



# TACPOD™

COMMUNICATIONS EXTENSION & INTEROPERABILITY SOLUTIONS



## TACPOD™

### Tactical Airborne Command, Control, Communication and Intelligence

- Supports information superiority across the battlefield: air-to-air and air-to-ground
- Non-invasive to host aircraft
- Radio and TDL BLOS extension
- Bridging/translating between disparate waveforms and frequencies
- Video management and dissemination
- Link 16, SADL, EPLRS, CoT, JTRS, TTNT, ANW2, AIS, UHF/VHF, HAVEQUICK, SINCARS, Project-25, Multiband CDL, VoIP/RoIP
- Self-reporting of host aircraft into TDLs and COP
- Computing resource in the sky: publish, subscribe, query
- Flexible payload bus; can be used to host various C4ISR payloads

The Tactical Airborne Command, Control, Communications and Intelligence Pod (TACPOD) from Ultra Electronics, Advanced Tactical Systems provides a robust, non-invasive payload for tactical communications exchange in an airborne-qualified pod for external mounting to manned or unmanned aircraft.

From Ground Operators at the Tactical Edge (GOTE) to convoys, command centers and other participating aircraft, multiple users will benefit as the TACPOD—with its Battlefield Integrated Gateway for Tactical Exchange (BIGTEX)™ software—relays, bridges, translates, distributes and manages current and legacy data, voice and video.

From the lower altitudes of the mid-tier aerial network, to the upper-tier at 65,000 to 70,000 ft. Mean Sea Level (MSL), the TACPOD provides communications relay and tactical data link gateway services over large, widely dispersed and often austere environments in support of our joint warfighters.

Designed to be minimally invasive to the host aircraft, the TACPOD provides the ability for an aircraft to easily support a rapid reaction, multi-mission role without experiencing the huge time and cost drivers associated with a non-recurring engineering effort to develop and integrate new systems into the aircraft.

The TACPOD has a common MIL-STD mounting interface, houses its own antennas

and requires nothing more than the attachment hard point and power from the host aircraft, allowing the flexibility to snap it on, pull it off and swap it out as required to support the mission.

The TACPOD uses high Technology Readiness Level Government and Commercial Off-The-Shelf (GOTS/COTS) components and an open architecture to provide a robust communications and situational awareness capability.

Ultra has integrated a number of components that facilitate Joint Tactical Radio System (JTRS), Adaptive Networking Wideband Waveform (ANW2), Tactical Targeting Network Technology (TTNT) and Common Data Link (CDL) waveforms; Link 16 and Situational Awareness Data Link (SADL) Tactical Data Links (TDL); Naval Automatic Identification System (AIS) tracking; and tactical exchange of voice data and imagery, such as TDL tracks, situational awareness, chat, 9-line, free text, streaming and throttled video, still images, Voice over Internet Protocol (VoIP), virtual teleconference, sensor points of interest and file publish and subscribe services.

# TACPOD interoperability at the tactical edge

TACPOD enables warfighter information superiority and enhances communication between edge users and theater commanders.

## TACPOD's TacCore™ hardware and software

TACPOD's TacCore system provides the supporting infrastructure to make any component a "system" providing a host computer, router, aircraft interface, power distribution and management, High Assurance Internet Protocol Encryptor (HAIPE), maintenance panel for ground checks and crypto fill access and a mounting chassis.

Antennas are mounted on, inside of or wrapped around the TACPOD structure to keep the system as minimally invasive to the host platform as possible.



TacCore hardware suite	Description
RTR – Ethernet backbone router	Cisco IOS, support for 10 Ethernet devices
ASC – General purpose computing resource	Core 2 Duo, 1TB storage
AID – Aircraft Interface Device	1553, synch, asynch, Ethernet, USB, ARINC 429
CRP – Crypto	HAIPE KG-250, bulk IP encryptor
PDU – Power Distribution Unit	Regulation, conversion, switching, monitoring
MPL – Maintenance Panel	Physical payload access, central crypto fill, mission load interface

## Software services

- Web browser-based interface
- User authentication and privileges
- Power switching and monitoring
- Data archive
- Chat server
- Pub/sub data bus
- Infrastructure for custom applications

TACPOD can also serve as a ready, pre-qualified testing platform for new airborne Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) electronic components requiring testing under operational conditions. Whether the requirement is for communications support from air-to-ground, air-to-air or both; or an ISR payload with communications distribution; or an experimental payload ready for flight, TACPOD is the solution.



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## Basic specifications (vary based on configuration)

**Weight:** ~120 lbs  
**Power:** ~500 W  
**Temperature:** -40° C to +65° C  
**Altitude:** Up to 70,000 ft. MSL

Ultra Electronics continually improves its products and reserves the right to change these specifications without notice.

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