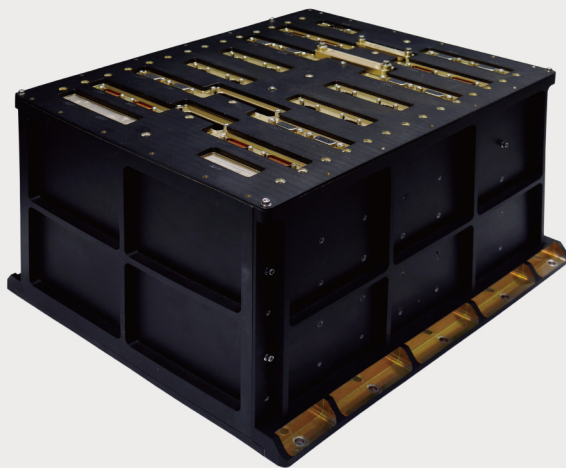


Image Data Handling Unit



TRL 9
CAS500-1/2/4



1.5 Tbits
Large Storage
Capacity



NAND Flash
High-Speed
Data Processing



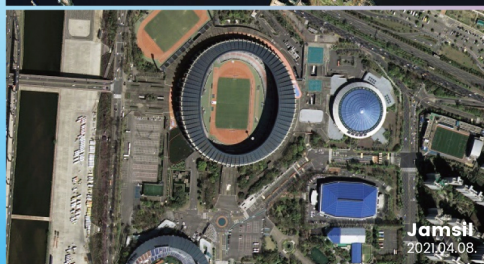
15 kg
Lightweight



75 W
Low Power
Consumption

The image data handling unit of a satellite is a core device that receives high-speed, large-capacity data output from Earth observation sensors aboard the satellite. It compresses and stores data in real time, while also performing encryption and encoding for transmission to ground stations. Lumir is the first Korean company to successfully develop and manufacture this onboard equipment, delivering superior performance and significant cost savings compared to competitors' products. By integrating non-volatile NAND flash devices into the image data handling unit, storage capacity has been significantly increased, with data retention maintained even when the power is off.

Earth observation images captured by CAS500-1



Item		Key Performance
Data Input	Channel-Link	6 Channels
	Input Rate Per Channel	1.47 Gbps
Data Storage	Storage Capacity	1.5 Tbits (Expandable up to 3 Tbits)
	Read/Write Speed	1.47 Gbps
Data Output	Output Speed	640 Mbps
		CCSDS 131.0-B-2
Compression	DWT (Discrete Wavelet Transform)	
Encryption	Yes	
Control	MIL-STD-1553B, SpaceWire	
Power Supply	Power Consumption	75W
	Input	36 - 50.4 VDC
Physical Properties	Size	280 x 336 x 197 mm
	Mass	11 kg

