



indra

SECURITY AND DEFENSE

ALR-400 RADAR WARNING RECEIVER

Security and defense in five continents

indracompany.com



ALR-400 RADAR WARNING RECEIVER



ALR-400 leading edge proven wide-band digital technology brings enhanced survivability in today's operating theatre. A high reliability open architecture and versatile ground support tools also provide simple installation, reduced life cycle costs, increased operational availability and equipment sovereignty

Bringing maximum survivability in today's operating theatres

ALR-400 has been designed to ensure maximum survivability in today's complex high density environment by means of improved situation awareness in the presence of an increasing number and sophistication of radar systems. ALR-400 performs with complex waveforms such as frequency agile pulse-Doppler radars,

in high pulse densities and detecting faint distant signals in the presence of strong nearby transmitters. Indra's radar warning receiver is suited for all missions, for both low altitude - short range and high altitude - long range engagements.

Incorporating the latest wide-band digital technology

ALR-400 incorporates proven leading edge wide band digital reception. High speed digitization techniques and sophisticated parallel process algorithms addressing both real time and frequency domains allow for precise minimal false alarm

pulse to pulse parameter measurements. The high processing throughput ensures performances in high pulse densities as well as keeping a low latency for rapid response and thus effectively supporting countermeasures. This technology

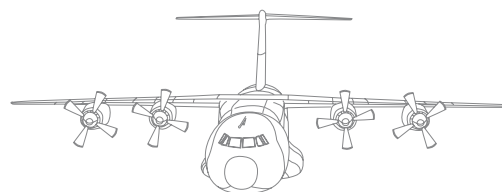
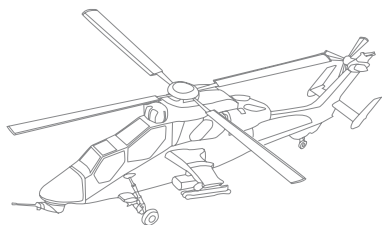
results in a simpler architecture, providing outstanding performances and maximising the probability of intercept while giving away the need for any collaborative narrow band receivers or dedicated devices.

Built on a proven, high reliability and flexible COTS based open architecture

Through a reduced parts count and an intensive use of COTS, including programmable processors, combined with a rapid COTS insertion approach, ALR-400 has an improved reliability, low life cycle costs and enhanced supportability. An open architecture provides for modular isolated standard interfaces, such as MIL-STD-1553B, communications serial port, USB, ARINC-429 and 100BaseT fast ethernet. The radar warner processor can host the defence aid computer (DAC) function enabling control and integration,

by means of its multiple Interfaces, of infrared, electronic attack and decoy countermeasures as well as missile and laser warning. Its modular approach and aircraft network software independence renders ALR-400 with unprecedented scalability for evolving threats and minimal change cross-platform compatibility already proven on board:
EF-18 fighter
TIGER attack helicopter
C-295 cargo and maritime patrol aircraft

A400M transport aircraft
Super Puma transport helicopter
Chinook transport helicopter
Mirage F-1 fighter
B-200 transport aircraft
F-27 transport aircraft
C-101 training aircraft
Cougar transport helicopter
CH53 Transport Helicopter
NH90 Multipurpose Helicopter



Equipment sovereignty supported by ground testing and threat library management systems

ALR-400 can be supported with Indra ground support test, post flight analysis, and threat library management systems. Indra's electronic warfare ground support systems provide end testing, complete

reprogramming of separately loadable user data files, library generation and evaluation, as well as detailed post-mission analysis tools for recorded data down to intra-pulse level. Indra can thus provide full

equipment sovereignty, allowing end users to operate, maintain and upgrade ALR-400 independently.

Main features

Effective early warning in modern scenarios
Wide band digital reception and processing technology
Pulse to pulse frequency measurement, including intra-pulse modulation characteristics
Multi continuous wave scenarios and LPI radar detection capabilities

Reduced part count and intensive use of COTS
Improved reliability, low life cycle costs and enhanced supportability
Open architecture with modular isolated standard interfaces
Control and integration of a full self-protection suite

Emitter library, mission file and flight stored data upload and download
Full equipment sovereignty, allowing end users to independently operate, maintain and upgrade



ISO 9001:2000



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