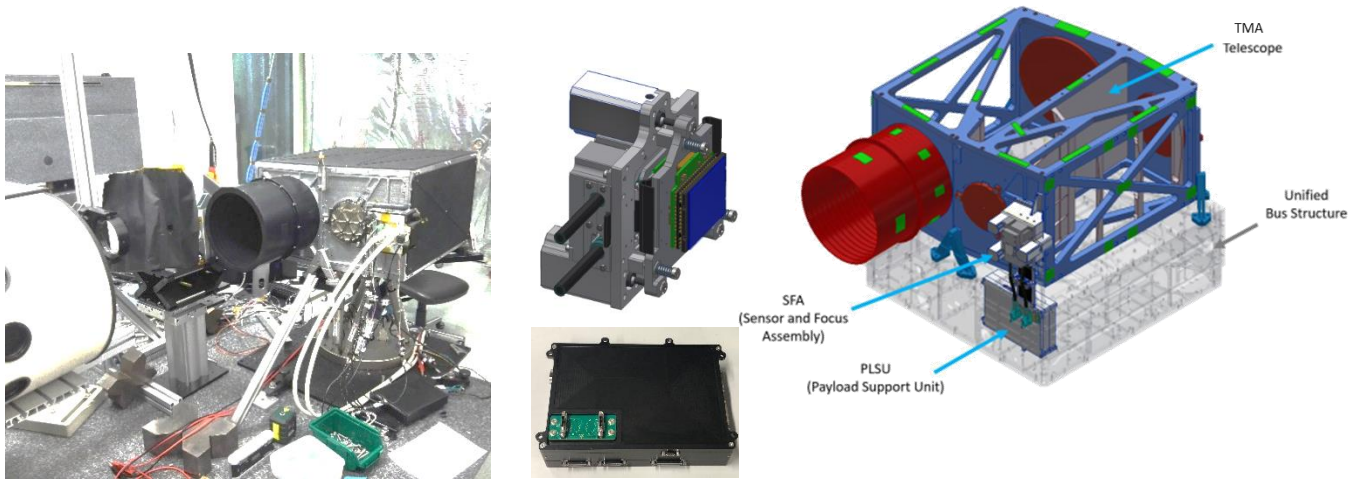


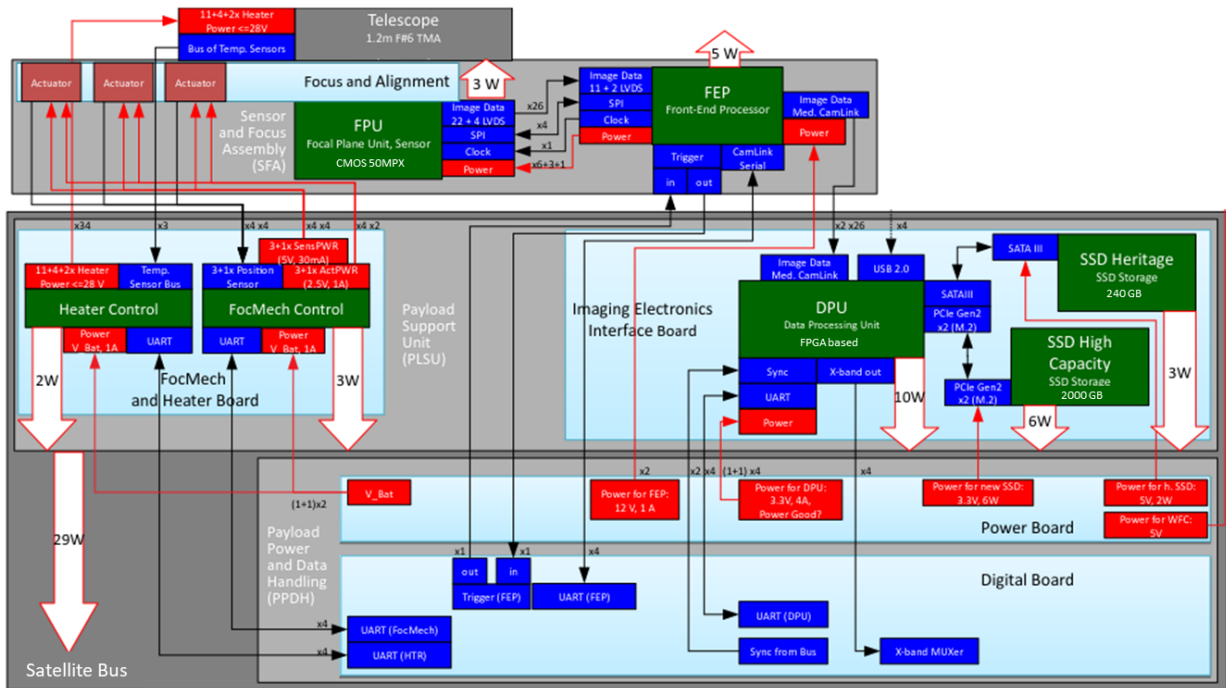
HRVI-2HD

The HRVI-2HD is the latest version of our high-resolution camera systems. The HRVI-2HD is built around a sophisticated Three Mirror Anastigmat (TMA) and offers 1.92m GSD resolution imagery with a 15km swath. The HRVI-2HD consists of the TMA Telescope and the Sensor and Focus Assembly (SFA) and the Payload Data Processing Unit (PLSU).



HRVI-2HD FM during calibration in clean room (left), HRVI-6HD mounted on small satellite (right)

SYSTEM SPECIFICATION	Specification	Comment
Resolution (PAN/MS)	1.92m / 7.68m	@500km
Swath Width	>14.6km	@500km
Channels	1x PAN & 4x MS	PAN: 450-900nm BLUE: 450-520nm GREEN: 520-600nm RED: 630-690nm NIR: 750-900nm
MTF	>0.1	@ full resolution and across the field
	SNR >100	
Size (x,y,z)	520x780x335	Including Baffle
Total Mass	19kg	
Temperature Range	0 to 30°C / -15°C to +35°C	OP/Non-Op
Design Life	5 years LEO	



Block-Diagram

INTERFACES & CAPABILITIES	HRVI-2HD
TMA Telescope and SFA	
Lens (TMA)	200mm Aperture, 1200mm Focal Length In-Orbit Focus & Alignment System: Yes Thermal System: Heaters
Filter (inside SFA)	PAN: 450-900nm
Sensor Focus Assembly (SFA)	Detector Size: 7920x6004 px Bit Depth (User Selectable): 8/10/12
PLSU	
Storage (inside PLSU)	1TB
Compression (inside PLSU)	JPEG selectable ratio
Encryption Engine (inside PLSU)	Yes
CCSDS Engine (inside PLSU)	Yes
X-Band Data Output (inside PLSU)	1x LVDS – 100 Mbit/s (up to 1Gbit/s optional) Gbit Ethernet
TMTC Interface (inside PLSU)	RS422