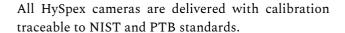# HySpex Classic

HySpex Classic cameras are designed to be application-generic and will be used at a wide range of platforms. The optics are made for specific high-end detectors and are extremely sharp per pixel and band, and are designed to minimize optical distortions such as smile and keystone down to 10% of a pixel over the full spectral and spatial range covered by the camera. Also, the spatial and spectral resolution remove is optimized to be as similar as possible for all points in the FOV and all spectral bands. HySpex classic cameras are the most flexible cameras, offering exceptional spectral integrity per pixel for all applications.

All HySpex cameras are delivered with calibration traceable to NIST and PTB standards.

	VNIR-1800	VNIR-3000N	SWIR-384	SWIR-640
Spectral range [nm]	400 – 1000	400-1000	930-2500	930-2500 nm
Spatial pixels	1800	3000	384	640
Spectral channels	186	300	288	360
Spectral sampling [nm]	3.26	2.0	5.45	4.38 nm
FOV*	17°	16°	16°	16°
Pixel FOV across/along [mrad]*	0.16/0.32	0.096/0.32	0.73/0.73	0.44/0.44 mrad
Bit resolution	16 bit	12 bit	16 bit	16 bit
Noise floor	2.4 e-	2.37 e-	150 e-	80 e-
Dynamic range	20000	11000	7500	7500
Peak SNR (at full resolution)	> 255	> 170	> 1100	>800
Max speed (at full resolution)	260 fps	117 fps	400 fps	140 fps
Power consumption	30 W	30 W	30 W	10 W
Dimensions (l-w-h) [mm]	390 - 99 - 150	390 - 99 - 150	380 - 120 - 175	36 – 11– 15 cm
Weight	5.0 kg	5.0 kg	5.7 kg	4.1 kg
Camera Interface	CameraLink	USB3	CameraLink	CameraLink

*Can be double with FOV expander