# Advanced Family of COMJAM Systems

Smart, Flexible Systems for Selective Air and Ground **JammingSolution** 

### **Technical Specifications**

### **Ground COMJAM Systems**

V/UHF Band Parameter HF Band Frequency band 2-30MHz 20-3000 MHz Power output (typical) 1 to 2KW 20-500 MHz 1KW 500-1000 MHz 500W 1000-3000 MHz 250W Antenna Omni-directional Omni-directional Directional

Transmission resolution 10 Hz Jamming modes

**Automatic:** 

• Signal Initiated Jamming Sequential Jamming Multi-Carrier Jamming

100 Hz

Broadband Jamming Manual Jamming -50 dBc

Harmonics suppression Harmonic filters

Low-Pass or Sub-octave filters

### **COMJAM for Mission Aircraft**

band 20-3000 MHz Frequency 20-500 MHz 500W-1KW Power output 500-1000 MHz 250W-500W 1000-3000 MHz 100W-250W Antenna Omni-directional Directional Transmission resolution 100 Hz Jamming modes **Automatic:** Signal Initiated Jamming

 Sequential Jamming Multi-Carrier Jamming

Broadband Jamming Manual Jamming

Harmonics suppression -50 dBc

Harmonic filters Low-Pass or Sub-octave filters

### SKYJAM - COMJAM Payload for UAS

30-500 MHz (optional: 30-3000 MHz) Frequency band Power output 50W Omni-directional Antenna Transmission resolution 100 Hz Jamming modes **Automatic:**  Signal Initiated Jamming Sequential Jamming Multi-Carrier Jamming

Broadband Jamming

Power consumption <750W

<35 kg Weight



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**JammingSolution** 







### Advanced Family of COMJAM Systems

# Smart, Flexible Systems for Selective Air and Ground JammingSolution

Today's modern battlefields increasingly depend on the Electromagnetic Spectrum,

reflecting the critical need for Electronic Attack (EA) systems that can deny or reduce an enemy's effective use of this spectrum in order to degrade and neutralize its combat capabilities.

### Elisra's Answer

In response to this urgent demand, Elisra has developed a family of COMJAM systems for air (manned and unmanned) and ground (fixed and mobile) platforms, as part of its Electronic Attack family of solutions. The company's COMJAM systems are combat-proven and in-service with many armies across the world. Elisra's cutting-edge systems utilize sophisticated algorithms combined with components based on the most advanced technologies available today.

These state-of-the-art jamming systems are able to cope with conventional communications as well as the latest communication methods, including frequency hopping.

Elisra's smart systems are equipped with a "look-through" mechanism for reception and activity detection, enabling precisely-timed, selective jamming of only targeted active signals. In addition, they allow prioritization of targets and the concentration of power on specific targets at any given moment, thus maximizing jamming efficiency.

### **Ground-Based COMJAM Systems**

The ground-based COMJAM systems are an extremely important component in an integrated EW system, providing capability to attack enemy's communications as part of the assistance to friendly forces.

Elisra's tactical ground-based COMJAM systems are modular, flexible, and configured to meet existing and emerging threats. They are adaptable to all land platforms, both stationery and mobile, including AFVs which can escort front line forces - an option recognized as an invaluable tactical asset. The COMJAM system comprises state-of-the-art components such as agile wideband digital receivers, activity detectors and exciters, very fast T/R switches and wideband antennas.

### **COMJAM for Mission Aircraft**

Diverse, fully automatic, and adaptable, Elisra's COMJAM solutions are specially designed for installation on-board Mission Aircraft. Among the key advantages of integrating COMJAM systems on Aerial Platforms is the expanded spatial coverage - which enables the provision of simultaneous assistance to multiple forces. In addition, terrain independence and reception of weak signals enhance the system's jamming efficiency and provide improved EW capabilities. Another clear benefit of airborne COMJAM implementation is the significantly increased flexibility in response to unexpected and rapidly changing operational scenarios and real-time changes in operational missions.

#### **SKYJAM - COMJAM for UAS**

SKYJAM is a battle-proven, modular, flexible, and customizable airborne COMJAM payload for UAS (Unmanned Aerial Systems). Operated in automatic or manual modes, the system manages prioritized jamming of multiple frequency sub-bands and predefined lists of threats. Deployed either as a stand-alone jammer or integrated with additional Elisra EW support systems, SKYJAM can be mounted on a variety of airborne platforms as well as providing the ideal solution for forward battlefield areas. User-friendly, SKYJAM's modular systems span the full frequency band - from VHF to UHF. Customers can select systems operating over a single VHF/UHF band, or a solution which covers multiple bands.

### **COMJAM Systems - Main Features**

- High-power solid-state amplifiers
- Agile synthesizers
- Complex modulation generation capability
- Integrated agile receiving and activity detection subsystems for look-through
- Manual or automatic operation
- "Power management" via sophisticated algorithms
- · Jamming options:
  - Signal Initiated Jamming (SIJ)
  - Sequential Jamming
  - Multi-Carrier Jamming
  - Wideband / Barrage Jamming