COMPARE TECHNICAL SPECIFICATIONS

	CELLAVISTA® 4K HighEnd[1]	NYONE® 4K HighEnd[1]	CELLAVISTA® 4 Scientific	NYONE® Scientific
Throughput	250[2] plates / day	100[2] plates / day	250[2] plates / day	150[2] plates / day
Objective capacity	4	3	4	3
Selectable Resolutions[1]	3.3 µm @ 2x optional 1.3 µm @ 4x 0.9 µm @ 10x 0.53 µm @ 20x 0.35 µm @ 40x	1.3 µm @ 4x 0.9 µm @ 10x 0.53 µm @ 20x	6.5 µm @ 2x optional 3.25 µm @ 4x 1.3 µm @ 10x 0.65 µm @ 20x 0.33 µm @ 40x	6.5 µm @ 2x optional 3.25 µm @ 4x 1.3 µm @ 10x 0.65 µm @ 20x 0.33 µm @ 40x optional
Automated whole well/whole plate imaging	✓	✓	✓	✓
Sample types	SBS plate format (6-384 wells), culture dishes and microscope slides	SBS plate format (6-384 wells), culture dishes and microscope slides	SBS plate format (6-384 wells), culture dishes and microscope slides	SBS plate format (6-384 wells), culture dishes and microscope slides
Camera	8 bit progressive scan CMOS	8 bit progressive scan CMOS	16 bit sCMOS	16 bit sCMOS
Pixel density	5440x 5440 29.6 MPx	4496 x 4496 20.2 MPx	2048 x 2048 4.19 MPx	2048 x 2048 4.19 MPx
Quantum efficiency (relevant to detect weak fluorescence)	~57 %	~66 %	> 80 %	~80 %
Light source	High performance long-life LED	High performance long-life LED	High performance long-life LED	High performance long-life LED
Illumination / Fluorescence[1]	Brightfield and 6 fluorescence excitation/emission channels	Brightfield and 4 fluorescence excitation sources, up to 5 fluorescence emission filters	Brightfield and 6 fluorescence excitation/emission channels	Brightfield and 4 fluorescence excitation sources, up to 5 fluorescence emission filters
Temp.-control	Possible[3]	×	Possible[3]	×
Image acquisition- & device controlling software[4]	YT-SOFTWARE®[4]	YT-SOFTWARE®[4]	YT-SOFTWARE®[4]	YT-SOFTWARE®[4]
Automation-ready set up	✓	✓	✓	×
Software-interface for automation	✓	✓	✓	✓
Batch processing interface	✓	✓	✓	✓
External barcode-reader	Optional	Optional	Optional	Optional

[1] Different system configurations like e.g. basic systems with brightfield only or customized filter and objective lenses set-ups are available.
[2] Throughput per day depends on experiment configurations (e.g. exposure time, plate type, focus options, # of imaging channels...).
[3] CELLAVISTA® can be equipped with the ibidi® heating and incubation system (other systems not tested). Due to pH-shift and consequent cell stress a heating option only is not recommended.
[4] YT-SOFTWARE® includes the same image analysis tools for both CELLAVISTA® and NYONE®. Differences in usable applications arise only due to different hardware configurations (e.g. different illuminations or camera chips).
[5] Hardware automation-package available.