



GRIMM

GLOBAL | RF | INTERDICTION | MULTI-MISSION

Small form factor spectrum dominance solution enabling direction finding (DF), geolocation, and electromagnetic attack (EA) missions on uncrewed systems

GRIMM is a compact, high-performance spectrum dominance solution designed for real-time geolocation and direction-finding of adversary signals and emitters of interest.



Engineered for low size, weight, power and cost (SWaP-C), this payload delivers unparalleled situational awareness, intelligence support and force protection capabilities. GRIMM empowers advanced operations across diverse environments around the world, including contested electromagnetic spectrum scenarios.

Mission Application

- Military operations and national security.
- Counterterrorism and counternarcotics.
- Intelligence, surveillance and reconnaissance (ISR).
- Border security and law enforcement.
- Electromagnetic warfare (EW), EA and RF-enabled cyberspace operations.

Mission Types

- Passive detection, identification, and DF/Geolocation of emitters.
- Electromagnetic attack including Decoy, radar & C2.
- Spectrum recording and data logging on internal HDD.

Platform Integration

- Plug and play with all MOD payload compliant platforms.
- Rapid integration with unmanned platforms (UAS, USV, UUV, and high altitude platforms).
- Remotely operable with automated collection modes.
- Conforms to VITA 49 and JICD open standards.
- IATT certified.
- Operator configurable SOI/emitter list for adaptation to new/emerging threats.

Advantages

- **Force Protection and Threat Awareness:** Enables rapid detection and location of hostile communications, radar and other electronic threats from unmanned platforms.
- **Scalable and Modular:** Adaptable for standalone or networked operations, enhancing battlefield coordination.



GRIMM
Transceiver



HII is a global, all-domain defense provider. HII's mission is to deliver the world's most powerful ships and all-domain solutions in service of the nation, creating the advantage for our customers to protect peace and freedom around the world. As the nation's largest military shipbuilder, and with a more than 135-year history of advancing U.S. national security, HII delivers critical capabilities extending from ships to unmanned systems, cyber, ISR, AI/ML and synthetic training. Headquartered in Virginia, HII's workforce is 44,000 strong. For more information, visit: hii.com.



hii.com/products

GRIMM GLOBAL | RF | INTERDICTION | MULTI-MISSION

Specifications

System Specifications:	
Input Power	18V – 36V
Size	6.3" x 4.3" x 1.5"
Weight	1.9 lbs
Power Draw	40W max
RF Specifications	
ES Front End	10 MHz – 18,000 MHz: 1,000 MHz IBW
EA Front End	10 MHz – 6,000 MHz: 5,990 MHz IBW
Sampling Rate	5 GSPS
Resolution	14-bits
FPGA	
	Xilinx RFSoc XCZU47DR
System Interfaces	
	Gigabit Ethernet
	100 Gigabit Ethernet
Volatile System Memory	
Processing System	4GB 2133 MHz LPDDR4
Programmable Logic	4GB 2400 MHz DDR4
Non-Volatile Memory	
	2TB NVMe Solid State Drive
	64GB eMMC
	2Gb QSPI

Features

- 1U small form factor design; <2 pounds; mod payload compliant.
- Flexible and scalable for many different missions.
- Operates seamlessly in any domain—anytime, anywhere.
- 24/7 passive monitoring with ability to transmit.
- Conforms to open standard allowing users to override code.
- Interfaces with third-party tools.
- Versatile integration with unmanned/ manned platforms, including high-altitude balloons, manpack and static ground nodes.
- Passive RF detection, direction-finding and geolocation across 10 MHz–18 GHz frequency range.



HII is a global, all-domain defense provider. HII's mission is to deliver the world's most powerful ships and all-domain solutions in service of the nation, creating the advantage for our customers to protect peace and freedom around the world. As the nation's largest military shipbuilder, and with a more than 135-year history of advancing U.S. national security, HII delivers critical capabilities extending from ships to unmanned systems, cyber, ISR, AI/ML and synthetic training. Headquartered in Virginia, HII's workforce is 44,000 strong. For more information, visit: hii.com.



hii.com/products