Amphenol Ruggedized, Non-Floating, Brush Rack and Panel Connectors





Ruggedized, Non-Floating Brush Rack & Panel Typical Markets:

- C4ISR/Tactical Radios
- Military Avionics





LRM (Line Replaceable Modules

Hi Speed/RF/Power Fiber Optics

Accessories Options

VITA 60,

8

Hi Speed

Brush

VME 64×/

Densit

FEATURES & OPTIONS

RUGGEDIZED, NON-FLOATING BRUSH RACK AND PANEL CONNECTORS

This connector series utilizes Amphenol's durable and reliable B³ contact system in a rugged, non-floating Rack and Panel connector.

BRUSH CONTACT TECHNOLOGY



Multiple strands of high tensile strength wire bundled together to form brush-like contacts. See Brush Contact Technology section of this catalog for further description.

Included in this series are digital and power/digital "hybrid" insert arrangements. The hybrid series utilizes Amphenol's high performance RADSOK® power contacts along with Amphenol's proven B³ contact. (See next page for more description of RADSOK® contacts.)

AVAILABLE FEATURES:

- High performance B³ brush contacts
- 0.100 inch x 0.100 inch square grid footprint
- Environmentally sealed at connector interface when mated (optional feature)
- Environmentally sealed connector mounting interface
- EMI protection is available at mounting surfaces and connector interface
- ESD protection is available allows use of Class 3 hardened chips (4KV max. voltage)
- Tapered mating surface provides near zero X & Y plane movement between mated connectors



Ruggedized, Non-Floating Brush Rack and Panel Connector (6 RADSOK® High Power Contacts and 74 Brush Contacts)



2 Bay Shell Configuration of Ruggedized, Non-Floating Rack and Panel Connector (126 Brush Contacts per Bay)



Amphenol Aerospace

Brush Contad Solutions

GEN-X

Hi Speed/RF/Power

Accessories **Options**/

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AT/

Speed HSB3

Ξ

Brush

Standard

Hybrids - Signal/Power/ **Fiber Optics**

Coax/

Accessories/Install. Docking Conn./

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Interconnects Rectangular UMD/LMS

> nterconnects Rectangular

Low Mating Force MIL-DTL-55302

VME64× / Ś

High Density

Pkg.

Hybrids - Fiber Optics/ Staggered

LRM (Line Replaceable Modules)

Amphenol[®] Ruggedized, Non-Floating **Brush Rack & Panel Connectors**

PERFORMANCE DATA / HYBRIDS WITH RADSOK®

CONNECTOR PERFORMANCE:

Standard performance requirements for 126 pin signal version:

- Durability: 500 mating cycles
- Operating Temperature: -60° to 125°C
- Current Rating: 3 amperes Hot swap 1 ampere max. (load dependent) - non ESD protected version only.
- Insulation Resistance: 1 gigaohm minimum
- **Dielectric Withstanding Voltage:** 500V, 60 Hz RMS @ sea level, 300V, 60 Hz RMS @ 15,000 ft. elevation
- Solderability: J-STD-004, -005 & -006
- Salt Fog: EIA-364-26B, test condition B
- Humidity: EIA-364-31B, test method III
- Vibration: EIA-364-28B, test condition III
- Shock: EIA-364-27B, test condition G
- ESD Protection intercepts ESD events on signal pins from 4kV to 25kV

Consult Amphenol Aerospace, Sidney NY for more information on ruggedized, non-floating rack and panel connectors to fit your particular interconnect needs.



Custom 2-Bay Ruggedized, Non-Floating Brush Rack and Panel Connector (126 brush contacts per bay)



Standard 126 pattern in Ruggedized, Non-Floating Brush Rack and Panel Connector.

HIGH POWER IS ACHIEVED WITH HYBRID RACK AND PANEL CONNECTORS THAT UTILIZE AMPHENOL® **RADSOK® CONTACTS**



RADSOK[®] CONTACT TECHNOLOGY:

- Socket cylinder within female contacts has several equally spaced longitudinal beams twisted into a hyperbolic shape.
- As male pin is inserted, axial members in the female half deflect, imparting high current flow across the connection with minimal voltage loss.
- The hyperbolic, stamped grid configuration ensures a large, coaxial, face-to-face surface area engagement.
- Ideal for crimp termination applications requiring repeated mating cycles and high current with low milli-volt drop.

For more information on RADSOK® products from Amphenol: www:amphenol-industrial.com and www.radsok.com Contact Amphenol Aerospace Operations, Sidney, NY (Phone: 607-563-5011) or Amphenol Power Solutions, Fraser, MI (Phone: 586-294-7400)



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Other