	iXon Life 888	iXon Life 897	iXon Ultra 888	iXon Ultra 897
Sensor	1024x1024 back-illuminated EMCCD	512x512 back-illuminated EMCCD	1024x1024 back-illuminated EMCCD	512x512 back-illuminated EMCCD
Core Attributes	FOV, sensitivity, speed	sensitivity, speed	FOV, sensitivity, 3x faster	accelerated to 56 fps
Image area (mm)	13.3 x 13.3	8.2 x 8.2	13.3 x 13.3	8.2 x 8.2
Resolution	1.0 Mpx	0.25 Mpx	1.0 Mpx	0.25 Mpx
Pixel size (um)	13 x 13	16 x 16	13 x 13	16 x 16
Pixel readout speed (MHz)	30	17	30	17
Frame Rate (fps)	26 (full frame)	56 (full frame)	26 (full frame)	56 (full frame)
Cooling (°C)	-80	-80	-100	-100
Read Noise	<1 e-	<1 e-	<1 e-	<1 e-
Max QE (%)	97	97	>95	>95
Applications	single molecule detection, cell motility, super-resolution, TIRF, FRET/FRAP, Vesicle tracking, ion signaling, microspectroscopy	vesicle trafficking, microspectroscopy / hyperrspectral imaging, SD confocal, ion signaling	single molecule detection, cell motility, super-resolution, TIRF, FRET/FRAP, Vesicle tracking, ion signaling, microspectroscopy, lucky astronomy, AO, quantum physics	vesicle trafficking, microspectroscopy, SD confocal, ion signaling, lucky astronomy, AO, quantum physics
Note	world´s fastest megapixel back-illuminated EMCCD	world´s wides installed EMCCD	largest field of view EMCCD	popular 512 x 512 frame transfer sensor and overclocks readout to 17 MHz, pushing speed performance to 56 fps

	Zyla 4.2 Plus	Zyla 5.5	Sona 4.2	Sona 2.0
Sensor	2048x2048 front-illuminated sCMOS	2560x2560 front-illuminated sCMOS	2048x2048 back-illuminated sCMOS (32 mm diagonal)	1400x1400 back-illuminated sCMOS (22 mm diagonal)
Core Attributes	for all fluorophores, reduced phototoxicity and photobleaching	Rolling and true Global Shutter in one sensor - snapshot imaging capability	largest on-sample FOV, reduced phototoxicity, lower fluorophore concentrations, vacuum protection sensor, reduce exposure times	perfect for 22 mm C-mount port, reduced phototoxicity, lower fluorophore concentrations, vacuum protection sensor, reduce exposure times
Image area (mm)	13.3 x 13.3	16.6 x 14.0	22.5 x 22.5	15.5 x 15.5
Resolution	4.2 Mpx	5.5 Mpx	4.2 Mpx	2.0 Mpx
Pixel size (um)	6.5 x 6.5	6.5 x 6.5	11 x 11	11 x 11
Pixel readout speed (MHz)	slow read 216 fast read 540	slow read 200 fast read 560	100 MHz (16-bit mode) 200 MHz (12-bit mode)	100 MHz (16-bit mode) 200 MHz (12-bit mode)
Frame Rate (fps)	100 (full frame)	100 (full frame)	48 (full frame)	70 (full frame)
Cooling (°C)	0	0	-45	-45
Read Noise	0.9	0.9	1.6 e-	1.6 e-
Max QE (%)	82	60	95	95
Applications	super-resolution, light sheet, ion imaging, TIRF, SD confocal, cell motility, wide-field, Fluorescence	ion imaging, cell motility, TIRF, upgrade microscope performance, physical science, OEM	SD confocal, TIRF, Light sheet, capture large fields of cells, embryos and tissues, cell motility, Gene editing, neurophysiology..	SD confocal, TIRF, Light sheet, capture large fields of cells, embryos and tissues, cell motility, Gene editing, neurophysiology..
Note	highest QE sCMOS, industry fastest USB 3.0 speeds	perfect upgrade - Rolling and true Global Shutter	world´s most sensitive back-illuminated sCMOS	world´s most sensitive back-illuminated sCMOS