GA-75 Bus

Terminal (OCT)

Volume

Additional Payload

**Optical Communication** 

Resilient, modular, and configurable half ESPA bus design supporting a variety of Comms and ISR missions

Customizable to operate over a wide range of orbits including all inclinations, and compatible with multiple launch vehicles

Utilizes standard payload interfaces to enable seamless integration and mission-ready delivery times

	GA-75 PARAMETER	GA-75 VALUE
SPACECRAFT (S/V) CAPABILITY	Orbit	LEO (400-600 km), all inclinations (Configurable for other orbits)
	Mass (Basic/Launch)	Up to 40 kg/75 kg
	Volume	Half ESPA up to ESPA compatible depending on payload volume (Configurable for other launches)
	Launch Vehicle Compatibility	Falcon 9, L1, Alpha (Others as required). 8" adapter ring (12" option available)
	Design Life	1-5 years
	Stabilization	3-axis, 0.03 deg, $3\sigma$
	Voltage	14.4 V +/- 2 Vdc
	Telemetry, Tracking & Command Rate	S-band, Up to 100 kbps uplink/downlink; L-band secondary; X-band, 10 Mbps downlink options available
	Mission Data Rate	S-band, Up to 1 Mbps uplink/downlink; 1 Gbps optical w/OCT
	On-board Storage	>10 Gbytes, additional storage options available
	Propulsion	Indium Ion (Other traditional, electric, and green options available); Up to 900 m/s dV
YLOAD (P/L) ACCOMMODATION CAPABILITY	Mass	Up to 35 kg
	OAP/Peak	Up to 18 W/430 W (Customizable for mission needs) Payload accommodation: power conversion available (6 V, 12 V, and 28 V)
	Volume	Variable (Launch configuration dependent)
	Field of Regard/View	Hemispherical unobstructed FoV
	Mission Data Handling	Up to 1 Gbps from P/L to S/V (Optical-based configuration)
	Command/Data Interface	Fully configurable (i.e. LVSD, RS422, SpaceWire)
	Thermal Control	Passive, payload controlled

Up to 18 W average, 200 W peak

Heat Rejection