

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:

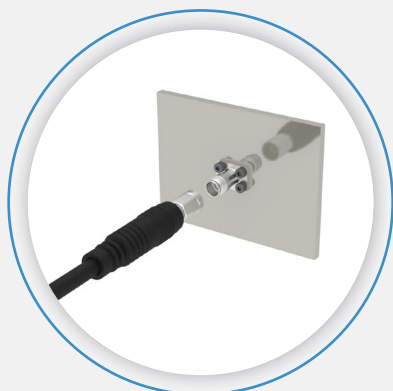
- Jack: square flange, bulkhead
- Plug: straight & right angle
- Screw-on & push-pull coupling mechanism
- Multi-coax
- Additional boot
- Jumper

MULTI-COAX MODEL:

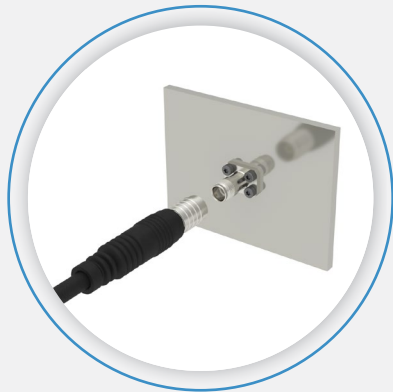




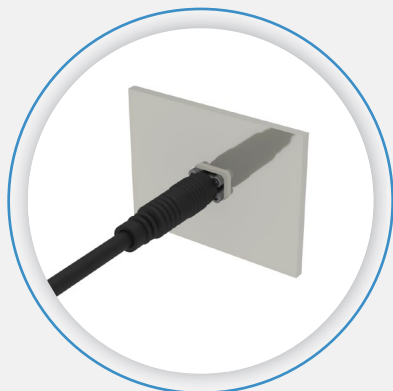
ADDITIONAL BOOT



Screw



Quick lock



One common boot for screw
& Quick lock models

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	250W @ 25°C	2 GHz
	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	

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 1/4" 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