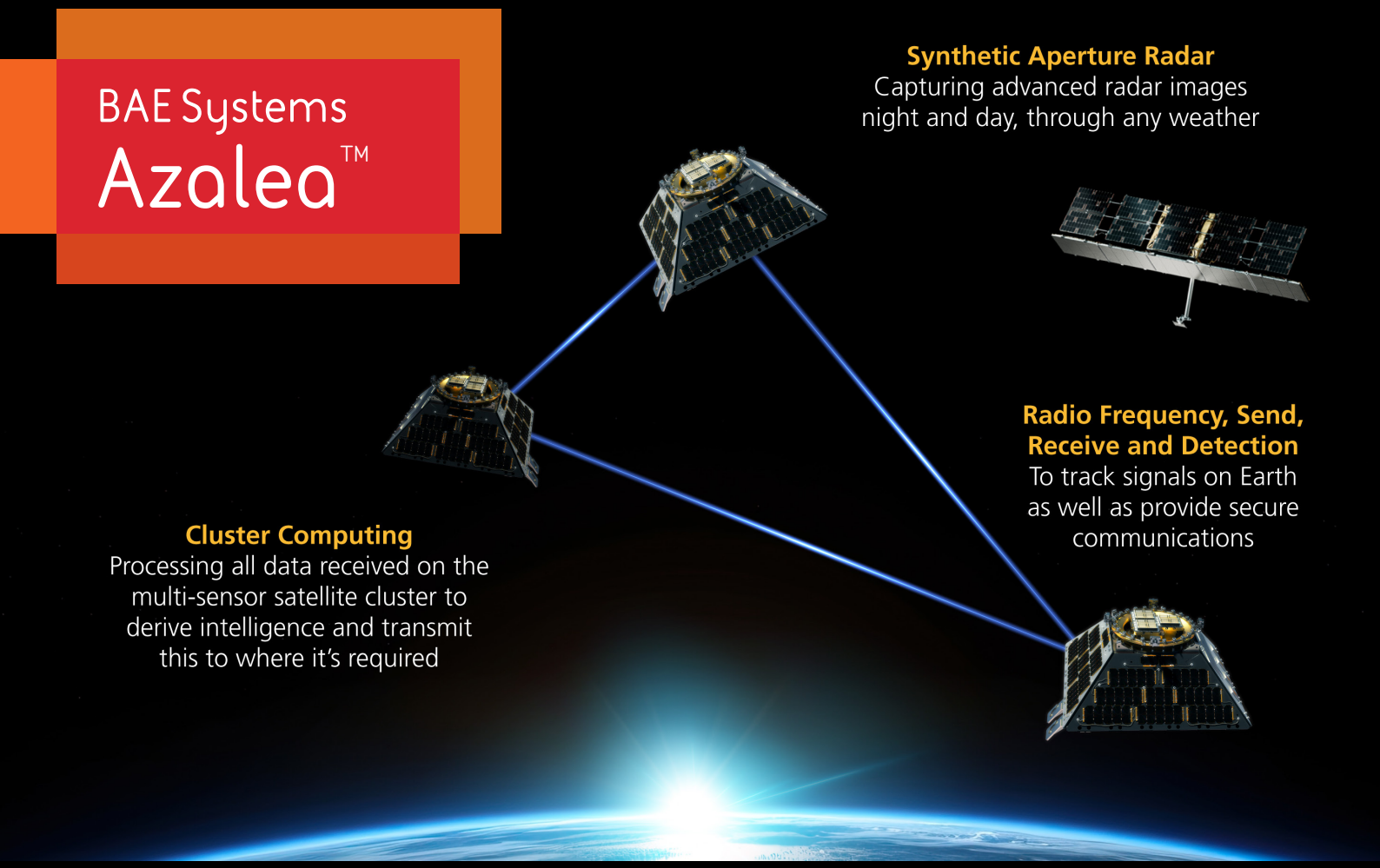
BAE Systems Azalea™



Azalea is a low Earth orbit cluster-based constellation, that will use multiple sensors to monitor the Earth's surface, analyse data and deliver the resulting intelligence anywhere in the world.

Intersatellite communications for precise time synchronisation and data transfer enables each cluster to deliver precise geolocation of RF signals along additional information from the scene of interest derived from the SAR data. State-of-the art edge processing along with the ability to move data around the cluster means that the processing can be performed on orbit, resulting in actionable information directly from orbit in near real time for faster decision making.

Key Features

- Industry leading wide area capture of the RF environment
- State of the art RF signal detection and geolocation
- Targeted multi-sensor (RF/SAR/EO) data for enriched analytics
- On-board (edge) processing to deliver actionable information direct to the user
- Assured and secured

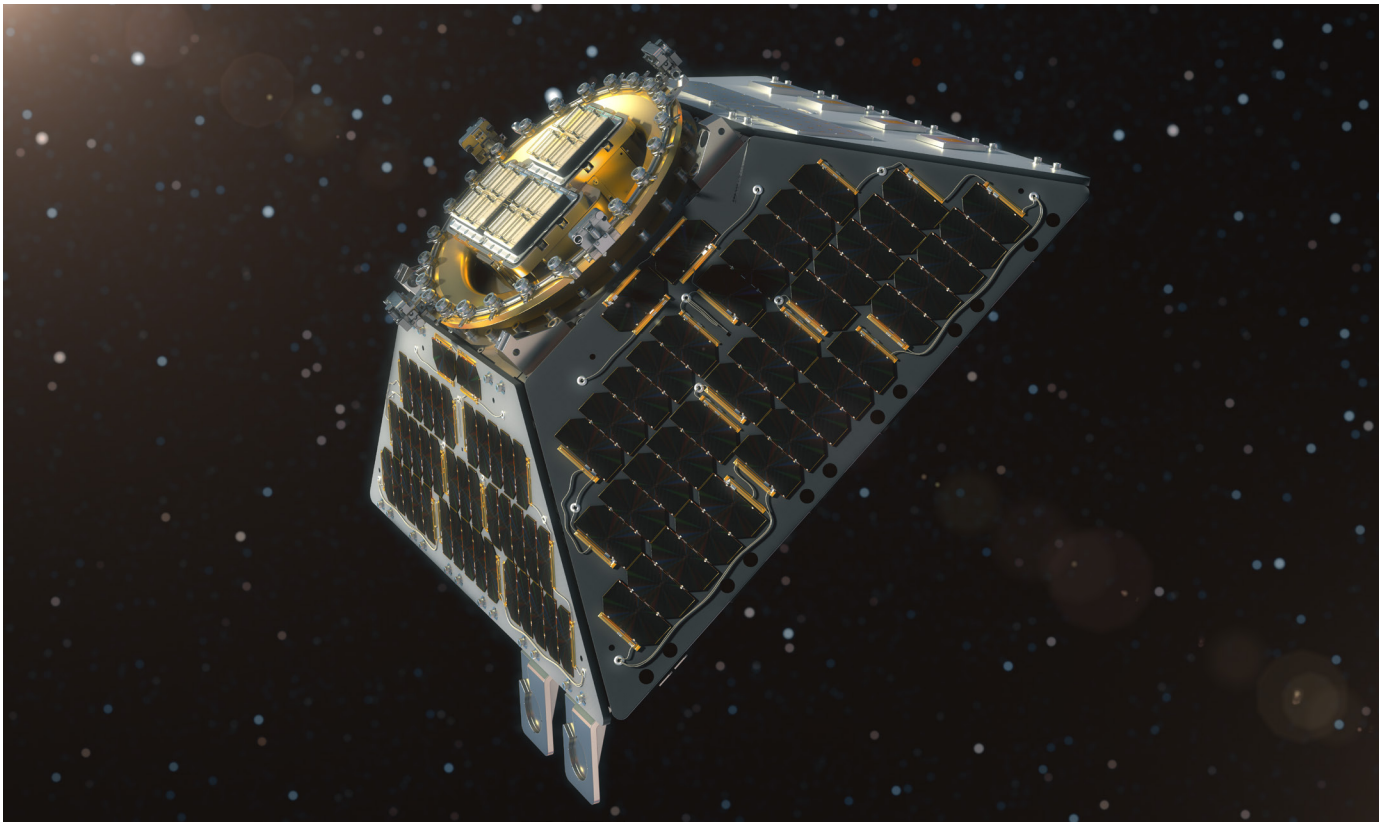
The system is orchestrated by the Azalea Hub which allows partners to join the system with their own assets such as SAR and EO along with the ability to access and ingest commercial data feeds. The Azalea hub provides all the planning and commanding to bring the data into a centrally managed system, and then applies state of the art data analytics to derive enriched information for the user for decision advantage.

Digital Intelligence

BAE SYSTEMS

Software Defined Radio and Data Processor

The BAE Systems Azalea Enhanced SDR and data processor forms the central part of the RF and processing chains on Azalea. Through its use of multiple antennas and Radio Head Units the Enhanced SDR supports space-ground links, space-space links, and advanced RF monitoring capabilities. Local processing resources interface to other platform functions such as imaging and data storage for a fully encompassing capability.



Azalea Cluster I Technical Specifications

Parameter	Capability
Mission life	RF 5 years, SAR 3 years
Orbit type	Sun-synchronous orbit (SSO)
Orbit altitude	500-600km
Inclination	~97.5°
LTAN	1030hrs
Orbit Period	~95 minutes
Launch Vehicle	Falcon 9 Transporter Rideshare

BAE SYSTEMS

BAE Systems, Surrey Research Park, Guildford, Surrey, GU2 7RQ, UK

E: space@baesystems.com | W: baesystems.com/futurespace

linkedin.com/company/baesystemsdigital @BAESystemsDigi

Find out more by scanning the QR Code