry standards in speed and image quality.