

# Low PIM RF Assemblies

## Passive Intermodulation



311201 and 310801 Low PIM Cable Assemblies

### MINIMIZING PIM

There are six components of connector designs that must be evaluated when considering a low PIM design. They are: contact design, connector interface, connector internal junctions, cable attachment, materials, and plating.

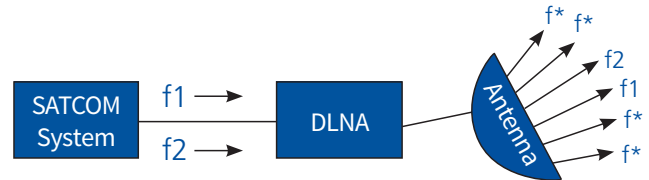
Carlisle Interconnect Technologies' (CarlisleIT) application engineering group has developed specialized low PIM cable assemblies for installation of antenna and electronic systems.

The prevention of PIM only starts with high performance designs and components. The most common source of PIM is created within the coaxial component terminations. Contamination-free precision assembly technique is essential for low PIM performance.

CarlisleIT application and manufacturing engineers have optimized our low PIM cable and connector products and developed termination procedures for clean, tight-tolerance RF assemblies that will reduce the introduction and effects of PIM into your performance-driven SATCOM systems.

### WHAT IS PASSIVE INTERMODULATION?

Passive Intermodulation, also known as PIM, is the generation of unwanted signals by passive components with non-linear characteristics. These unwanted signals can effectively block desired signals or cause interference in other systems.



Description	Fits Cable Type
Right Angle TNC Connector	311201
Straight TNC Connector	311201
Straight N Connector	311201
Bulkhead TNC Jack	311201
ARINC 600 Size 1 Pin	311201
ARINC 600 Size 1 Socket	311201
Right Angle TNC Connector	310801
Straight TNC Connector	310801
Straight TNC Connector	310701

### SPECIFICATIONS

- » Designed primarily for use in ARINC 781 compliant SATCOM antenna systems
- » Current offerings include RF assemblies with TNC and Type N connectors in various configurations for 310701, 310801, and 311201 cable types
- » Every CarlisleIT RF cable assembly is fully tested to guarantee electrical and physical integrity, maintain high quality, ensure reliability, and comply with system requirements
- » Proven low PIM performance during temperature cycling (DO-160E Section 4 Category F2 and Section 5 Category A) and vibration testing (DO-160E Section 8 Category S Curve C)

When performance matters, our low PIM RF assemblies provide proven performance in demanding applications.

### CONNECT WITH US TODAY

See CarlisleIT's line of **Cable Assemblies & Harnesses** at:  
[CarlisleIT.com/products/cable-assemblies-harnesses/](http://CarlisleIT.com/products/cable-assemblies-harnesses/)

**1-800-327-9473**  
**Sales@CarlisleIT.com**