Vision-1
Ideal High-Resolution Monitoring Solution

The Vision-1 high-resolution imagery offer brings a new <1m asset to the Intelligence Constellation, with full end-to-end mission operation services. Vision-1 is in orbit with NovaSAR, opening significant opportunities for Opti-SAR applications.

Number of Satellites: 1
SSTL S1-4 satellite

Features & Benefits

Key Features
- Detailed 0.9 m imagery products.
- 3.5 m Multispectral bands (NIR, RGB).
- Advanced agility and available capacity.
- Analysis ready data.

Key Benefits
- Further enhances our constellation monitoring capabilities.
- Particularly suited for defence, security and agriculture applications.
- Facilitates near real-time imaging.
- Secure UK operations.

Technical Specifications

- Launch: 16 September, 2018; Launched with NovaSAR
- Orbit: Sun-synchronous, 10:30 AM descending node, 583km altitude
- Period: 96.2 minutes
- Inclination: 97.5°
- Optical System: Newtonian telescope, combined with a complex pick-off prism and a folded refractive relay, focal length of 6.666m, f-number of 15.9
- Spectral Bands: Pan= 450-650 nm; Near Infrared = 760-910 nm; Red = 600-670 nm; Green = 510-590 nm; Blue = 440-510 nm
- Product Resolution: Panchromatic: 0.9 m; Multispectral: 3.5 m
- Swath Width: 20.8 km at Nadir
- Dynamic Range at Acquisition: 10 bits per pixel
- Viewing Angle: Standard: +/- 30° in roll | Extended: +/- 45° in roll
- Revisit capacity: Daily to 8 days depending on latitude and partner satellites
- Pointing Agility: Roll/Pitch 60° within 85 seconds excluding stabilization time
- Location Accuracy at Nadir: < 12 m CE90

Mission Lifetime
Minimum of 7 years.