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
- **Plugs**: straight & right angle
- **Screw-on & push-pull coupling mechanism**
- **Multi-coax**
- **Additional boot**
- **Jumper**

**MULTI-COAX MODEL:**

- 4 Coax
- 5 Coax
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.

### FEATURES & BENEFITS
- Robust design for outdoor use
- Low PIM, independent of applied torque
- Multiple coupling mechanism of push pull and torque
- RF shielding
- Optimized for ¼” super-flexible 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
- Multi-coax/Blind mate applications

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**Test/Characteristics** | **Values/Remarks**
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**Impedance** | 50 Ω
**Frequency** | DC to 20 GHz
**PIM (Passive Intermodulation)** | -166dBc, 2x43dBm for all coupling types (static and dynamic)
| **Power** | 250W @ 25°C
| | 100W @ 85°C
| | 50W @ 105°C
| | 250W @ 25°C
| **Return Loss (typical)** | 36dB @ up to 4 GHz
| | 34dB @ up to 6 GHz
| | 30dB @ up to 10 GHz
| | 20dB @ up to 20 GHz
| **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 6 GHz (screw-on): -110 dB min.
| | DC to 3 GHz (quick-lock): -90dB min.
| | 3 to 6 GHz (quick-lock): -70dB min.
| **Surge Current** | ±1 kA 10/350 μs pulse and ±4 kA 8/20 μs pulse
| | ±5 kA 10/350 μs pulse and ±20 kA 8/20 μs