



## SAR-C Single Polarimetric SAR Payload

High-performant C-band Synthetic Aperture Radar payload featuring flexible imaging modes for wide-swath, high-resolution imaging.

## **Payload Specifications**

Frequency of Operation Antenna Configuration Payload Modes

Achievable Ground Resolution PRF Ranges Polarisation Beam Configuration Waveform Payload Mass Deployed Dimensions Antenna Elements

C-band
Deployable Phased Array
Stripmap, Spotlight, ScanSAR,
Sliding Spotlight, Stripmap Wide,
VideoSAR
1m
0.4–40 kHz
Single (HH or VV)
Digital Beamforming
Arbitrary Waveform Generation
176 kg
5550 x 1000 x 125 mm
240 x 42

Peak Gain	40.5 dBi
Rx Noise Figure	< 4.5 dB
Tx Duty Cycle	3.6–18%
Peak Transmit Power	Up to 16 kV
Tx Pulse Length	1-40 us

## **Power Consumption**

During Imaging	Up to 4 kW
Warm-Up	< 1.7 kW
Standby	< 0.9 kW
Configuration	< 0.6 kW
Avg. Power Consumption	< 250 W

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.

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