

## DIGITAL BROADBAND JAMMER COMJAM

### SAJ-2000MD



Figure: Customised Digital Broadband-Jammer (Example)

#### Features:

- Up to 1 kW RF output power, adjustable
  - Ultra-fast digital synthesizers
  - Multi-threat and multi-mode operation
  - Fast attack and stealth mode
  - High speed search-lock receiver interface
  - Various operational modes including real-time spoofing
  - Manual and fully automatic operation
  - Programmable exclusion of unlimited communication channels or sub-bands
  - Broadband or spot jamming including programmable fast frequency hopping
  - Download of frequency lists for programmed spot jamming from a search receiver
  - Synthesizer parameters fully programmable using a PC/Notebook
  - Comfortable GUI Graphic User Interface for operator
  - Remote control via TCP/IP, encrypted VPN or protected radio link
  - Comprehensive BITE test
  - Wide range DC and AC power supply
  - According to MIL-STD-810F and DO-160F
- COMJAM application, EW/ECM
  - Portable for various platforms including airborne and shipboard installations
  - Frequency range from 0.1 MHz up to microwave or per separate specification

#### Applications:

The digital broadband jammer SAJ-2000MD serves as a means of disturbance, confusion and deception of radio stations within a EW/ECM system.

Individual frequencies or defined frequency bands can be jammed. As a result, single targets, frequency-agile methods such as fast frequency hopping or spread spectrum transmissions are covered. In addition to the single-frequency jamming, also multiple targets can be covered through simultaneously transmitting jamming signals of different frequencies (multi-threat capability). Protected frequencies or bands are defined in a blocking list and excluded from jamming.

Using high speed broadband receivers the jammer operates fully automatically as a stand-alone system or as part of a EW system.

The jammer can be used on different platforms and is also used in aircrafts as active means in the context of typical EW/COMJAM tasks or for training purposes to simulate jamming attacks into own communication channels in the battlefield. For use as a decoy transmitter, different modulation sources are available. Furthermore, spoofing can be operated on one or multiple channels simultaneously in real-time.

In addition, the jammer can be operated in unmanned stations by encrypted remote control. Therefore, wired or wireless remote control channels are available including encrypted VPN. Operating is conducted by the operator via computer and a comprehensive Graphic User Interface as user interface. A comprehensive BITE system allows the presentation of the overall status of the system, with automatic error-/alarm reporting, including the description of the error and first measures.

Due to the modular architecture, the jammer can be upgraded to current technical or tactical requirements within wide limits.

**Technical Specifications****SAJ-2000MD**

1. Frequency Range From 0.1 MHz up to microwave
2. RF Output Power up to 1kW
3. Frequency Generation Ultra fast digital synthesizers
4. Frequency Protection:
  - Frequency exclusions
  - Band exclusions
  - Protected frequency list
5. Modulation:
  - Complex
  - Several spoofing modes
6. Special Operation Modes:
  - Manual or fully automatic operation
  - Spot, preamble, look-through, broadband, hopping
  - Manual/automatic list, hopping list
  - Practically unlimited number of pre-configurable settings
7. Local Control:
  - Comfortable Graphic User Interface GUI for the operator
8. Remote Control:
  - Two-wire
  - VPN
  - Remote control for unmanned stations via wireless channel
  - Data-link interface for integration in EW-system (C<sup>4</sup>).
  - Selection and command of jamming profiles (recall)
9. Platform:
  - Vehicle
  - Shipboard
  - Airborne, according to DO-160F
10. Operating Temperature: -20°C - +55°C
11. Operating Voltage: DC or AC
12. Housing: MIL Case with integrated 19"-shock mounted chassis according to VG-95446-2, MIL-STD-810F, DO-160F
13. Colour: RAL-6031F9 (NATO), RAL-5008 or on request

## SAJ-2000MD COMJAM up to microwave



Figure:  
High Power COMJAM System (Example)