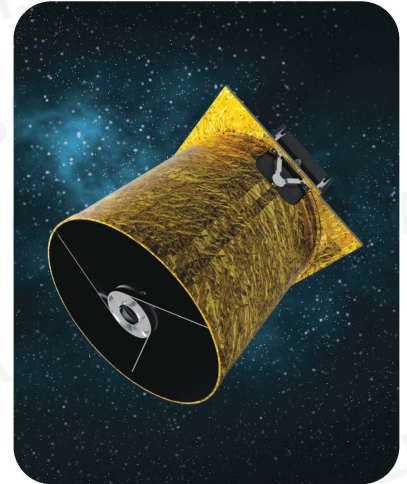


FineView

Ultra High Resolution, Electro-optical Payload

The Azista FineView is an optical earth-observation payload designed and produced in India. It is built for high-quality panchromatic (PAN) and multispectral data at submeter levels and is engineered for a lifespan of over five years in a Low-Earth Orbit. Initially created to meet Azista's own high-performance spaceborne imaging requirements, this payload is now offered as a next gen product.

The payload is tailored to support ISR (intelligence, surveillance, and reconnaissance) constellations. This capability stems from Azista's inherent strengths in mass manufacturing with quick turnaround times. FineView undergoes rigorous on-ground and in orbit payload test and calibration processes to ensure precise image quality metrics.



Salient features



Resolution
0.47 m PAN GSD



Swath
Upto 22.5 km @ 500km



Imaging Spectral Bands
2 x PAN (Offset Pixel Row),
6 x Multispectral



Stellar TDI Performance

- Purely Charge Domain
- Bidirectional
- Multispectral
- Selectable stages
- Excellent Product SNR & MTF



Easy integration



**Design qualified
for most launchers**



Applications

Fine Resolution Earth Observation
ISR

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Parameter ¹	Condition	Specification			Units	Remarks
		Min	Typ/Mid	Max		
Imaging Specifications						
GSD	PAN	0.47			m	@500km orbit
	MX	< 1.4			m	
Swath		Upto 22.5			km	
Type of sensor	PAN and MX	Charge-transfer (Analog) TDI				Bidirectional
Quantization Dynamic Range			12		bits	
Spectral Ranges	PAN	400		900	nm	Panchromatic
	MX1	400		450	nm	Coastal Blue
	MX2	450		520	nm	Blue
	MX3	520		590	nm	Green
	MX4	630		690	nm	Red
	MX5	700		750	nm	Red Edge
	MX6	770		890	nm	Near-Infrared
Optics Aperture		500			mm	Clear Aperture
Signal To Noise Ratio	240 for PAN at the full-well capacity of the sensor > 125 for PAN at 20% albedo and 60° solar elevation > 50 for PAN at 15% albedo and 15° solar elevation					With appropriate TDI settings
MTF	11%					Nyquist Frequency
Electronics Interface Specifications						
Electrical Grounding	Power input isolation is optional; electronics isolated from the structure					
Power supply voltage		18	28	32	V	Nominal
Functional Power Demand	Active	100/190			W	Average/ Peak
	Hibernating	55			W	
Bus Interface	RS422 UART/CAN/MIL STD 1553-B/SPACE-WIRE control & telemetry, RS422 Reset, RS422 Boot Health, Open-collector / Current-Drive Power-OK					
Data Output Interfaces		CML SERDES/ 10G Ethernet				
Data Connectors		AirBorn verSI				For SERDES option
Power/Control connector		Standard D-sub				
Mechanical Specifications						
Material of Main Mirrors		SiC				
Material of Structure		SiC				
Mass		< 50			kg	
Envelope		650 x 650 x 1250			mm	
Thermal Design		Isolated & Autonomous				

Note:

1. All parameters are specified for a 500km orbit or unless otherwise specified.

Abbreviations:

- **PAN:** Panchromatic • **MX:** Multispectral • **LEO:** Low Earth Orbit • **ISR:** Intelligence Surveillance and Reconnaissance • **TDI:** Time-Delay Integration
- **SNR:** Signal to Noise ratio • **GSD:** Ground Sampling Distance • **GRD:** Ground Resolved Distance

