The ALQ-703 equipment’s unrivaled performance stems from its highly advanced system design based on solid-state and digital technologies (DRFM, Digital Receiver, RX/TX modules) and phased-array antennas, featuring fast electronic beam steering and high ERPs.

In operational scenarios, the most likely threat to combat aircraft over the target area is represented by the simultaneous presence of surveillance, acquisition, and tracking radars as well as missile and fire control systems. Among the main jamming roles required to ensure an adequate protection of attack formations, the Escort, Support, and Close Support missions undoubtedly deserve special attention. To meet such demanding requirements, Elettronica proposes its ALQ-703 highly integrated Support Jammer Pod, designed to provide both individual and collective protection to combat aircraft. System design ensures prompt interception and automatic processing of the radar environment, as well as the implementation of a power management function to ensure an optimized jamming response to the multi-threat environment.

This design approach represents the only effective solution to the stringent needs of today’s threat environments where fast emitter interception, real-time identification, and dedicated ECM/Electronic Attack (EA) programs constitute vital assets towards mission success.

The pod is designed for use in the platform’s central station in order to provide a 360° coverage. Self-cooled and fully automatic, the Support Jammer Pod is essentially a stand-alone equipment, that during missions overrides the platform’s internal self-protection suite. Also its reduced dimensions and mass make it suitable for a wide range of platforms.

**SYSTEM PERFORMANCE**

The Support Jammer Pod has been designed to provide:

- Wide frequency and spatial coverage
- Automatic threat acquisition and emitter location based on the phase DF technique
- Very high ERP
- Automatic power management function to ensure a multiple and simultaneous jamming response
- Advanced “smart” (noise and deception) jamming techniques exploiting digital technology
- Fully solid-state Active RX/TX Phased Array
To effectively counter modern radar threats, the Support Jammer system can implement “Smart ECM techniques”, exploiting latest DRFM (Digital RF Memory) technology and advanced algorithms. The system can generate a wide range of Mutual Screening Jamming Techniques that include Noise Jamming, featuring a multitude of waveforms to optimize masking effectiveness, and Coherent False Targets to ensure an intelligent deception of both radar operators and automatic tracking systems. Nevertheless, the system can also ensure automatic platform self-protection in order to maximize platform survivability and probability of mission success.

SYSTEM FEATURES
The Support Jammer system consists of an ESM equipment exploiting digital receivers and phase DF technique. This equipment performs accurate environment signal analysis and provides high priority threat designation to the ECM/EA section in order to defeat the encountered threats and ensure formation survivability. The ECM/EA section features solid-state transmitters and is closely integrated with the ESM section; the former also incorporates an independent receiving and tracking capability that endows the system with a high level of operational effectiveness and flexibility to provide an exceptional response to the threat scenario. Worthy of mention are the planar phased array antennas (two-dimensional apertures) that deliver the necessary high power jamming signal.

PRODUCT SUPPORT
The ELT Support Jammer Pod is fully supported by a complete set of product support equipment that includes:

- Field test equipment
- Mission data (operational and logistics) loading/unloading
- Ground support equipment
- Automatic test equipment
- Ground facilities for mission preparation and planning and post flight data analysis (operational and logistics)