

Pit Viper-Air

Low SWaP payload for electronic support, electronic attack, and cyber missions



FEATURES

- VHF, UHF, L-band, and S-band frequency coverage.
- Integrated 10W amplifier.
- Dedicated WiFi effects card.
- IP54 environmental rating.
- Low size, weight, and power.
- 1U modular payload-compliant form factor.
- Less than 1.5lbs payload weight.
- Adjustable power draw.
- Easy-to-use web-based GUI.
- Integrates with other CACI equipment via HADES ICD.

Pit Viper-Air (PV-Air) is a modular payload (MP)-compliant payload designed for electronic support, electronic attack, and cyber missions on airborne platforms. PV-Air provides users with a host hardware platform that enables new concepts of operation (CONOPS) out at the tactical edge. This size, weight, and power (SWaP) optimized technology utilizes commercial off-the-shelf (COTS) hardware to provide a rugged, agile, and low-cost hardware platform to host multiple applications.

PV-Air allows a user to run CACI, U.S. government off-the-shelf (GOTS), and third-party applications. Additionally, PV-Air enhances cointegrated systems by ingesting and processing external sensor data over its gigabit ethernet interface.

As an MP-compliant payload, PV-Air is a plug-and-play capability that can be integrated into any MP-compliant platform. In its current 1U form factor, PV-Air is well equipped to integrate onto Group 1 through Group 3 unmanned aircraft system (UAS) platforms. Its user-friendly graphical user interface (GUI) allows the operator to tailor their app selection and execute collaborative missions from a single platform. PV-Air's compliance to CACI's HADES interface control document (ICD) enables the payload to operate in conjunction with a host of CACI air and ground systems. HADES provides tipping, queuing, network control, and other interoperability functions between different systems.

For more information please contact:
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CACI

ABOUT PIT VIPER - AIR

PV-Air’s high-performance general-purpose processor (GPP) and software defined radio (SDR) speeds capability to the user and more effectively adapts to modern threats. It uses a containerized software architecture to enable rapid switching between mission software bundles.

As a component of a broader ecosystem, PV-Air acts as a force multiplier to more effectively prosecute complex, multi-domain communication networks. Each Pit Viper payload can function independently or be networked together with other HADES compliant systems to tip/cue and aggregate results in a common operating picture.

RECOMMENDED APPLICATIONS

- CACI’s SNARE multiprotocol survey tool.
- CACI’s Duck Blind protocol-based electronic attack platform.
- CACI’s Ardent Emblem cyber effects architecture (development and funding required.)
- Third-party applications via Docker.

PIT VIPER - AIR SPECIFICATIONS	
Frequency range (Receive)	70 MHz to 6 GHz
Frequency range (Transmit)	100 MHz to 2.6 GHz
CPU	i7-8665UE (4C, 1.7GHz, up to 4.4GHz)
Memory	32GB DDR4
Storage	512G SSD
SIZE, WEIGHT AND POWER SPECIFICATIONS (SWAP)	
Payload dimensions	1U MP-compliant (7.25”x4.29”x1.5”)
Weight	Less than 1.5lbs
Power	6W to 56W*
Internal Tx power amplifier	10W
ENVIRONMENTAL SPECIFICATIONS	
Ingress protection rating	IP54

*Performance varies based on specific application and is adjustable to platform or mission requirements. Preliminary information is included; specifications subject to change without notice.