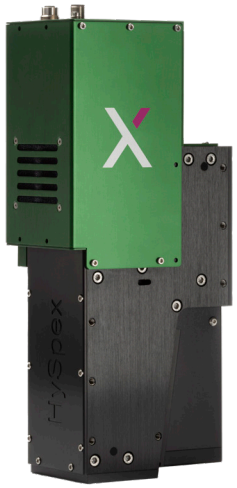
HySpex
Baldur S-640i N



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	
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	HG:8.5e^{-}/MG:32e^{-}/LG:270e^{-}
Peak SNR	HG:>150/MG:>275/LG:>800
Dynamic range	HG:2650/MG:2360/LG: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*