

NV04ASC - Asynchronous SPAD sensor characteristics

Parameter	Value	Comments
Format	64x48 pixels	
Pixel pitch	28 μm	
Pixel sensitive area $\varnothing$	10 μm	
Pixel fill factor	10%	Native
PDP peak	50% 35%	450nm, 6V overvoltage 450nm, 3V overvoltage
Dark count rate	20 cps/pixel	At room temperature, 3V overvoltage
Wavelength window	350 – 800 nm	PDP > 5% @ 3V overvoltage PDP > 10% @ 6V overvoltage
Sensitivity	Single-photon level	
DNR	>120dB	
Event rate	100 Mevent/s	
Equivalent frame rate	100 Mfps	Binary frames.
Latency	40 ns	
Output format	23 bit	
Output data	(Pixel X, Pixel Y, Photon t)	
Timestamp resolution	10 ns	
Output data rate	288 MB/s	Maximum value
Pixel masking	Yes	Full custom

Camera system NV04ASC-HW

Parameter	Value	Comments
Power	1 W	Maximum value
Interface	USB3.0	
External dimensions	3x3x3 cm ³	Without lens
External trigger	Yes	Only as master
Lens mount	C-Mount or M12	Fiber coupler version also available