

Step and pixel size chart for C1, C1-Plus, C1si, aqnd C1si-R

Objective type λ	mag	NA	n medium	Pinhole 525 nm	Nyquist pixel size	Super Nyquist	Nyquist step size	minimum overlap step
Plan Apochromat and VC Plan Apo	100	1.40	1.515	M	0.098	0.070	0.25	0.80
	60	1.40	1.515	S	0.098	0.070	0.25	0.80
	60	1.20	1.330	S	0.114	0.081	0.30	0.95
	40	1.30	1.515	S	0.105	0.075	0.30	0.90
	40	1.00	1.515	S	0.137	0.098	0.50	1.55
	40	0.95	1.515	S	0.144	0.103	0.55	1.75
	20	0.75	1.515	S	0.182	0.130	0.85	2.75
	10	0.45	1.515	S	0.303	0.217	2.40	7.70
	4	0.20	1.515	S	0.683	0.488	12.10	40.00
Plan Fluor	100	1.25	1.515	M	0.109	0.078	0.30	1.00
	60	1.25	1.515	S	0.109	0.078	0.30	1.00
	40	1.30	1.515	S	0.105	0.075	0.30	0.90
	40	0.75	1.515	S	0.182	0.130	0.85	2.75
	20	0.75	1.330	S	0.182	0.130	0.75	2.45
	20	0.50	1.515	S	0.273	0.195	1.95	6.25
	10	0.30	1.515	S	0.455	0.325	5.40	17.30
Apo TIRF	100	1.49	1.515	M	0.092	0.065	0.20	0.70
	60	1.49	1.515	S	0.092	0.065	0.20	0.70
Plan Apo TIRF	100	1.45	1.515	M	0.094	0.067	0.25	0.75
	60	1.45	1.515	S	0.094	0.067	0.25	0.75
S Fluor	100	1.30	1.515	M	0.105	0.075	0.30	0.90
	40	1.30	1.515	S	0.105	0.075	0.30	0.90
	40	0.95	1.515	S	0.144	0.103	0.55	1.75
	20	0.75	1.515	S	0.182	0.130	0.85	2.75
	10	0.50	1.515	S	0.273	0.195	1.95	6.26
	4	0.20	1.515	S	0.683	0.488	12.10	39.00
Plan Water Immersion	100	1.10	1.330	M	0.124	0.089	0.35	1.15
W Fluor	60	1.00	1.330	M	0.137	0.098	0.45	1.35
	40	0.80	1.330	S	0.171	0.122	0.65	2.15
	20	0.50	1.330	S	0.273	0.195	1.70	5.45
	10	0.30	1.330	S	0.455	0.325	4.70	15.20
S Plan Fluor and Plan Fluor ELWD	60	0.70	1.330	M	0.195	0.139	0.85	2.80
	40	0.60	1.330	M	0.228	0.163	1.20	3.80
	20	0.45	1.330	S	0.303	0.217	2.10	6.75

Nyquist pixel size is the pixel size in object space supporting high resolution confocal imaging.

Super Nyquist considers the diagonal measurement of the pixel as the most meaningful. This pixel size is best for deconvolution of confocal data.

The Nyquist step size supports maximum axial resolution.

The minimum overlap step size is the best choice for 3D imaging when the purpose of the acquisition is to show spatial relationships between structures. It minimizes photodamage and is a good choice for most applications.