

## **DECEPTOR™**

### Small form factor software defined radio frequency (RF) electronic warfare (EW) payload

Deceptor is a fully integrated, software-defined radio payload that provides off-the-shelf, electronic support (ES) and electronic attack (EA) capability to detect, geolocate, deceive and deny detection from modern emitters. Deceptor is designed specifically to meet the challenging SWaP-C requirements of today's unmanned aerial, ground and maritime platforms.

#### **COMPACT MODULAR EW SOLUTION**

Deceptor is a RF EW system based on commercial off-the-shelf (COTS) hardware that leverages cutting-edge software capability. It combines a high level of capability with very low size, weight, power and cost (SWaP-C). Deceptor supports rapid payload configuration and technology updates at a low price, making it suitable for expendable air, ground or maritime unmanned platforms.

The Deceptor architecture enables a capable L3Harris EW software suite that is flexible, adaptable and supports third-party reprogrammability. L3Harris provides the infrastructure to support rapid reprogramming and compatibility with open standards such as Big Iron. The common Framework Environment (CFE) ensures rapid integration and enables hosting of high Technology Readiness Level (TRL) 3rd party applications.

#### **ADVANCED ES AND EA CAPABILITIES FOR TODAY'S EVOLVING THREAT ENVIRONMENT**

Deceptor provides advanced ES and EA capabilities. Passive detection, classification and identification of modern emitters is enhanced with optimized direction-finding and geolocation algorithms tailored for low SWaP-C applications.

Flight-proven EA techniques to deceive, degrade and deny emitter detection are implemented in a reconfigurable, reprogrammable multi-core Digital RF memory architecture. Effects are mission-tailorable and designed to meet the needs of offboarding EW efforts, including launched effects for short, medium and long range.



#### **BENEFITS**

- > 2U MOD payload-compliant and configurable for custom applications
- > Ready-now solution using TRL-7 flight-tested software
- > Open software and firmware architecture supports emerging DOW standards such as Big Iron, CFE and Open Mission Systems
- > Modular design to support multiple mission configurations
- > Scalable design provides EA capability to expendable, attritable and persistent unmanned vehicles with configurable amplifier solutions

#### **FEATURES**

- > Multi-function RF EW payload delivers advanced ES and EA
- > Passive detection capability including single-ship or multi-ship direction finding and geolocation
- > Electronic attack capabilities to deny, degrade and deceive
- > Tailorable aperture approach supports the use of custom, COTS or existing conformal antenna solutions

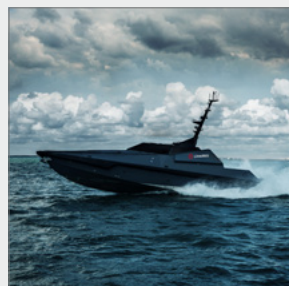
### **Multi-Domain Platform Applicability**



Unmanned  
Ground Vehicles



Unmanned  
Aerial Vehicles



Unmanned  
Surface Vehicles

## DECEPTOR EW PAYLOAD SPECIFICATIONS

	Designed for Cost	Balanced Cost and Performance	Designed for Performance
<b>Example Application</b>	ESM, ELINT, COMINT, Decoy EA	DF/geolocation, electronic attack	MIMO and multi-function
<b>RF Frequency Range of Operation</b>	VHF – C Upgradable to Ku	S – Ku Upgradable to Ka	S – Ku Upgradable to Ka
<b>Transmit/Receive Channels</b>	2 independent transmit/receive channels. Upgradable to 4 channels	4 independent transmit/receive channels	8 independent transmit/receive channels
<b>Minimum Detectable Signal Power</b>	Sensitivity is tailored for all-purpose multi-function radar and comms performance, can be adjusted to specification		
<b>Range of EA Techniques</b>	Supports wide range of EA techniques: DRFM-based, Noise, Spot Noise, Exciter and others in support of decoy, deception and denial effects in stand-in and self-protect configurations		
<b>Signal Processing</b>	Quad-core A53 ARM Optional NVIDIA Orin NX 16G	Quad-core A53 ARM Optional NVIDIA Orin AGX	Quad-core A53 ARM Optional NVIDIA Orin AGX
<b>Dimensions</b>	3.9 in x 4.9 in x 7.8 in	MOD payload 2U	3.9 in x 4.9 in x 7.8 in
<b>Weight</b>	Approx. 5 lb w/o antenna	Approx. 5 lb w/o antenna	Approx. 5 lb w/o antenna
<b>Power Draw (Rx Only)</b>	50 W (est.)	90 W (est.)	125 W (est.)
<b>Power Draw (Tx)</b>	EA power can be scaled to mission requirements with additional volume	+10 W (est.) (low power EA) EA power can be scaled to mission requirements with additional volume	EA power can be scaled to mission requirements with additional volume
<b>Connectivity</b>	1 Gb Ethernet port	1 Gb Ethernet standard 10 Gb and 100 Gb Ethernet options available	10 Gb and 100 Gb Ethernet options available
<b>Power Input</b>	28 VDC (typical)	28 VDC (typical) (2 MAIM connectors for 2U MOD payload)	28 VDC (typical)

### Deceptor™ Software Defined Modular EW Payload

© 2025 L3Harris Technologies, Inc. | 11/2025 | L31213

**NON-EXPORT CONTROLLED:** THIS DOCUMENT CONSISTS OF INFORMATION THAT IS NOT DEFINED AS CONTROLLED TECHNICAL DATA UNDER ITAR PART 120.33 OR TECHNOLOGY UNDER EAR PART 772.

L3Harris Technologies is the Trusted Disruptor in the defense industry. With customers' mission-critical needs always in mind, our employees deliver end-to-end technology solutions connecting the space, air, land, sea and cyber domains in the interest of national security. Visit [L3Harris.com](https://www.l3harris.com) for more information.



1025 W. NASA Boulevard  
Melbourne, FL 32919

[L3Harris.com](https://www.l3harris.com)