

HIGH SPEED CAPABILITIES

Amphenol

MILITARY HIGH SPEED



Amphenol Military High Speed specializes in the design and manufacture of ruggedized integrated solutions for all major high-speed protocols for harsh environment military and aerospace applications.



Ethernet Switches

Amphenol Ethernet Switches are available in multiple form factors including 3U and 6U VPX with hundreds of available channels.



Media Converters

Amphenol media converters are built to bridge every technological gap from protocol conversion, copper-to-fiber, data concentration, and more.



High Speed Contacts

Amphenol's high speed contacts are optimized for high-frequency and high-speed data transmission in rugged applications.



High Density

Amphenol offers a selection of connectors with high density arrangements, including the Centaur Series, which combines a high-speed D38999 connector and cable in one rugged assembly.

OPEN STANDARDS

Amphenol open standards technologies are aligned with the Modular Open Systems Approach (MOSA) and its frameworks.

R-VPX Evolution 2.0 VITA 46.30



R-VPX Evolution 2.0 is designed and optimized to achieve data rates in excess of 25 Gb/s, meeting VITA 46.30 requirements.

MIL-HD2 VITA 91



The high-density SOSA™ and VITA 91-aligned MIL-HD2 provides 56Gbps PAM4 speeds in a compact 3U form factor with 3-, 4-, and 6-pair configurations available.

RaptorLink



Amphenol's next-generation 3U VPX Ethernet switch, the RaptorLink 64X50, is SOSA-aligned and features VITA-91 connectivity, offering double density with support for speeds of up to 50G per lane on the backplane.

Amphenol Aerospace

MILITARY AVIATION SOLUTIONS

Air power is surging across the globe.

Fifth-generation aircraft are roaming the skies, with sixth-generation development on the horizon. Meanwhile, modern attack and utility helicopters continue to be a mission-critical asset.

Amphenol interconnects are widely used in modern airframes and support next-generation capabilities.



Build It At www.Open.Tech Open.Tech
by Amphenol

www.amphenol-aerospace.com

TECHNOLOGIES



Circular

Amphenol offers the largest selection of harsh environment circular connectors on the market, including numerous options across MTL-DTL-38999 Series I, II, and III.



Power

Amphenol Power Solutions are intended to tackle high current and high voltage requirements in any application.



Data

Amphenol offers a wide selection of connectors and contacts for meeting harsh environment data and signal demands.



Hybrid

Amphenol connectors can be configured to deliver both power and signal simultaneously.

MICROMINIATURE



Series Five

An innovation of MIL-DTL-38999 Series III. Up to 20% smaller and 50% lighter than its Series III counterpart. Available in multiple configurations and with higher voltage capabilities.



2M

2M is a Micro-Miniature interconnect series optimized for Size, Weight, and Power (SWaP).

MILITARY AVIATION SOLUTIONS



High Temperature Series Five

This Series Five variant can withstand exposure at 572 °F (300 °C) for up to 24 hours with continuous duty at 500 °F (260 °C) assured.



2M805 High Vibration

The next evolution of the 2M family, this microminiature connector meets MTL-DTL-38999 vibration requirements.



Dualok

MTL-DTL-38999 derivative that uses an anti-decoupling mechanism to withstand severe vibration environments.



MTL-DTL-38999 with PCB Contacts

D38999 Series III connectors with PC Tail contacts, ideal for printed circuit board applications.



Bulkhead Feedthrough

Connectors with double-ended receptacles with feedthrough contacts that mate to standard MIL-SPEC D38999 plugs.



LRM

Surface mount high density rectangular connectors that utilize brush contacts. The ideal board-to-board mating scheme for ruggedized chassis.

FEATURES

Amphenol Aerospace offers a variety of features and capabilities for military aviation platforms, including:

MIL-SPEC Derivatives

38999 Plus

38999 Plus offers customized connectors with a MTL-DTL-38999 style foundation to tackle any interconnect challenge.

Quick Disconnect

Ram-Lock

A push-pull quick disconnect system with positive locking that is perfect for applications where accidental unmating is a concern.

Hermetics

Hermetic Connectors

Amphenol Hermetic Connectors feature an airtight seal that prevents liquid, air, gas, and solid particles from entering the contact space.

EMI/RFI/EMP Shielding

Filter Connectors

Amphenol Filter Connectors provide significant protection against EMI/RFI interference and EMP with a variety of available filter options.

Advanced Platings

AP-93

REACH/RoHS compliant finish that meets 1000 hours of dynamic salt spray, 500 mating cycles, and meets the millivolt drop shell-to-shell conductivity of nickel (Class F).

*Visit our website or contact your Amphenol representative for information on our other plating options.