

Nota van Inlichtingen Marktconsultatie SMLM-microscoop

Ref. Nr.	Vraag	Antwoord
1	quasi-isotropic precision: should the system be able to record 3D Z-stacks at quasi-isotropic resolution?	Recording of z-stacks is not required
2	quasi-isotropic precision: The market consultation leaves minimal requirement for Z-resolution ambiguous. Would a system with 50nm Z resolution be an acceptable solution?	The z localization precision needs to be less than 20 nm.
3	Objective: Should the 100X TIRF objective be equipped with motorized correction collar positioning system which facilitates 3 things 1)software-based optimization of the correction collar by assesing the PSF 2) 3D z-stack SMLM 3) improve experimental reproducibility as correction collar position can be precisely defined	Not necessary
4	Laser lines: Could you please specify where these minimal laser powers are applicable (head power, fiber tip). We kindly ask if this requirement could be specified as kW cm ⁻² as this better relates to magnification and FOV. In some SMLM solutions the laser passes grating patterns and this requires use of higher power lasers to compensate excitation light loss. Our solution does not know such excitation light reduction hence lower laser powers can be used in our microscope system.	Output from laser. We require high effective laser power, particularly for the 640-nm laser line to ensure favorable single-molecule switching in tissue sections. >1.5 kW cm ⁻² would likely be sufficient.
5	Imaging field of view: could you please indicated the minimal field of view requirement for the system (at 100X). Our solution can provide up to 80 um x 80 um.	Minimal 150x150 µm with a 100x objective

6	sCMOS cameras: should the camera's be liquid cooled to minimize vibrations?	Not a requirement
7	Application question: At what imaging depth should this the quasi-isotropic resolution be reached. We read that living brain slices are to be used.	Not a requirement