

CCD Detector			
Camera	High resolution CCD camera TOMI-2		
Resolution	1 360 × 1 024 pixels		
A/D Converter Resolution	16 bit (65 536 grey levels)		
Pixel Size	6.45 μm × 6.45 μm		
Frame Rate	20 frames per second for full resolution		
CCD Detector Wavelength Range	400 – 1 000 nm		
Spectral Response	QE max at 540 nm (~72%), 50% roll-off at 350 nm and 800 nm		
Read-Out Noise	< 8 electrons RMS		
Full-Well Capacity	> 22 000 electrons		
Dynamic Range	65 dB		
Connectivity	Control and data: Gigabit Ethernet		
Operating Modes	Video (Chf), Snapshot (long integration times for FPs detection)		
Lights		Detection Channels – Up to 7 Emission Filters in a Filter Wheel	
Light Sources	Red-Orange 618 ± 10 nm Cool White 5700 K Far-Red 735 ± 10 nm	Chlorophyll filter	695 - 770 nm
Super Pulse Intensity	> 5 000 μmol.m ⁻² .s ⁻¹		
Actinic Light Intensity	Up to 2 000 μmol.m ⁻² .s ⁻¹		
Optional Additional Lights	UV 365 ± 9 nm Royal Blue 450 ± 10 nm Blue 475 ± 10 nm Cyan 505 ± 15 nm Green 530 ± 15 nm Amber 590 ± 40 nm	Filters for Multicolor GFP filter	440/40, 520/28, 690/8, 747/33 nm 513/13 nm
		YFP filter mCherry	593/46 nm 635/18 nm
Lens			
Lens type	RICOH FL-CC2514A-2M		
Focal length	25 mm		
Brightness	F1.4 - 16/F1.4		
Technical Data			
Dimensions (W × D × H)	652 × 665 × 1 455 mm		
Weight	97 kg		
Electrical	220 – 240 V AC		
Power Consumption	1 500 W		
Operating Temperature	5 – 25°C		
Operating Humidity	0 to 90% (non-condensing)		
Software			
FluorCam10	<ul style="list-style-type: none"> fully automated control of FC device image acquisition <i>via</i> automated experimental protocols numerous image manipulation tools automated data analysis and parameters computation (F0, FM, FV, F0', FM', FV', FT, FV/FM, FV'/FM', ΦPSII, NPQ, qN, qP, Rfd, ...) 		