

HySpex

Baldur S-640i N

Designed to be fast, flexible, robust and repeatable, HySpex offers the Baldur line of industrial cameras.

Baldur S-640i N covers the spectral range from 970-1670nm.

All Baldur cameras are Nyquist cameras giving a spectral resolution of 2 spectral bands while capturing 4 times as much light as the classic systems. To ensure that the most information per frame rate is provided, the spectral resolution is kept very close to 2 bands.

Additionally, the spatial resolution of Baldur S-640i N is better than 1.5 pixels, yielding a very sharp camera.



On-scene scan speed for various foreoptics options

Foreoptics type	Working distance [mm] from camera to object	Field of view	Pixel size	Max. speed*	Max. speed**
Microscope	27,4	6.9°/20.9 mm	0.033 mm	0.02 m/s	0.04 m/s
30 cm	204,8	18.5°/103,7 mm	0.162 mm	0.09 m/s	0.18 m/s
1.0 m	888,3	17.4°/309.4 mm	0.483 mm	0.27 m/s	0.54 m/s
44 cm / 40°	428,3	39.9°/325.3 mm	0.551 mm	0.31 m/s	0.62 m/s
1.0 m / 40°	989,8	41.9°/801 mm	1.252 mm	0.70 m/s	1.40 m/s
1.9 m / 40°	1844,3	41.9°/1453.3 mm	2.271 mm	1.27 m/s	2.54 m/s

*With 208 bands and square pixels. **With 72 bands and square pixels.

MAIN SPECIFICATIONS	HG	MG	LG
Spectral range	970-1670 nm		
Spectral bands	208		
Max. speed*	560 fps		
Spectral sampling	3.41 nm		
F-number	f/2		
Spectral FWHM	< 2 bands		
Spatial FWHM	< 1.5 pixels		
Spatial pixels	640		
FOV	16.7° / 32.2°		
Bit resolution	12 bit		
Noise floor	8.5 e-	32 e-	270 e-
Peak SNR	> 150	> 275	> 800
Dynamic range	2650	2360	
ROI*	Pairs of bands can be selected/deselected individually		
External trigger options	LVDS, 3.3V / 5V TTL		
Dimensions (l-w-h)	364 – 105 – 153 mm		

*Reducing the number of spectral channels with ROI will proportionally increase the maximum frame rate