



NEX10™

MINIATURE LOW PIM RF CONNECTOR

Radiall's NEX10™ series is a miniature and lightweight RF Coaxial connector with excellent intermodulation performance for outdoor telecom applications up to 20 GHz.



Growing demand for new generation equipment within the Telecom market requires a top performance solution with exceptional benefits and features. To develop this solution, Radiall has partnered with two leading RF connector manufacturers to develop a new compact extremely robust Low PIM connector: NEX10™.

With exceptional performance up to 20 GHz in order to meet the performance needs of customers, NEX10™ also features a compact design which is 50% smaller than 4.3-10. This unique solution also offers separation of electrical and mechanical reference planes, which maximizes intermodulation performance under static, dynamic, vibrations and torque stress conditions.

NEX10™ is available in multiple configurations:

- Jack: square flange, bulkhead
- Plug: straight & right angle
- Screw-on & push-pull coupling mechanism
- Multi coax
- Additional boot
- Jumper



Miniature Low PIM RF Connector

NEX10™ meets market needs by providing 4.3-10 connector advantages in a smaller size. The more robust and lightweight interface design allows for multi-coax interconnection solution.

Test/Characteristics	Values/Remarks
Impedance	50 Ω
Frequency	DC to 20 GHz
PIM (Passive Intermodulation)	-166dBc, 2x43dBm for all coupling types (static and dynamic)
Power	100 W @ 2 GHz @ 85°C
Return Loss (typical)	DC...6 GHz, 36dB, 6...10 GHz, ≥ 30dB, 10...20 GHz ≥ 20dB
Durability	100 min. 500 for test and measurement types
Mating Characteristics	Quick Lock engagement force: 50N Screw-on recommended torque: 3Nm
Interface Retention Force	Quick-Lock 150 N min., Screw 500 N min.
Bending Force	≥5Nm
Screening Effectiveness	DC to 3 GHz (screw-on): -100dB min.
	DC to 3 GHz (quick-lock): -90dB min.
	3 to 6 GHz (quick-lock): -70dB min.

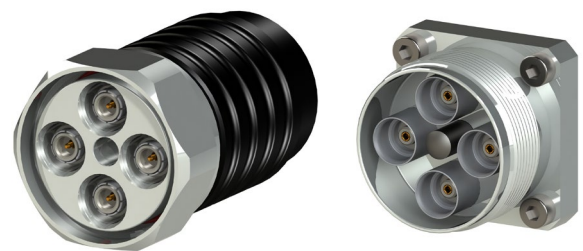
Features & Benefits

- Robust design for outdoor usage
- Low PIM, independent of applied torque
- Multiple coupling mechanism of push pull and torque
- High RF shielding
- Optimized for ¼" superflexible corrugated and smaller flexible cables
- 12.7mm minimum flange height
- Contact areas protected from damage

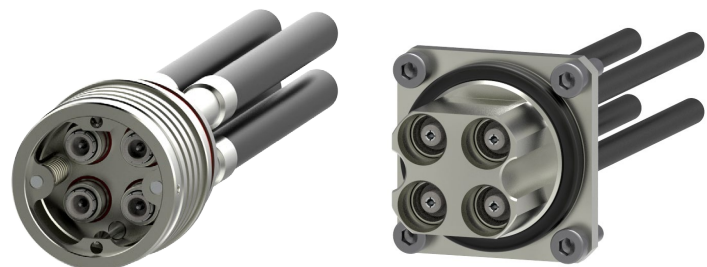
Applications

- Small Cell and MIMO
- DAS/In-building
- Antennas, radios and filter output
- Outdoor and Indoor
- Applications requiring PIM stability in a compact size
- Multicoax/Blind mate applications

Multi-Coax Model:



Screw-On Type



Quick-Lock Type