

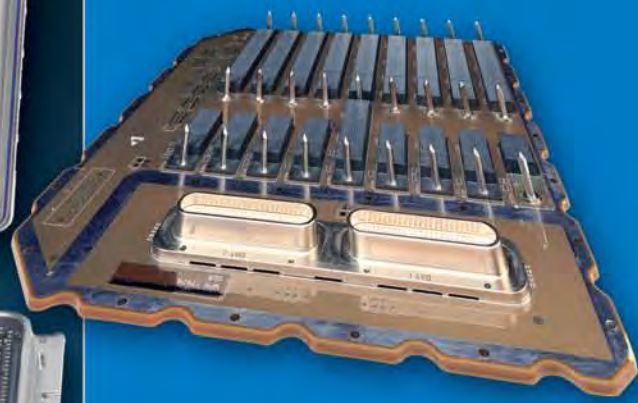
# Amphenol Ruggedized, Non-Floating, Brush Rack and Panel Connectors



## TABLE OF CONTENTS

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

- Table of Contents ..... 96
- Features, Options ..... 97
- Performance Data,  
Hybrids with RADSOK® Power Contacts .. . . . 98



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

- C4ISR/Tactical Radios
- Military Avionics



# Amphenol® Ruggedized, Non-Floating Brush Rack & Panel Connectors

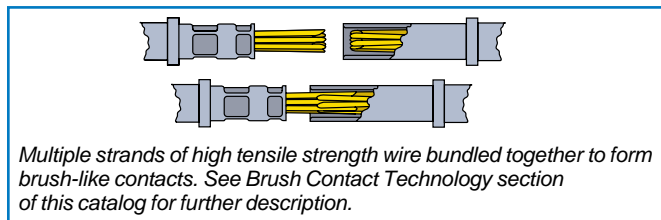


## FEATURES & OPTIONS

### RUGGEDIZED, NON-FLOATING BRUSH RACK AND PANEL CONNECTORS

This connector series utilizes Amphenol's durable and reliable B<sup>3</sup> contact system in a rugged, non-floating Rack and Panel connector.

#### BRUSH CONTACT TECHNOLOGY



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 B<sup>3</sup> contact. (See next page for more description of RADSOK® contacts.)

#### AVAILABLE FEATURES:

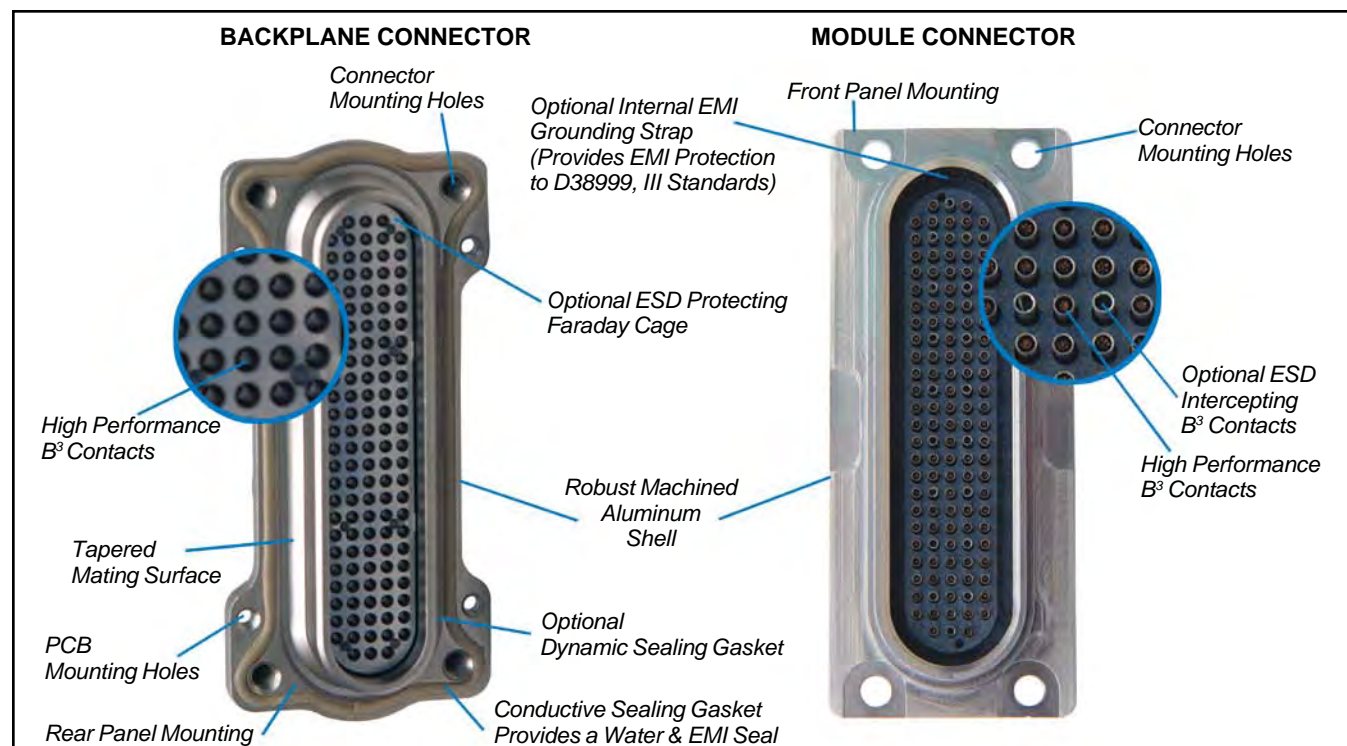
- High performance B<sup>3</sup> brush contacts
- 0.100 inch x 0.100 inch square grid footprint
- Environmentally sealed at connector interface when mated (optional feature)
- Environmentally sealed connector mounting interface
- EMI protection is available at mounting surfaces and connector interface
- 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)



Introduction/  
Pig. Solutions/  
Brush Contact

LRM (Line Replaceable Modules)  
Staggered/  
GEN-X

Hybrids - Fiber Optics/  
Hi Speed/RF/Power

Options/  
Accessories

Ruggedized  
VME 64x/  
VITA 60, 66

High Density  
HDB3  
HSB3  
Hi Speed

Standard  
Brush

Low Mating Force MIL-DTL-55302  
Hybrids - Signal/Power/  
Cook/Fiber Optics

Docking Conn./  
Accessories/Install.

Rack & Panel  
Brush  
Ruggedized

LMD/LMS  
Rectangular  
Interconnects

Other  
Rectangular  
Interconnects



# Amphenol® Ruggedized, Non-Floating Brush Rack & Panel Connectors

PERFORMANCE DATA / HYBRIDS WITH RADSOK®

Introduction/  
Pkg. Solutions/  
Brush Contact

LRM (Line Replaceable Modules)  
Options/  
Accessories

Hybrids - Fiber Optics / Staggered/  
Hi Speed/RF/Power  
GEN-X

Ruggedized  
VME64x /  
VITA 60, 66

High Density  
HSB3  
Hi Speed

HDB3

Low Mating Force MIL-DTL-55302  
Docking Conn./  
Accessories/Install.

Hybrids - Signal/Power / Standard  
Coax/Fiber Optics  
Brush

Rack & Panel  
Brush  
Ruggedized

LMD/LMS  
Rectangular  
Interconnects

Other  
Rectangular  
Interconnects

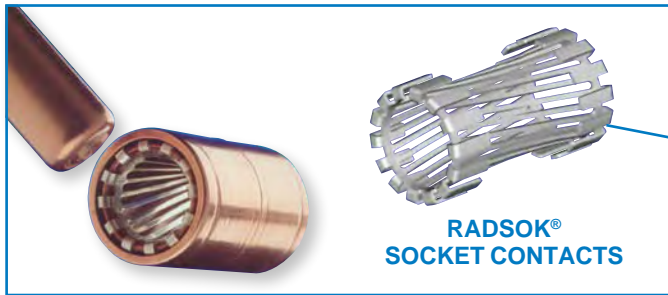
## CONNECTOR PERFORMANCE:

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.

## 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](http://www.amphenol-industrial.com) and [www.radsok.com](http://www.radsok.com)  
Contact Amphenol Aerospace Operations, Sidney, NY (Phone: 607-563-5011) or Amphenol Power Solutions, Fraser, MI (Phone: 586-294-7400)



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.

