

# AVIATION INTERFACE BACKPLANE (AIB)

## Aggressively Adaptable Power Solution

The L3Harris Next Generation Manpack (NGMP) Aviation Interface Backplane (AIB) is the recommended solution for AN/PRC-167 and AN/PRC-158 Manpack Radio aviation adapter installation.

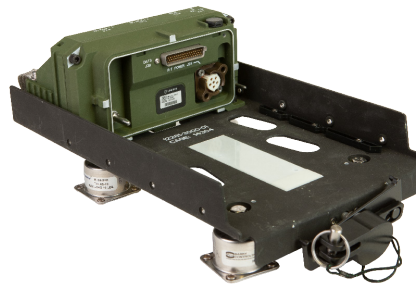
The AIB adapter conditions military aircraft power. It has interfaces for each channel of the AN/PRC radio that allow for control of external RF power amplifiers, communication with airborne tunable device systems, various digital data communication protocols, and intercom interfaces. The AIB includes a shock mount and Radio Interface Assembly (RIA). Additional components, such as RF-410-PA050 Power Amplifier (PA), V/UHF/L antennas, L1/L2 GPS antennas, multichannel speaker and system cables are supplied by the user.

### The radio enables the following:

- > Automatic detection of the AIB mount from the radio
- > Automatic detection and enabling/disabling of the RF-410 PA connected to the AIB mount
- > Radio reporting of various faults originating from the AIB mount
- > Reading and monitoring the AIB temperature sensor device
- > Human-machine interface (HMI) support for enabling/disabling the AIB accessory power port



Radio Interface Assembly, STCMP  
(#12281-1000-01)



Mount Assembly, AIB, Single  
(# 12281-0100-01)



Spider Cable (AN/PRC-167 only)  
(#12278-6100-A1/A2/A3)



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## POWER, CONTROL AND COMMUNICATIONS

### KEY BENEFITS

- > Lighter weight, more compact and rugged than alternative options
- > Eliminates lag time for development or conversion of separate airborne radios
- > Supports voice, data and video protocols
- > Brings the resilience, versatility and capabilities of the Falcon Net Ecosystem™ to the cockpit
- > Works with most common military helicopters

PHYSICAL	
Dimensions	5.38 H x 7.79 W x 14.22 D in (13.67 H x 19.79 W x 36.12 D cm)
Weight	7.5 lbs (3.4 kg) (without radio or cables)
Color	CARC Green (RIA), Black (Shock Mount)

POWER	
Input Voltage	18-34.3 VDC (MIL-STD-704)
Output Power (Radio)	28.0 VDC at 9.51 A max (11.72 A intermittent overload)
Accessory Output Power (Red, Black-1, Black-2)	28.0 VDC at 0.5 A each (Global limiter controls a max 1.0 A total from the three accessory ports combined)

INTERFACES	
Red	Channel 1 Fixed Level Audio Channel 2 Fixed Level Audio Accessory Power PRC Support RS-232 Serial Port Red 1 Ethernet Red 2 Ethernet Remote Zeroize/HQ-TOD
Black-1	Black Ethernet Channel 1 PA Control Channel 1 Tunable Accessory Control Accessory Power
Black-2	Channel 2 PA Control Channel 2 Tunable Accessory Control Accessory Power
Front Panel	Radio Interface

ORDERABLE PARTS	
12281-0100-01	Mount assy, AIB, single
12281-1000-01	Radio interface assy, STCMP
12281-3000-01	Shock mount assy, AIB
12278-1505-A021	Cable assy, AIB DC input
12278-1502-01	Conn kit, AIB radio INTFC assy
12278-0700-01	Mounting plate assy, RF-345, AIB, low-profile (AN/PRC-167 only)
12278-6100-AX	Cable assy, AIB/167 Spider harness, multiple lengths provided (AN/PRC-167 only)

See L3Harris Product Catalog for accessories

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