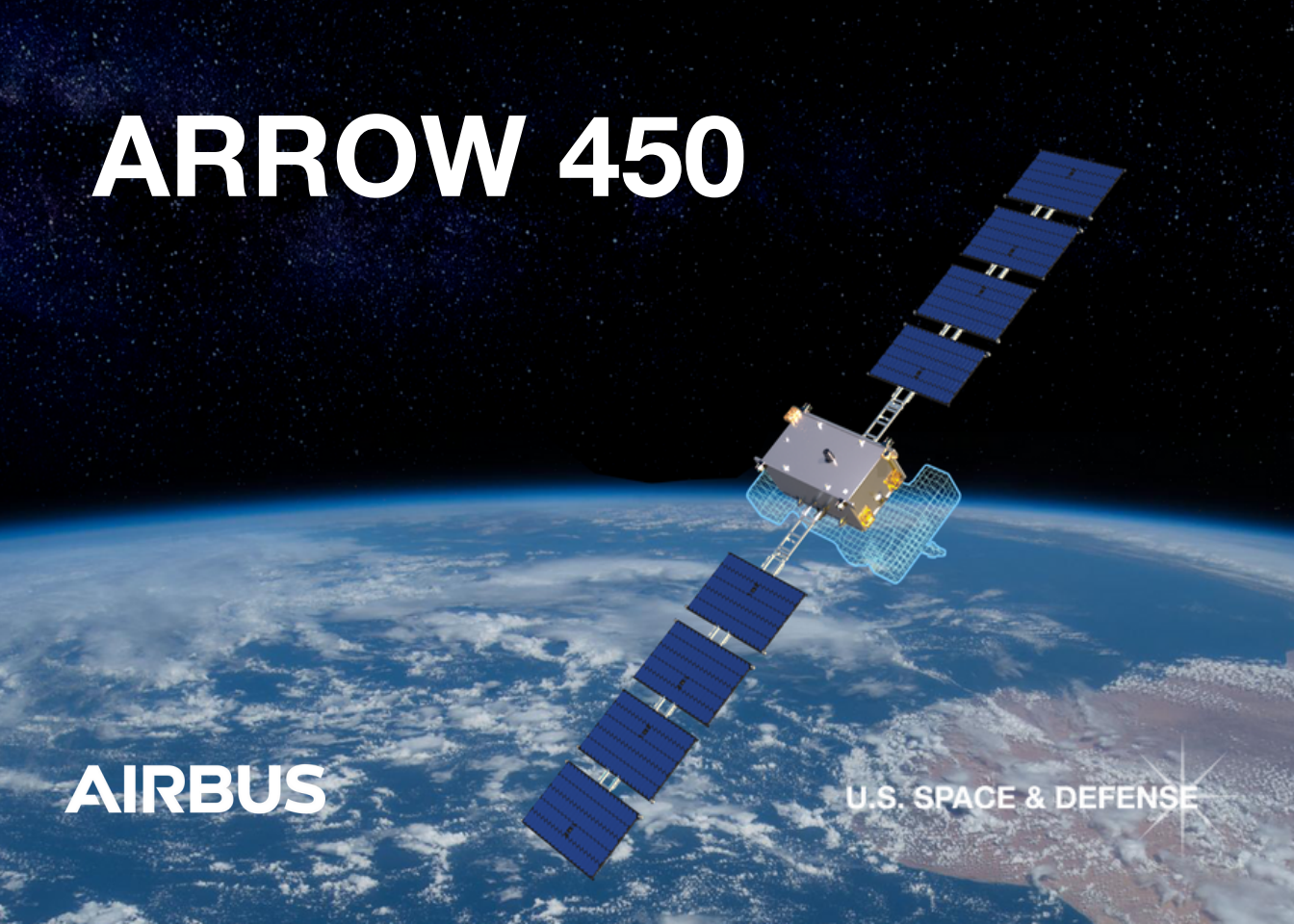
ARROW 450



AIRBUS

U.S. SPACE & DEFENSE

Specifications

Characteristics	ARROW 450
Class	ESPA Grande
Payload Mass	200-300 kg
Payload Volume	Modular
Payload Power	450 – 820 W OAP average (EOL) 3.0 kW Peak (1200 km polar orbit)
Power Bus	22-38 V Unregulated
Nadir Deck Area	800 x 1500 mm (std) 1200 x 2000 mm (max)
Avionics Architecture	Simplified CAN / SpaceWire / Ethernet
Attitude Control Performance	Pointing Control: 0.3 3-sigma** Pointing Knowledge: 0.3 3-sigma** Position Knowledge: 10 m 1-sigma** Velocity: 0.06 m/s 1-sigma** Time Accuracy: 50 ns 1-sigma** **Precision bus pointing option available
Connectivity – Downlink	Ka Band, X Band, and LCT
Connectivity – TT&C	Ka Band and S Band
Propulsion	800 m/s ΔV @ 400 kg total mass

Value

Scale: High-volume spacecraft production optimized for proliferated national security LEO constellations.

Price: Low recurring cost achieved through integrated supply chain, industrialization of processes, and the use of COTS equipment.

Quality: Applying large scale production, assembly and test approaches from other industries including advanced levels of smart automation.

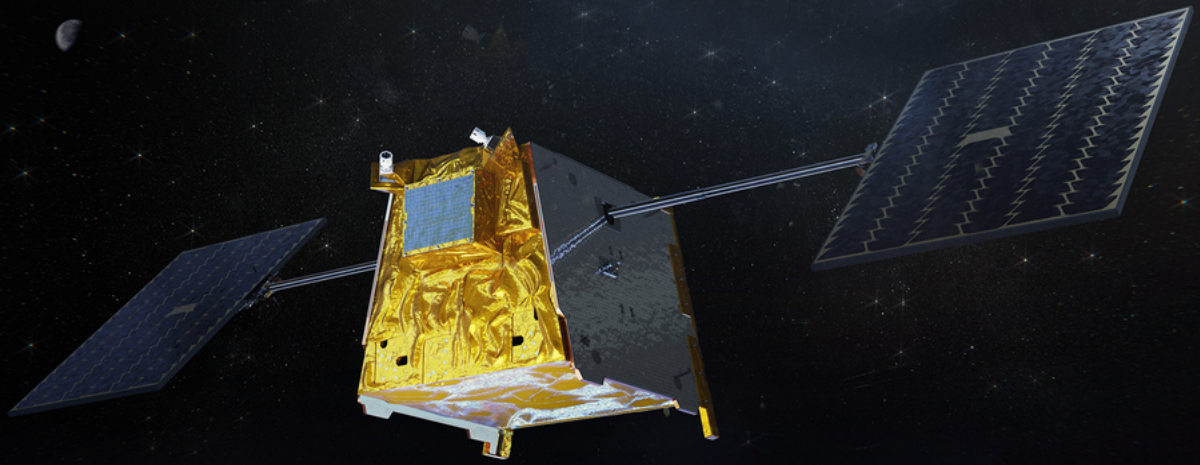
Modularity: Designed to accommodate multiple mission configurations, from nano to medium class payloads and long duration LEO missions. Orbit altitude flexibility thanks to all-electric propulsion. Standard payload deck and standard interfaces.

Reliability: High reliability standards, five years minimum lifetime in LEO orbit (at 1,200km).

Regulation: Compliant with post-mission spacecraft disposal regulations.

Contact:
Deborah Horn, deborah.horn@airbusus.com

ARROW 150



AIRBUS

U.S. SPACE & DEFENSE

Specifications

Characteristics	ARROW 150
Class	ESPA Grande
Payload Mass	100 kg
Payload Volume	1 m^3
Payload Power	250 W Average (EOL) 700 W Peak
Power Bus	22-38 V Unregulated
Nadir Deck Area	800 x 750 mm
Avionics Architecture	Simplified CAN / SpaceWire / Ethernet
Attitude Control Performance	Pointing Control: 0.3 3-sigma Pointing Knowledge: 0.3 3-sigma Position Knowledge: 10 m 1-sigma Velocity: 0.06 m/s 1-sigma Time Accuracy: 50 ns 1-sigma
Connectivity	Commercial Ka (baseline) S-band (option) Optical Comm (option)
Propulsion	800 m/s ΔV @ 200 kg total mass

Value

Scale: High-volume spacecraft production optimized for proliferated national security LEO constellations.

Price: Low recurring cost achieved through integrated supply chain, industrialization of processes, and the use of COTS equipment.

Quality: Applying large scale production, assembly and test approaches from other industries including advanced levels of smart automation.

Flight Proven: 618 satellites on orbit. Compatible with all launchers.

Reliability: High reliability standards, five years minimum lifetime in LEO orbit (at 1,200km).

Regulation: Compliant with post-mission spacecraft disposal regulations.

Contact:
Deborah Horn, deborah.horn@airbusus.com