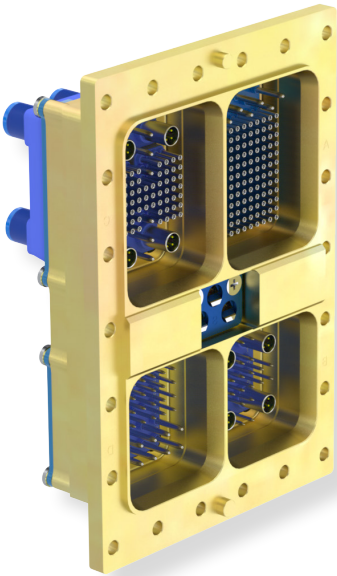


MPX Series MIL-DTL-83527B AECMA EN3682

*Ruggedized Rack
& Panel Connector*



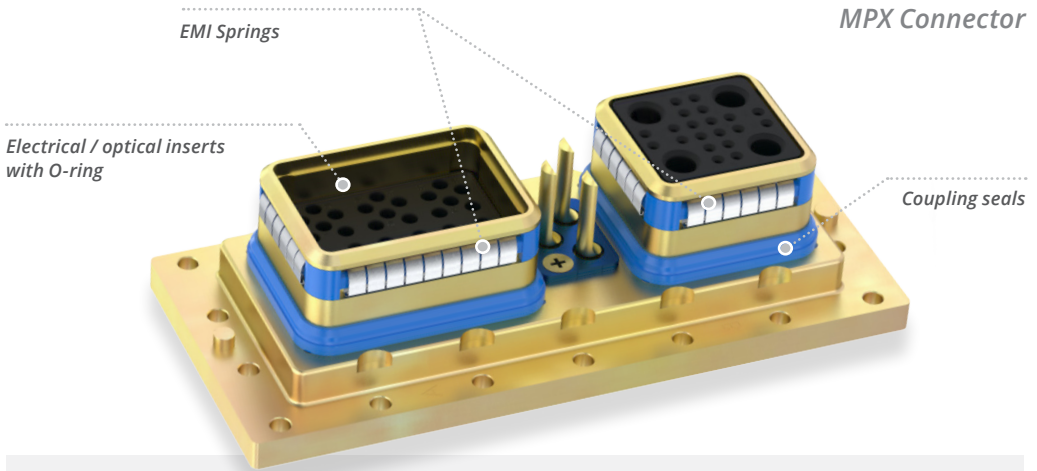
Radiall's MPX is a ruggedized multicavity connector for Rack & Panel applications. It has been used in the defense industry for over 30 years.



MPX

MIL-DTL-83527B/EN3682

The MPX series features a standardized rectangular shape that combines contact high density and robustness for harsh environments. Several versions are proposed with two, four or six cavities, making the MPX series the ideal solution for all equipment sizes. Interfacial seal, rear grommet and o-ring insert options guarantee sealing performance and a high level of reliability in the field. In order to meet market needs, Radiall proposes a broad range of electrical and optical inserts.



DEVELOPED FOR HARSH ENVIRONMENTS

The Radiall MPX series is a robust rectangular connector for Rack & Panel applications compliant with the MIL-DTL-83527B specification and EN 3682 European Standard. This series is well suited for military applications and commercial aircraft where harsh environmental issues are a concern.

Available in three different shell formats that hold two, four or six inserts, this blind mate solution offers a high level of modularity and an extremely secure mating sequence. The broad range of inserts are compatible with signal, power, quadrx, triax, coax and optical contacts or a mix of these. The MPX series offers a high level of contact density. One single connector can hold up to 750 #22 contacts.

Machined out of aluminum alloy, the MPX series offers a high level of performance. Thanks to its shell plating, it can withstand 500 hours of salt spray and strong shock and vibration.

To prevent electromagnetic interferences, the connector is loaded with EMI springs. Interfacial seal, rear grommet and o-ring insert options guarantee sealing performance and a high level of reliability in the field. Its rectangular shape perfectly fits all equipment, and its Rack & Panel feature makes it the ideal alternative to legacy circular connectors such as the MIL-DTL-38999 series.

APPLICATIONS

- Avionic bays on military airplanes and helicopters (radio, radar, calculators, screens, etc.)
- Ground military applications



OPTICAL SOLUTIONS

In response to the market demand for higher bandwidth, density and reliability, Radiall MPX connectors integrate Physical Contact (PC), Expanded Beam (EB) and Multifiber (MT based) optical solutions.



Q-MTITAN™ ARINC 846

Ruggedized, high density, 12-fiber contact for #8 quadax cavity



EB-LUXCIS®

4-channel Expanded Beam optical insert offering minimum maintenance in demanding environments



LUXCIS® ARINC 801

High performance optical connectivity for harsh environments

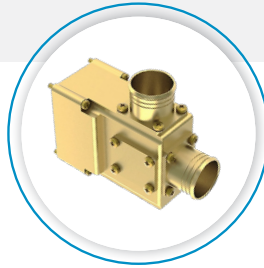
MATERIALS & ENVIRONMENTAL PERFORMANCE

- **Temperature range:** -65 °C to +150 °C (-85 °F to +302°F) Optical: -40 °C to +125 °C (-40 °F to +257 °F) (EIA 455-3)
- **Temperature life:** 1,000 hours at 150 °C (+302 °F) (see MIL-DTL-83527B) Optical: 1,000 hours at 125 °C (+257 °F) (EIA 455-4)
- **Salt spray:** 500 hours (Test procedure 26 of EIA364)
- **Humidity:** 10 days Optical: 4 days (Test procedure 31 of EIA364)
- **Sealing:** Altitude immersion 50,000 ft
- **Fluid resistance:** EIA-364-10
- **Mating/unmating:** 500 cycles (Test procedure 9 of EIA364)
- **Random vibration:** (see MIL-DTL-83527B)
- **Shock:** 30 g/11 ms/half sine (Test procedure 27 of EIA364)
- **Mating/unmating forces:**
 - Shell size 2: 1446 N / 325 lbf max
 - Shell size 3: 1780 N / 400 lbf max
 - Shell size 4: 2113 N / 475 lbf max

A wide range of MPX accessories are available to fit every market demand.

ACCESSORIES

- Quadrax – fiber optic adapter
- Backshell
- EMI spring
- O-ring
- Dust caps



MPX BACKSHELL

Conductive backshell with multiple entries to ease wiring



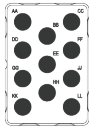
OPTICAL ADAPTER FOR #8 QUADRAX CAVITY

1 LuxCis® ARINC 801 optical contact per quadrax cavity

ELECTRICAL AND OPTICAL INSERTS



■ **36F36**
36 LuxCis®



■ **Q11**
11#8 Quadrax



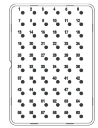
■ **68Q4**
4#8 Quadrax
62#22 Contacts
6#16 Contacts



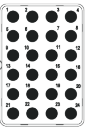
150
150#22 Contacts



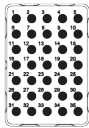
126
120#22 Contacts
6#16 Contacts



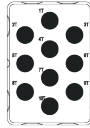
60
60#20 Contacts



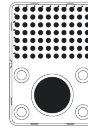
24
24#12 Contacts



35
35#16 Contacts



T10
10#8 Coax/Triax



70C1
70#22 Contacts
1#1 Coax



■ **6 EB-LUXCIS®**



■ **20Q4**
20#20 Contacts
4#8 Quadrax



20T4
20#20 Contacts
4#8 Coax/Triax



■ **62Q2**
2#8 Quadrax
60#22 Contacts
2#16 Contacts



■ **68Q2**
2#8 Quadrax
68#22 Contacts



34
24#20 Contacts
10#16 Contacts



100
100#22 Contacts



11C2
4#20 Contacts
3#16 Contacts
4#12 Contacts
2#5 Coax



11T2
4#20 Contacts
3#16 Contacts
4#12 Contacts
2#8 Coax/Triax



62T2
60#22 Contacts
2#16 Contacts
2#8 Coax/Triax



■ **Q6**
6#8 Quadrax



T6
6#8 Coax/Triax



■ **4 EB-LUXCIS®**

- Inserts compatible with optical contacts

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GLOBAL PRESENCE

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Russia • South Africa • Singapore • Spain • Switzerland • Taiwan • Thailand • Turkey • Vietnam*