



DRAGONFLY-C

Single Polarimetric SAR Satellite

High-performant C-band Synthetic Aperture Radar satellite featuring advanced onboard processing capabilities for real-time SAR image formation, Ground Moving Target Identification, and object detection and tracking.

Satellite Specifications

Frequency Band	C-band	PRF	0.4-40 kHz
Antenna Configuration	Deployable Phased Array	Incident Angle Range	20-52°
Range Bandwidth	300-600 MHz	Beam Configuration	Digital Beamforming
Polarisation	HH or VV	Waveform	Arbitrary Waveform Generation
Imaging Modes	Stripmap, Spotlight, ScanSAR, Sliding Spotlight, Stripmap Wide	Imaging Time per Orbit	5-10 min
Peak Radiated Power	4 kW	Payload Mass	176 kg
Transmitter Duty Cycle	5-20%	Bus Dry Mass	163 kg
		Satellite Mass	350 kg
		Data Downlink	Up to 2.5 Gbps (≥ 1 Gbps avg.)

Imaging Mode	Stripmap	Spotlight	ScanSAR
Nominal Swath	20-44 km	10 km	100 km
Nominal Product Length	100 km	5 km	100 km
Incidence Angle	20-52°	20-35°	20-35°
NESZ	-20 to -17 dB	-19 to -17 dB	-22 to -18 dB
AASR & RASR	≤ -20	≤ -20	≤ -20
GRD, Ground Range Resolution	3 m	1-1.5 m	15 m
GRD, Ground Azimuth Resolution	3 m	1-1.5 m	15 m

Extended imaging capabilities include Sliding Spotlight, Wide-swath Stripmap and VideoSAR imaging modes.