



Image credit: CarbsAR render 2019. Credit: SSTL

CARBSAR

CarbsAR utilises the platform heritage of the Carbonite series and combines it with an innovative deployable X-band SAR payload to provide high resolution imaging capabilities night and day, whatever the weather.

Synthetic aperture radar (SAR) imagery can provide diverse surveillance intelligence like optical images but, deriving from an active sensor, is not subject to favourable solar illumination or weather conditions considered.

Applications

Suitable for a wide variety of commercial, civil and security applications:

- Defence and security
- Maritime
- Disaster response
- Environment and infrastructure

CarbsAR will capture high resolution SAR imagery during day or night, and in all weather conditions, allowing the reliable provision of information for a range of applications.

The high resolution and small footprint make it an ideal asset for acquiring more detailed information from known areas of interest.

Payload

Parameter	Specification
GSD	0.5m
Swath	4km
Spectral bands	X-Band
Throughput	180GB/day, 45 spotlight mode images per day

Platform

Parameter	Specification
Reference orbit	525km SSO with 10:30 LTAN
Mission lifetime	5 Years
Launch mass	140kg
Data storage	128GB
Downlink	500Mbps