

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 20 kilometers <sup>1</sup>. 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.

### Light weight

The CRE2-144-LW is designed for light weight and integration into small UAV's such as quad copters where every gram of payload weight counts.

#### 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 provides cost efficient integration and an interoperable solution for seamless data exchange.

### Easy to integrate

The unit contains a single high-end connector with Ethernet and power that can be connected to external IP equipment.

#### 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. All units are operated via IP connections making integration and management flexible, simple and scalable for future deployments.

# CRE2-144-LW

# **Features**

- Radio module for integration in
  - Unmanned vehicles
  - o Portable solutions
- C-band phased array tactical wireless radio
- IP centric/ad hoc network operations
- AES-256 link encryption hardware
- Unmatched bandwidth and range
- Field proven
- · Low weight
- Easy to install and operate



# Technical specifications

**Electrical parameters:** 

Power supply : 9-36 VDC

Data interface : Ethernet 10/100baseT

Wireless parameters:

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

Mechanical parameters:

Size : 120 × 65 × 13.3 mm

Weight : 85 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  $: -40 \,^{\circ}\text{C}$  to  $+40 \,^{\circ}\text{C}$ 





