

AIRBORNE SRT-800



Avionics

AIRBORNE SOFTWARE DEFINED RADIO SRT-800



SWave® Airborne SDR SRT-800 provides secure and cyber resilient connectivity in the air-to-air and air-to-ground domains for Military and Civil Agencies looking for reliable radio communications spanning the entire battlespace. SWave® Airborne SDR SRT-800 is designed to guarantee superior performance on any fixed/ rotary wing aircraft, manned or unmanned.

The success or failure of military actions strongly relies on accurate information. From this viewpoint, the recent advancement of communication technology is of great importance in forming the structure of Network Enabled Capability (NEC). NEC combines key elements from different organizations – instructive, procedural, technical, organizational and human – and merges them into a single Network, thus enabling them to interact, achieve, and maintain notable strategic superiority.

Leonardo's answer to NEC requirements is the cutting-edge SWave® Airborne SDR SRT-800 radio, this airborne radio is based on the company's latest Software Defined Radio (SDR) technology.

A single SDR is designed to replace various traditional avionics units such as UHF/VHF communications radio, SATCOM, and crypto computer. SDR was specifically developed with the idea of a single communication platform having the capability to be completely reconfigurable with software that's based on several different communication modes. Due to its SCA compliance, SRT-800 provides the customer with a highly versatile and flexible communications option.

SWave® Airborne SDR SRT-800 is the latest in Leonardo's SDR family, which includes man-portable, vehicular and naval radios. The SDR solution can be tailored to customer requirements ranging from integration of the airborne SRT-800 into an existing network up to delivery of a complete communication solution.

Leonardo is one of the leading partners of the ESSOR (European Secure Software Defined Radio) consortium, whose purpose is to establish a shared EU radio architecture, ensuring that all products of the SWave SDR family are compatible and compliant with the development of new waveforms.

SWAVE® AIRBORNE SDR SRT-800

KEY FEATURES

- Software reprogrammable in the field (SCA compliant)
- Software programmable crypto appliqué
- Narrow and wide band waveforms
- EPM capability
- Compatible with ICAO Annex 10 and ED-23C, including FM immunity
- Beyond line-of-sight capability
- Interoperable with NATO standards
- Ability to host indigenous SCA waveforms and cryptographic algorithm
- Control via MIL-BUS-1553 or ARINC-429 or RS-485
- Compact and lightweight with low power consumption

TECHNICAL SPECIFICATIONS

FREQUENCY RANGE

Coverage:	30- 2000 MHz
VHF	30-88 MHz close air support
VHF	108-118 MHz navigation
VHF	118-137 MHz air traffic control
VHF	137-156 MHz land mobile
VHF	156-174 MHz maritime
UHF	225-512 MHz military
UHF	512 - 2000 MHz (growth)

TRANSMIT OUTPUT POWER

AM	16 W
FM	20 W
SATCOM	100 W

WAVEFORMS

VLOS	AM/FM voice and data
ATC in the 118-137 MHz band (8.33 kHz and 25 kHz channels) with embedded FM immunity i.a.w ED-23C	
HaveQuick/HaveQuickII (STANAG 4246)	
SATURN (STANAG 4372)	
SINGGARS (MIL-STD 188-241-1)	
Selfnet® EASY II	
Selfnet® Soldier Broadband Waveform	
ESSOR's High Data Rate Waveform	
Data MIL-STD-188-220D	
Link-II with external modem	
Sonobuoy with external modem	
Maritime in the 137-156 MHz band	
Capability to host indigenous SCA waveforms	

GUARD RECEIVER

Independent tunable guard receiver

COMSEC

Programmable Cryptographic Appliqué (upgradable for crypto modernization):

- KY-58
- KY-100
- KG-84A/C
- Italian Algorithm

Compatible with external cryptos

Capability to host indigenous algorithms

SATCOM

Dedicated	MIL-STD-188-181B
5 kHz DAMA	MIL-STD-188-182A
25 kHz DAMA	MIL-STD-188-183A
Integrated waveform	
Data	MIL-STD-188-184

ANCILLARIES

Remote control panel SP-2083/X
High Power Amplifier (SATCOM)
Low Noise Amplifier (SATCOM)