





## 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,    | Imaging Time per Orbit | 5-10 min                      |
|                        | Sliding Spotlight, Stripmap Wide | Payload Mass           | 176 kg                        |
| Peak Radiated Power    | 4 kW                             | Bus Dry Mass           | 163 kg                        |
| Transmitter Duty Cycle | 5-20%                            | 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.