

BATTLEFIELD AWARENESS AND TARGETING SYSTEM (BATS) VEHICULAR AMPLIFIER (BVA)

Extend BATS-D radio range and enhanced situational awareness to 200+ nautical miles

The L3Harris BATS Vehicular Amplifier (BVA) extends radio range dramatically to more than 200+ nautical miles across air, land and sea. Designed to pair with Link 16 cryptographic products, such as the BATS-D AN/PRC-161 Handheld Link 16 Radio, the BVA can be mounted in both small unmanned and traditional mobile platforms, such as ground vehicles, boats and light ISR aircraft to provide higher transmit power and increased range.

PRODUCT DESCRIPTION

What separates a BVA system from any other Link 16 system? A warfighter with a dismounted Link 16 Cryptographic Product can connect to a BVA in their vehicle to provide longer range. The dismounted Link 16 Cryptographic Product can also be removed from the vehicle, maintaining all Link 16 network configuration (including keys). The BVA can be left behind in the vehicle because it does not require any keying and is therefore not a COMSEC Controlled Item (CCI)—providing critical flexibility in evolving mission situations while maintaining connection, always.

Easy integration is a key feature of the BVA system. Once the BVA and a Link 16 Cryptographic Product are paired, the Link 16 Cryptographic Product handles the cryptographic requirements of Link 16, as well as the interface to the host terminal. This allows frictionless compatibility with existing equipment. The BVA itself only requires power and an Ethernet-based connection to the paired Link 16 Cryptographic Product.



BVA



BVA with Fan Tray



Operate at the
Tactical Edge

KEY FEATURES

- > Range is greater than 200 nautical miles
- > Dual antenna ports provide antenna diversity
- > Based on L3Harris' proven Link 16 hardware architecture and software from the Small Tactical Terminal (STT) KOR-24A
- > Pairs with a Link 16 Cryptographic Product to provide enhanced range for all types of platform installations such as UAS, boats, ground platforms, and aircraft
- > Carries over all Link 16 functionality from Link 16 Cryptographic Product
- > No need for special storage as the BVA is not a CCI item
- > Host interface through the Link 16 Cryptographic Product maintains compatibility with existing user equipment
- > Low size, weight, and power suitable for small mobile platforms
- > Rugged design (MIL-STD-810F)
- > Optional "grab & go" capability for dismounted soldier carrying the Link 16 Cryptographic Product out of platform
- > Upgradable for CMN/CCR-4 and Advanced AJ

SPECIFICATIONS

PERFORMANCE

- > Frequency Range: 969 to 1206 MHz Link 16
- > Transmission Modes: Link 16 TDMA, All OP modes and enhanced throughput
- > Antenna Ports: Link 16 port A, 50 Ω TNC Link 16 port B, 50 Ω BNC
- > Data Interfaces: Dedicated Ethernet to companion Link 16 Cryptographic Product Platform discretes (Power on, TX indicator, etc.)
- > DC Input: 28 VDC per MIL-STD-704F
- > Current Draw: 2.4 A typical 7.5 A peak (during TX time slot) 12 A max (power-on inrush)
- > Power Draw: 67 W average (based on 5% TX TSDF)
- > Dimensions: 5" (w) x 5.6" (h) x 6.8" (d), 12.7 cm (w) x 14.2 cm (h) x 17.3 cm (d)
- > Volume: 190 cu in.
- > Weight: 8.83lb (4.01 kg)
- > Range: Clear line-of-sight transmission range in excess of 200 nm
- > RF Power Output: 63 W
- > L-Band: Link 16 data and voice including enhanced throughput modes

ENVIRONMENTAL

- > Operating Temperature:
 - Forced convection cooling¹: -30°C to +52°C (-22° to +125°F)
 - No cooling²: 52°C* at 1% TSDF
 - Cold plate cooling²: 60°C* at 3.8% TSDF
 - Storage Temperature: -54° C to +90°C (-65° to +194°F)
- > Humidity: \leq 90% non-condensing per MIL-STD-810F
- > Shock: 40 G, 11 msec all axes per MIL-STD-810F
- > Vibration: MIL-STD-810H Method 514.8 Procedure I, Category 24



1. VPN 1353512 BVA Fan Tray available for purchase
2. Max temperature dependent on TSDF. See system specification for details at various TSDFs

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