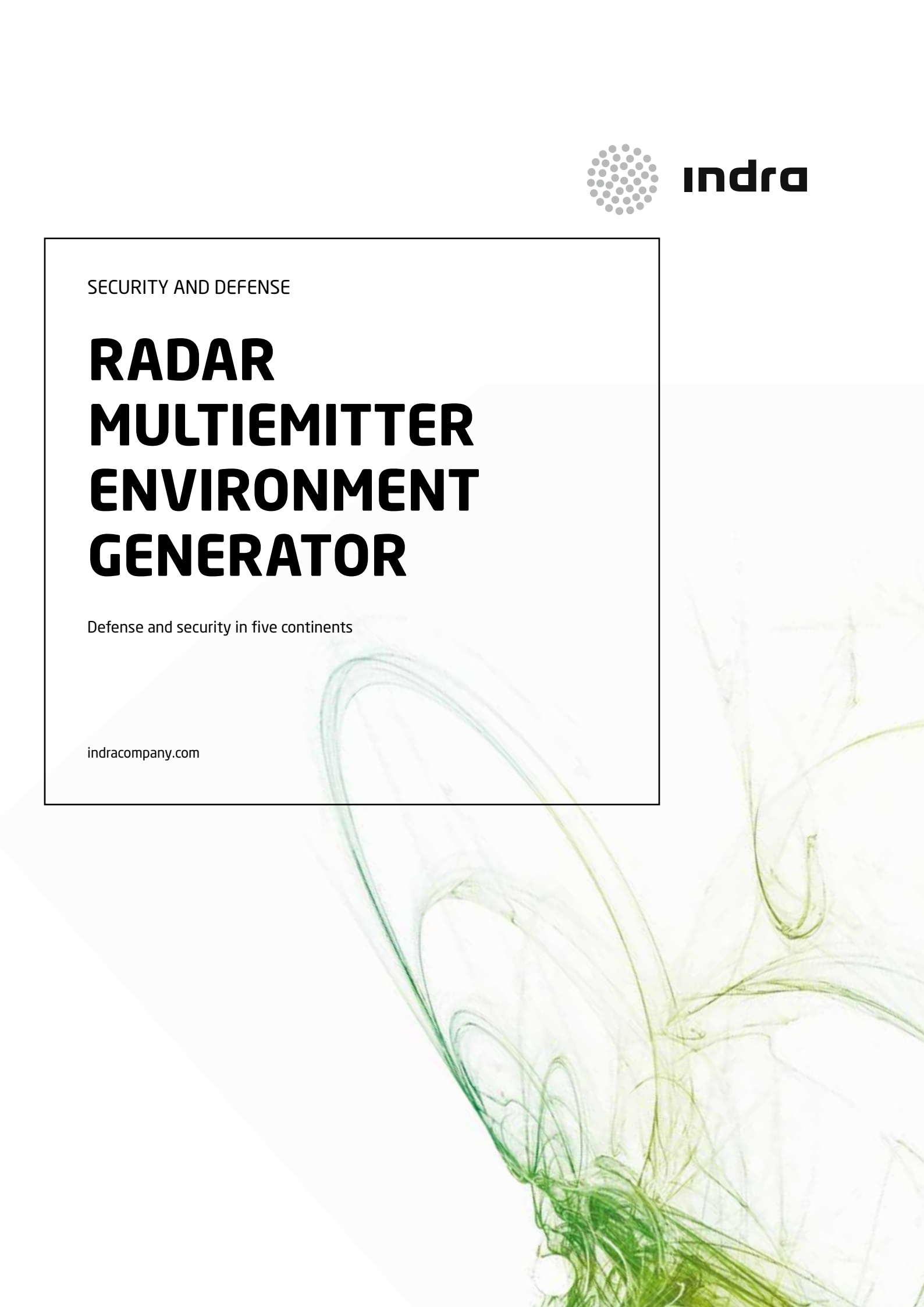
SECURITY AND DEFENSE

RADAR MULTIEMITTER ENVIRONMENT GENERATOR

Defense and security in five continents

indracompany.com



RADAR MULTIEMITTER ENVIRONMENT GENERATOR



EWE-4000

Indra puts a range of radio frequency generators at your disposal in Radar Band (EWE Series), oriented to analysis, diagnostic and ECM as well as ESM Electronic Warfare Systems validation

EWE-1000

EWE-1000 model is the most basic in the range, but not for it the less competitive one in its sector. Able to emit any frequency signals inside the work band, in continuous or pulsed way. Modulated by a wide characteristic spectrum of video values signals.

This model´s prominent characteristic, regarding the rest of the range, is its low weight and autonomy, what transforms it into a portable equipment, to have it in any location.

It allows to have stored several emitters characterized by their parameters, acceding to them through a keyboard and a LCD screen incorporated.

Some EWE-1000 applications are:
- Verification of RF wiring
- Verification of Video wiring
- Test of electronic warfare systems in preventive maintenances
- Previous test GO/NO GO to the mission

Emitters density :
- Monoemitter
  64 sequential complex emitters
- Multiemitter
  3 simultaneous simple emitters

EWE-2000

EWE-2000 is the only one of the EWE family that combines radio frequency generation and processed results analysis in a same equipment. Being at the same time a modular equipment that allows to form in independent modules of signal injection and analysis of stimulus response for different used working bands. Allowing this way to acquire a basic structure for an equipments and to extend itself in the future with new modules.

Integrated in an own mobile unit, transportable by user, it allows to move this unit to forward edge of operations and to make the necessary tests for the verifications of the systems.

The connection of the injection elements is made through a hood to the system receiving elements, and the analysis is made intercepting the results transmitted by equipment to diverse aircraft control systems.

The interface used in control tests can be included within the infrastructure or externally by means of a PC or Handheld.

Some EWE-1000 applications are:

- Verification of RF wiring
- Test of electronic warfare systems in preventive maintenances
- Previous test GO/NO GO to the mission

Simultaneous emitters density:

- 4 (0.5 - 2 GHz)
- 9 (2 - 18 GHz)
- 2 (18 - 40 GHz)

EWE-4000

EWE-4000 is a one channel Radar Multiemitter Environment generator oriented to analysis, diagnostic and validation of ESM and ECM EW systems. The equipment is designed to generate up to 16 time-multiplexed simultaneous emitters or one CW in the range of 2-18 GHz and it can generate a maximum density of 900.000 pulses per second.

The Man-Machine-Interface is based on Windows-XP and offers a user friendly GUI.

The application is used to edit and simulate the scenarios. It offers facility to create scenarios, platforms and associated emitters, characterise RF parameters and save them in a database.

The simulation can be executed, paused, stopped and reloaded easily, offering a very flexible interface.

The MMI receives feed-back from the HW and alerts the user if any problem appears during simulation. In addition to CBIT it is possible to realize a complete BIT of the system under user request.

Every emitter simulated with the EWE-4000 has the following configurable parameters:

- Frequency
- Scan
- Pulse Repetition Interval
- Pulse width
- Modulation

EWE-5000

Basic EWE-5000 product is a one channel Radar Multiemitter Environment Generator designed to generate up to 16 time-multiplexed simultaneous pulsed emitters or one CW in the range of 0.5-18 GHz. Other configurations with more generation channels are possible.

The radar generator can generate a maximum density of 1000000 pulses per second.

EWE-5000 has the following units:

- Man-Machine-Interface
- Signal generator and processor
- High Power Amplifiers
- Transmitting Antennas
- Tracking System

The Man-Machine-Interface is used to create the different emitters and scenarios to be simulated. It offers a user friendly GUI based on Windows-XP and facility to play, stop and re-play the scenario created.

This console has an Ethernet interface with the processor unit. The processor unit is responsible for generating the real pulses to be transmitted for each of the emitters created by the user.

The processor is mounted in a 19" rack. It consists of processing boards and RF modules. The processing boards calculate the actual parameters for each pulse to be transmitted (TOA, frequency, amplitude, PW and intrapulse modulation) and programme the RF signal generator and RF components to simulate the real train pulse as desired. The RF signal is then transmitted to the appropriate HPA which amplifies this signal before sending it to the transmitting antennas.

Every emitter simulated with the EWE-5000 has the following configurable parameters:

- Frequency
- Scan
- Pulse Repetition Interval
- Pulse width
- Modulation

EWE-6000

EWE-6000 is the top series model of the Electronic Warfare Environment serie. Its capabilities to generate a complex, dynamic scenario, directly injected or radiated in free space towards EW systems with a high degree of fidelity, accuracy and easy to use, have no precedences.

The EWE series constitute a set of highvalued elements to be used during the development, testing and evaluation of most advanced Electronic Warfare systems today.

EWE-6000 has the following elements:

- Radar Warning Receivers (RWR)
- Electronic Countermeasures (ECM)
- Electronic Support Measures (ESM)
- Installed EW systems
- SIGINT systems

The EWE-6000 is a modular product, that can be accommodated and grown to satisfy different sizes and RF generation needs.

Typical applications of EWE-6000 are:

- Development and evaluation testing of EW systems
- Countermeasures effectiveness evaluation
- Anechoic chamber trials
- Tactics effectiveness evaluation
- Dynamic electromagnetic environment simulation
- Training for operators, on-board personnel and squadrons

EWE-6000 can generate up to 16 simultaneous emitters, upgradeable under request, with frequency coverage between 0.5-40 GHz, a scenario pulse density of 900.000 PPS per generation channel and advanced intrapulse modulation capabilities (FMOP [chirp], PMOP, AMOP).



Ground deployment of EWE-5000



Naval deployment of EWE-5000



ISO 9001:2000





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