FEATURES & BENEFITS

- Operates at the same electrical performance as Type N up to 11 GHz
- Snap-on interface for quick and easy installation
- Rotatable 360° after connection for flexibility with installation

APPLICATIONS

- Base Stations
- Cable Assemblies
- Components (Filters, Amplifiers, Combiners)
- Datacom
- Routers
- Switching Equipment
Amphenol RF’s QN connector is a quick disconnect version of the N connector with similar internal construction, which enables fast and easy matings with minimum space requirements. The innovative alternative to N connectors, the QN line is perfect for indoor and outdoor applications including base stations and cable assemblies. These connectors have the same benefits over threaded connectors and can be terminated to larger cables and are designed to handle higher power requirements.

The Snap-on interface makes the QN connector 10 times faster than a threaded connector and gives increased reliability with no torque or tooling required. The 360° rotatable interface makes routing of cable assembly easy, with no mechanical stress or electrical performance degradation.

## Specifications

### Electrical

- **Impedance**: 50 Ω
- **Frequency**: DC - 11GHz (optimized DC - 6GHz)
- **Dielectric Withstanding Voltage**: 2500 Vrms, 50 Hz (sea level)
- **Working Voltage**: ≤1000 Vrms, 50 Hz (sea level)
- **Insulation Resistance**: $5 \times 10^3 \text{ MΩ min.}$
- **Power Handling**: 300 W @ 2.5 GHz typical
- **Contact Resistance**:
  - center contact: 1.5 m Ω max. (initial)
  - outer contact: 1.5 m Ω max. (initial)
- **Passive Intermodulation**: -155 dBc @ 1.8 GHz (2x 43 dBm carrier)
- **Screening Effectiveness 100 MHz to 3 GHz**: -90 dB min.

### Mechanical

- **Mating Characteristics**:
  - engagement force: 30 N typical
  - disengagement force: 30 N typical
- **Interface Retention Force**: 450 N min.
- **Durability**: 100 mating cycles min.
- **Connector pitch**: 20 mm min. center to center

### Environmental

- **Temperature Range**: -40°C to +125°C
- **Climatic Category**: IEC 60169-1 16.2 40/125/21
- **Rapid Temperature Change**: IEC 60169-1 16.4 (-40°C/+125°C)
- **Corrosion**: Saltspray test acc. to MIL-STD-202 F, method 101 D, condition B
- **Moisture Resistance**: MIL-STD-202 F, method 106 F
- **Vibration**: IEC-1169-1 paragraph 9.3.3 (10-500 Hz;5g)
- **Dust & Moisture protection**: IEC 60529
- **IP Rating interface**: IP68