



## **SKY GUARDIAN 2000 ADVANCED BROADBAND RADAR WARNING RECEIVER**

**Aircraft operational environments are ever more threatening. Situational awareness and rapid response to identified threats are critical to survivability.**

Sky Guardian 2000 is an advanced radar warning receiver (RWR) that provides situational awareness and rapid threat warning and includes a central hub for integrating other Electronic Warfare (EW) sensors and countermeasures. The equipment is a very capable, yet compact system suited to low-fliers such as helicopters and transport aircraft where engagement ranges can be short and rapid reaction is required.

Following extensive verification and trials, Sky Guardian 2000 has been accepted into service on a number of platforms in different configurations as a stand-alone RWR, or as the heart of an integrated EW suite.

The RWR accurately measures intercepted radar parameters and uses sophisticated software and digital hardware signal processing to characterise the environment and inform the

operator. It identifies emitters and systems by matching measured data to a pre-loaded, user-controlled library initiating warnings and countermeasures if necessary. Recordings of the intercepts can be stored for post mission analysis and to update a central database.

Sky Guardian 2000 also provides a programmable Defensive Aids Suite (DAS) controller. This is designed to provide the level of sensor and countermeasure integration required for maximum survivability on today's modern battlefield.

### **KEY FEATURES**

- C to K band instantaneous cover
- Direction finding capability of better than 10° rms
- Library of over 4,000 emitter modes
- User programmable for emitter identification
- Threat emitter recording for post-mission analysis
- Built-in integrated DAS controller
- Comprehensive service and support.



Compact RWR for small platforms requiring high performance

## TECHNICAL SPECIFICATIONS

### RF coverage

C to K band

### Coverage

360° azimuth; ±45° elevation  
depending upon installation

### Direction finding accuracy

Better than 10° rms  
Characterises all emitter modes by RF/PRI/PW  
Scan and associated agility  
Records mission and systems status data in-flight

### Emitter library

More than 4,000 emitter modes

### Extended capability

Can act as the core of an integrated DAS

### Power

28V 8A, 350VA 3 ph 115V 400Hz

### Total weight

23kg

## MODULAR ARCHITECTURE

Sky Guardian 2000 detects and identifies all pulsed, Continuous Wave (CW), Interrupted CW (ICW) and Pulse Doppler (PD) radars at long range and in complex Radio Frequency (RF) environments. An ultra broadband receiver in a digital architecture gives a virtual 100% probability of intercept whilst an advanced digital IFM ensures fast and accurate frequency determination. A separate narrowband-scanning channel provides enhanced sensitivity for intercept of low power signals.

## DISPLAYS AND CONTROLS

Sky Guardian 2000 integrates directly with aircraft systems via its 1553B databus for controls and displays via a glass cockpit. Alternatively the system can be provided with its own control and display capability for installation into the platform. Mission dependent data is loaded via a PCMCIA memory card port in a data transfer unit which also provides the medium for recording in-flight intercept and system data.

## ADVANCED TECHNOLOGY

The high performance of Sky Guardian 2000 is achieved by using powerful processors and advanced real-time signal measuring and analysis techniques. Use of Monolithic Microwave Integrated Circuits (MMIC) results in a significant reduction in size allowing all the receiving and processing functions to be contained within fewer units.

## DEFENSIVE AIDS SYSTEMS

Sky Guardian 2000 has been designed to perform the core functions of a DAS controller. All self-protection sensor data is combined in a single 'situation awareness' picture and ensures the optimum selection and management of countermeasures.

## PROVEN PERFORMANCE

Sky Guardian 2000 is the latest RWR to enter service from SELEX Galileo's well established range of sensor systems for fixed and rotary wing aircraft. This lightweight equipment provides a proven situational awareness and self-protection capability. With a virtual 100% probability of intercept and rapid time to intercept, Sky Guardian 2000 is as ideally suited to today's low altitude, short range engagements as it is to long range engagements. Using its DAS controller, Sky Guardian 2000 has been shown to co-ordinate integrated sensors and countermeasures to provide full protection to the platform and crew. With an extensive emitter and tactics programming capability, as well as the ability to record the electromagnetic environment, Sky Guardian 2000 is truly adaptive to today's battlefield providing vital protection and engagement intelligence.