CORDIS ARRAY II

The Cordis Array II (CRE2) product family meets the demands for tactical operations where digital high capacity communication and reliable data transfer are crucial for efficient and safe missions. The system operates in C-band and is field proven with high data rate communication over long distances. Phased array technology with electronic beam-steering gives significant advantages for tactical wireless links with high mobility.

Robust with encryption

The CRE2 with phased array technology enables high speed, high capacity and extremely robust data, voice and video transfer between multiple nodes in ad hoc networks. The CRE2 portable units can handle obstructions and provide stable performance in both close-by operations as well as line-of-sight distances exceeding 30 kilometers [1]. Extra TRANSEC is provided by digital beam-forming. COMSEC is provided by AES-256 link encryption in hardware.

Connecting remote nodes

The CRE2 connects troops with a high capacity digital communication system. QoS handles low latency data streams and high priority sensor data. The system can transfer encrypted feeds with live video, location data and other network traffic, binding together tactical units in a network centric system that increases operational efficiency.

Aeryon SkyRanger R70 expansion payload

The CRE2-144-R70 is an ultra light phased array expansion payload that can be attached between the Aeryon SkyRanger R70 UAS and standard payloads and provide military tactical link capabilities as well as unmatched range with the CRE2 phased array technology.

IP connectivity

CRE2 technology supports complex operations that may involve a large number of information nodes and several information streams floating between the network nodes. End-to-end IP connetivity makes integration and management flexible and cost-efficient. The result is an interoperable and seamless solution for data exchange, scalable for the future deployments.
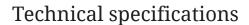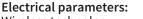
Easy to operate

CRE2 provides an ad hoc tactical network with no need for base stations, infrastructure or equipment in order to operate. This makes it a simple solution to use and maintain, enhancing efficiency in coordinated operations.

[1] CRE2-144-R70 to CRE2-189 at 7 Mbps

CRE2-144-R70

Features

- *Expansion payload module for Aeryon SkyRanger R70*
- *Fits between the SkyRanger R70 and standard payloads*
- *C-band phased array tactical wireless radio*
- *IP centric/ad hoc network operations*
- *AES-256 link encryption hardware*
- *Unmatched bandwidth and range*
- *Low weight*
- *Compatible with fielded tactical equipment*
- *Easy to install and operate*

Technical specifications

Electrical parameters:
Wireless technology	: Phased array
Data interface	: Ethernet 10/100baseT

Wireless parameters:
Available data capacity	: 15 Mbps
Wireless encryption	: AES-256

Mechanical parameters:
Size	: 176 × 134 × 66 mm
Weight	: 295 g

EMC:
Radiated emissions	: MIL-STD-461F RE102
Conducted emissions	: MIL-STD-461F CE102
Radiated emissions, spurious & harmonics	: MIL-STD-461F RE103

Environmental:
Ambient temp. range	: -40 °C to +40 °C

Aeryon SkyRanger R70 UAS

Specifications subject to change without further notice