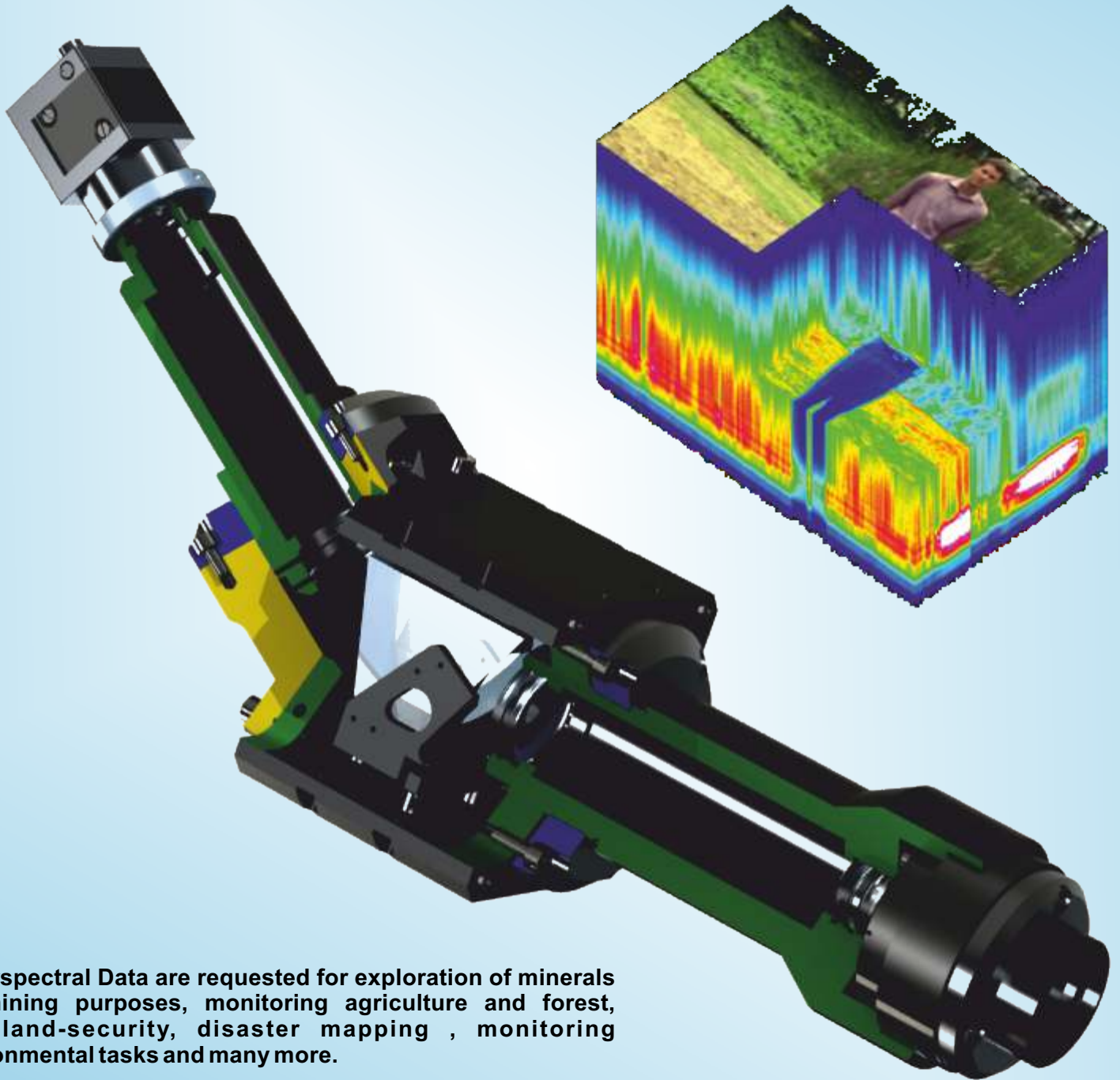# Aero HyCam

Hyper Spectral pushbroom camera

Hyperspectral Data are requested for exploration of minerals for mining purposes, monitoring agriculture and forest, homeland-security, disaster mapping , monitoring environmental tasks and many more.

Using push broom technology is state of the art to guarantee simultaneous data capturing of many parallel in bands for precise radiometric data analysis.

Light, robust and high performance was the goal for the development of the 2 available sensors. Beside the stand alone operation, they can be nicely combined with our RGB AeroCam high resolution sensors, the AeroTherm ThIR camera to measure surface temperatures and of course also Lidar.

AeroTopoL is able to plan and navigate missions for these sensors and using our AeroDiDOS direct referencing, makes the system a turnkey solution with a high degree of options for sensor combination.

Model	HyCam M2	HyCam M3
Specification	Refractive	VPH grating
Data storage	Compact form PC	Compact form PC
Dispersion element	Prism	VPH Grating
Mass (sensor head)	3 kg	1.5 kg
Power supply	12 V	12 V
Minimum Object Distance	180 m	180 m
Spectral range	400 – 950 nm	450 — 900 nm
Spectral bands	120	256
Spectral band width	5 nm	2.5 nm
Available Pixel quantity Spectral	1024	1452
Scan rate	60-90 lines/sec	60-90 lines/sec
Digitization	12 bit	12 bit
Data stream capture and store	Y	Y
Realtime compression	Y	Y
Realtime RGB (selectable visulization)	Y	Possible
Instantaneous FOV	0.022°	0.015°

AGL calculated for MK3	GSD (nadir)	Scan width
300 m	8 cm	120 m
600 m	16 cm	240 m
1000 m	26 cm	400 m