



Eagle-3™

*Robust, flexible
operational
mission platform*



THE VALUE OF PERFORMANCE.

NORTHROP GRUMMAN

Eagle-3™ Spacecraft

The Eagle-3 spacecraft is the highest performance member of Northrop Grumman's Eagle spacecraft product line. It is designed for missions requiring high reliability, substantial payload capacity, and operational mission performance features.

The Eagle-3 bus is a robust yet cost-effective spacecraft that can be configured for critical operational and science missions in a wide range of orbits and may be launched on the Falcon 9, Falcon Heavy or the Evolved Expendable Launch Vehicle (EELV). Seven Eagle-3 spacecraft are in production at Northrop Grumman's Redondo Beach, Calif., facility.

Key features include longevity and survivability based on a redundant architecture and radiation-hardened electronics, with scalable capacity for multiple payloads. The Eagle-3 bus can autonomously recover basic functionality to ensure survivability for critical missions.

Other options include accommodations for high agility, large deployables, wide-band communications subsystems, and low-latency data delivery via high-rate Ka-band downlink to ground stations or broadcast to field terminals.

The space platform uses core designs for low Earth orbit (LEO), medium/high Earth orbit (MEO/HEO), geosynchronous orbit (GEO), and L2 Lagrange point configurations supporting a wide variety of missions and providing a high level of mission assurance.

Eagle-3 Specifications

	LEO	MEO/HEO	GEO
Payload Mass	1,175 kg or greater	2,900 kg or greater	1,100 kg or greater
Payload Power	4,000 W or greater	5,500 W or greater	5,500 W or greater
Payload Data Interface Type	MIL-STD-1553B 1 Mbps IEEE-1394 100 Mbps	Dual MIL-STD-1553B 1 Mbps (ea) IEEE-1394 100 Mbps	Dual MIL-STD-1553B 1 Mbps (ea) IEEE-1394 100 Mbps (option)
Pointing Knowledge	22 arcsec, 3σ*	10 arcsec, 3σ*	10 arcsec, 3σ*
Pointing Control	50 arcsec, 3σ	9 arcsec, 3σ	9 arcsec, 3σ
Agility: Acceleration	Optional	0.1 deg/sec ²	Optional
Agility: Rate	Optional	1.0 deg/sec	Optional
Design Life	Up to 7 years	10 years	Up to 15 years
Propulsion Type, Capability (delta V)	Monoprop, 260 m/s or greater	Monoprop, 236 m/s or greater	Monoprop, 2,100 m/s or greater
Optional	<ul style="list-style-type: none"> Wide-band communications 		

*Higher performance available using payload data

Optimal Eagle Spacecraft and Launch Vehicle Matching



Eagle-1M



Eagle-2



Eagle-3



Eagle-S



Minotaur I



Taurus 3210



Minotaur IV



Delta II



Antares



Falcon 9



Falcon Heavy



EELV

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