

GA-500

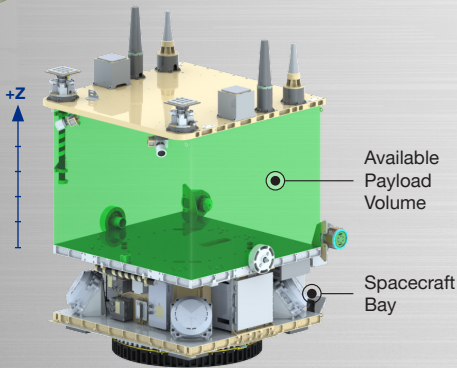


Resilient, modular, and configurable ESPA-Grande bus design supporting Environmental Monitoring, Space Situational Awareness, Comms, and ISR missions

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

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

Block redundant and cross-strapped options available



Spacecraft can grow in Z direction to accommodate various tank sizes

GA-500 PARAMETER

GA-500 VALUE

SPACECRAFT (S/V) CAPABILITY

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| Orbit | All orbits, all inclinations (Including xGEO/Cislunar) |
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|---------------------|---------------------|
| Mass (Basic/Launch) | Up to 280 kg/505 kg |
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| Volume | ESPA/G-designed (Configurable for other launches) |
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| Mission/Program | EWS, Oracle |
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| Launch Vehicle Compatibility | Falcon 9, Minotaur IV (Others as required) |
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| Design Life | 3-15 years |
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| Stabilization | 3-axis, 0.035 deg, 3 σ |
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| Voltage | 28 V +/- 6 Vdc |
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| Telemetry, Tracking & Command Rate | S-band, Up to 125 kbps uplink, 1 Mbps downlink |
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| Mission Data Rate | X-band, Up to 300 Mbps; OCT capable |
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| On-board Storage | >8 Gbytes, additional storage options available |
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| Propulsion | Xenon/Krypton Hall, Traditional Hydrazine (Electric and green options available) |
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PAYLOAD (P/L) ACCOMMODATION CAPABILITY

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| Mass | Up to 225 kg |
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| OAP/Peak | Up to 450 W/3k W (Customizable for mission needs) Payload accommodation: power conversion available (6 V, 12 V, and 28 V) |
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| Volume | Variable (Launch vehicle dependent) |
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| Field of Regard/View | Hemispherical unobstructed FoV |
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| Mission Data Handling | Up to 300 Mbps from P/L to S/V: 1 Gbps using GigE connection |
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| Command/Data Interface | Fully configurable (i.e. LVSD, RS422, SpaceWire) |
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| Thermal Control | Up to 5 bus-controlled heater switches |
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| Heat Rejection | Configurable heat management system available |
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