GUARDIAN HFE

Through the GUARDIAN range of products, Leonardo offers combat-proven, military-grade products that are extremely reliable, easy-to-use, simple to deploy, operate and support within the demands of the land tactical environment.

Through many years of experience in delivering Counter Remote Controlled Improvised Explosive Device (C-RCIED) products and a profound understanding of the evolving threat environment, Leonardo introduces GUARDIAN-HFE.

GUARDIAN-HFE is an active, high power 2.4GHz to 6GHz C-RCIED radio frequency inhibitor based on Leonardo's GUARDIAN-H3 and GUARDIAN-C2 signal generation technology.

The system is designed for both vehicle and static roles, and can be integrated with the GUARDIAN-H3 system providing capability in the frequency band 20MHz to 6GHz. It can also be used as a standalone active jammer over the frequency band 2.4GHz to 6GHz.

GUARDIAN-HFE can also be integrated with any other third party systems currently deployed offering a cost effective solution to resolving extant operational capability gaps. GUARDIAN-HFE can be supplied with a Remote Control Unit (RCU), enabling the user to remotely control certain functions of the GUARDIAN-HFE.

When integrated with GUARDIAN-H3, a single remote control unit can be used to control both equipments.

The equipment also provides remote visual and audio indication of its status to the user via the RCU.

KEY CAPABILITIES

- High output power providing coverage whilst travelling in a moving vehicle
- Active jamming over frequency range 2.4GHz to 6GHz
- > Can be integrated as an additional slice to Augment
- GUARDIAN-H3 giving 20MHz to 6GHz active jamming Remotely controllable
- Laptop/PC or fill-device used to load the operational profiles
- Can be supplied as a standalone jammer or integrated with third party supplied equipment
- Comprehensive Built-in-Test (BIT) monitors key equipment parameters providing the operator with immediate audible and visual warnings of failure
- Housed in rugged lightweight alloy case
- Integral fans providing forced air cooling for continuous operation



TECHNICAL SPECIFICATION

WEIGHT

- > Main unit
- › Mounting tray

DIMENSIONS

- > HxWxD
- > FE installation envelope
- > H3+ FE installation envelope

150mm x 382mm x 510mm 240mm x 510mm x 580mm 840mm x 510mm x 580mm (when Configured as a Vertical Stack)

13.0kg approx

5.5kg approx

ELECTRICAL CHARACTERISTICS

- > Power Supply
- > Operational Supply Voltage 22V to 30V DC
- Power conditioning unit for 12V DC vehicle supply available
- The equipment is designed withstand the application of a reverse polarity connection at the prime power connector

POWER CONSUMPTION

>	Typical	450W (for 40W RF)
>	Max Input power	< 600W for FE (28V * 22A)

FREQUENCY RANGE

>	G-HFE Band	2400MHz to 6GHz
>	Transmit Signal generation method	4 channel DDS
>	Modulation Canability	EM PCM ESK PSK

ENVIRONMENTAL

 Storage 	-40°C to +80°C
> Operating	-33°C to +65°C (de-rated below -20°

EMC

- Radiated Emissions
- Conducted Emissions
- > Radiated Susceptibility
- › Conducted Susceptibility

°C)

CS101,CS114,CS115,CS116

RE102, RE103

CE102. CE106 RS103

Construction

Housed in rugged, lightweight alloy case, the unit is designed with all controls and connectors protected from accidental damage. NATO green to BS381C tint no. 285 matt finish.

Security

The GUARDIAN-HFE equipment is provided with an independent Zeroise facility by means of a Front Panel mounted switch and an RCU mounted switch. Zeroise switches are fitted with protective covers to void inadvertent operation. The Zeroise function deletes all critical system information from memory.

Alarm indications

Built-in Test (BIT) monitors the key equipment parameters, providing immediate audible and visual warnings of failure to the operator.

- Antenna damage or disconnection
- Failure of signal generation



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