Aerospace & Defense

SENTINEL-1. Synthetic Aperture Radar deployment and locking mechanism (SAR DLM)

×

SENER AEROSPACE & DEFENSE / SPACE / COMMUNICATIONS / HELIX AND PATCH ANTENNAS

SENTINEL-1. SYNTHETIC APERTURE RADAR DE-PLOYMENT AND LOCK-ING MECHANISM (SAR DLM)

Cliente: ESA

Among the Sener projects for 1- and 2-body deployment mechanisms, projects such as Sentinel 1 SAR antenna panel deployment stand out.

The Sentinel 1 satellite has a C-band Synthetic Aperture Radar (SAR). Thanks to this SAR instrument, Sentinel 1 will be able to provide high- and medium resolution data for the observation of land and coastal areas in cloudy areas and at night. It also has a radar with interferometric capabilities for detecting small land movements (at millimetric or sub-millimetric levels.

Sener performs the deployment of the Sentinel 1 SAR antenna, which has fi ve panels (A, B, C, D and E). Of these, the central panel (C) is rigidly fixed to the top of the satellite and the other four (A, B, D and E) will be deployed in relation to panel C in a controlled sequence after the launch. They will then remain locked in the deployed configuration. The four rotating axes are parallel.

Today Sener is proud to communicate the successful in orbit deployment of the units corresponding to the Sentinel-1A and Sentinel-1B. Sener has got also the contract to supply new mechanisms for the next Sentinel-1C and Sentinel-1D.