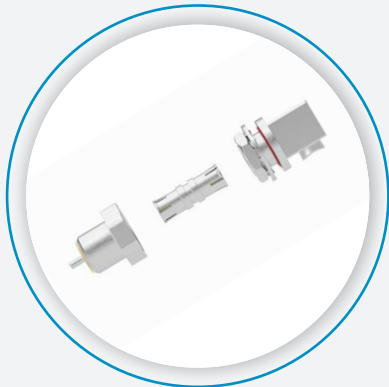


PIM-MAX

Low PIM Solution for
FDD Networks



APPLICATIONS

- Wireless telecom radio units
- Wireless telecom filter modules
- Machine to machine wireless units
- Test & Measurement RF boards
- Broadcast RF equipment

PIM-MAX is Radiall's new three-piece blind mate connector solution that features stable static and dynamic PIM 3 performances up to -160 dBc with 2x + 43 dBc carriers.

Due to the deployment of 5G systems, the increasing requirements for multi-spectrum densification are driving operators to add capacity while boosting network performance. To address these areas, more operators are using Active Antenna Systems (AAS) and co-locating multiple systems.

In addition, designers and operators need to consider several other variables. As base station towers are increasing in height to allow for more coverage options, environmental factors, such as wind, can make it difficult to maintain ideal PIM levels. In non-traditional sites, such as dense urban areas, other sources of vibration can cause PIM issues.

Low PIM blind mate connectors with stable PIM performance under dynamic conditions are essential for FDD AAU/AAS systems. Radiall's new PIM-MAX connector system addresses the PIM and greater utilization demands of 5G. This Board-to-Board, Board-to-Module, Module-to-Module connector solution provides a cost-effective and compact alternative to low PIM jumpers. Additionally, it can maintain stable PIM levels under harsh vibration conditions (MIL-STD-202G, Method 204, Condition A). PIM-MAX has a large misalignment tolerance (axial: ± 0.8 mm; radial: 3°) that minimizes overall system costs and provides a robust swipe-proof interface, which reduces risk of damage during installation.

FEATURES & BENEFITS

- Frequency range: 0~6 GHz;
- VSWR: 1.25, 0-4 GHz; 1.3, 4-6 GHz;
- Dynamic PIM 3 @ 2x20 W: -160 dBc
- Static PIM 3 @ 2x20 W: -165 dBc
- Radial tolerance: 3°
- Axial tolerance: ± 0.8 mm
- Working temperature: $-55 \sim +165^\circ$ C
- Vibration: MIL-STD-202G, Method 204, Condition A

Note

Connectors with different mounting types can be developed upon request.