HySpex

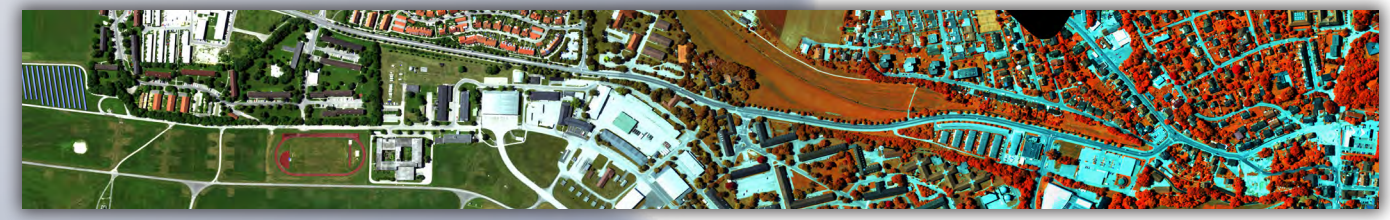
HySpex VNIR-1800

The new HySpex VNIR-1800 **hyperspectral camera** from NEO, is developed for **field, laboratory, airborne** and **industrial** applications.

HySpex VNIR-1800 utilize a cutting edge **actively cooled and stabilized scientific CMOS** detector. This makes VNIR-1800 the ideal camera for high-end data acquisitions where **high radiometric accuracy** is required.

The dynamic range of 20 000 ensures **outstanding SNR levels** even in darker areas of an image of highly dynamic scenes. With a max frame rate of **180 fps**, combined with **aberration corrected optics** and **high optical throughput** (f/2.5), HySpex VNIR-1800 offers a unique combination of data quality, high speed and sensitivity.

A wide range of **close-up lenses** allows the use of the camera at working distances ranging from a few cm **with a spatial resolution of 24 µm**, to infinity for e.g. **airborne remote sensing**.



Flight line with vegetation enhanced in red to the right.

Main specifications

Spectral sampling	400 – 1000 nm
Spatial pixels	1800
Spectral channels	182
Spectral sampling	3.26 nm
FOV	17°
Pixel FOV across/along	0.16/0.32 mrad
Bit resolution	16 bit
Noise floor	2.4 e^-
Dynamic range	20000
Peak SNR (at full resolution)	> 255
Max speed	180 fps
Power consumption	30 W
Dimensions (l–w–h)	39 – 9.9 – 15 cm
Weight	5.0 kg