



# AEROSPACE & DEFENSE

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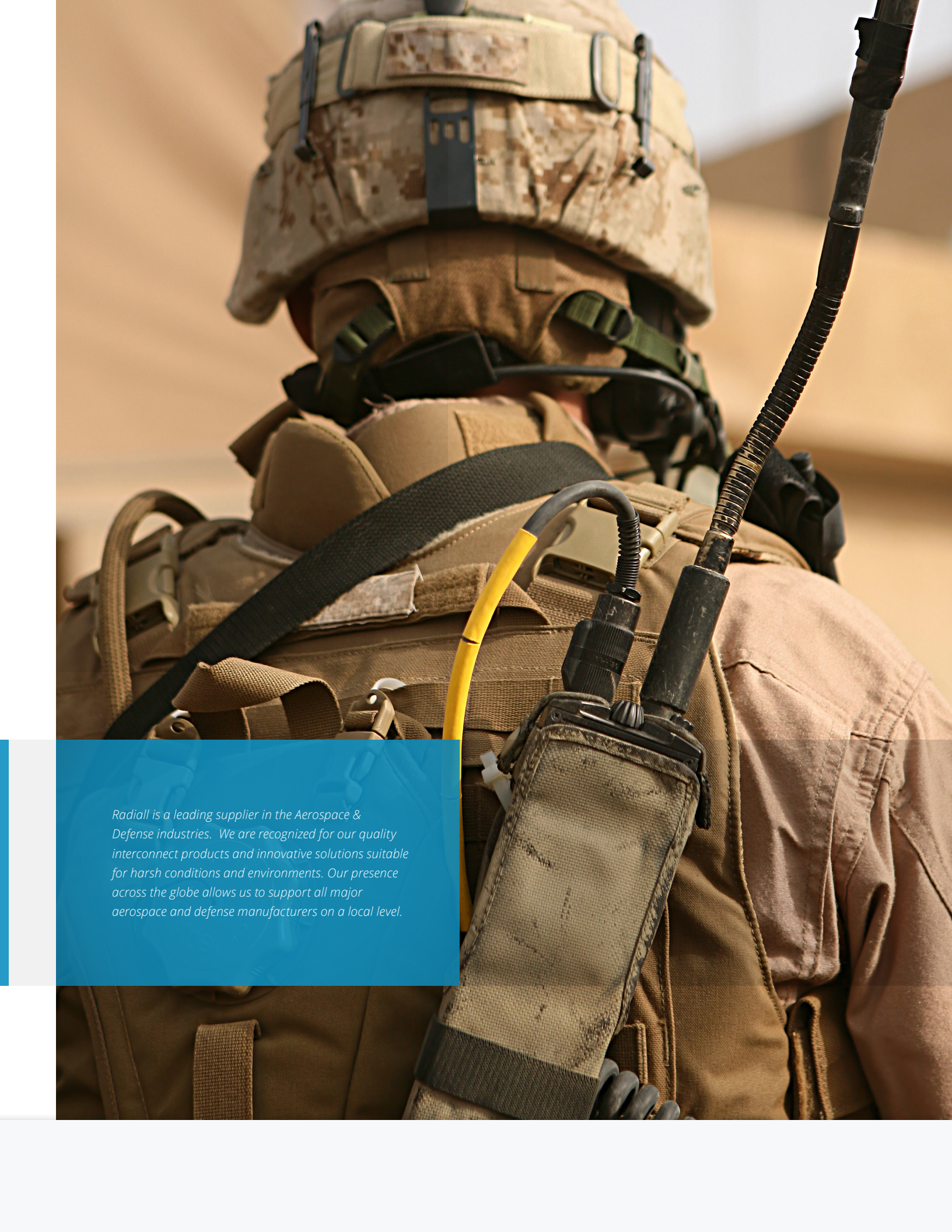
*Brochure*



**SIMPLIFICATION** IS OUR INNOVATION

**Radiall** 





*Radiall is a leading supplier in the Aerospace & Defense industries. We are recognized for our quality interconnect products and innovative solutions suitable for harsh conditions and environments. Our presence across the globe allows us to support all major aerospace and defense manufacturers on a local level.*



# ADVANCED AEROSPACE

## MULTIPIN CONNECTORS

*For use in both harness and equipment connectors*

### NSX-ARINC 600

- Rack and panel connectors
- Robust and cost effective
- A large range of contacts and accessories
- RoHS and REACH compliant options
- High-speed data link configurations available off-the-shelf

### DSX-ARINC 404 & SAE AS 81659

- Rack and Panel connector
- Used in major civil and military programs
- Numerous configurations available

- Specific front-release, front-removable contacts solution for receptacles

### MPX - MIL-DTL83527

- Rack and Panel connector
- Rugged design for harsh and military applications
- High-conductivity and corrosion resistance
- Removable inserts with various configurations
- A large variety of inserts and contacts for high-speed data link



## MULTIPIN CONNECTORS CONTINUED

### EPX™ - EN4644

- Disconnect panel, Rack and Panel and galley applications
- Modular and expandable design
- Space saving with high-density inserts and stackable shells
- Time-saving, user friendly and cost effective with a comprehensive range of rear accessories

### HDQX SERIES

- High-density connector for #8 contacts
- Uses standard ARINC 600 quadrx contacts
- Compatible with #8 BMA, triaxial, twinax and coaxial contacts



## MULTIPIN CONNECTORS CONTINUED

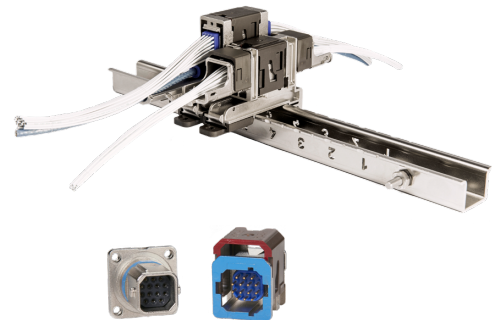
### QM

- Quick mating with the Radiall Touch – one-finger mating in a snap
- Quick installation with rail fixation
- Lightweight, compact and high-density
- Integrated ground blocks and backshells

### QUICKFUSIO

- Miniature connector for sensors, EWIS and cabin applications
- Versatile range with several shell styles and outputs

- Competitive costs with the use of standard SAE-AS-38999 Series II contacts
- Lightweight design, extreme compactness and high contact density
- Quick mating with the Radiall Touch – one-finger mating in a snap



## SPACE QUALIFIED COMPONENTS

- Comprehensive range of space qualified coaxial components up to 50 GHz
- Large connector interface selection: SMP, SMP-LOCK, 2.4mm, SMA, SMA 2.9, TNC and Very High Power TNC
- Various products available for RF transmission in space including switches, connectors, attenuators, loads, semi-rigid and low-loss flexible cable assemblies, couplers, dividers, and phase shifters





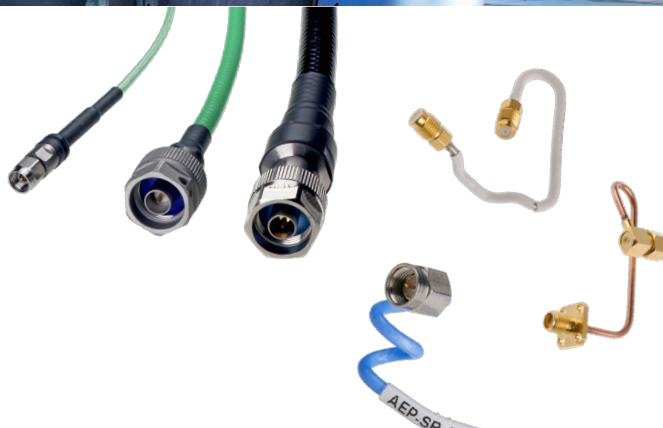
## RF CABLE ASSEMBLIES

### STANDARD CABLE ASSEMBLIES

- Hand-formable
- Semi-rigid
- RG flexible

### PROPRIETARY CABLE ASSEMBLIES

- Short-bend
- SHF Ultra Low Loss
  - Loss optimized up to 67 GHz
  - Phase matching option
  - Armored, Lightweight and Airframe versions
- Custom cable assemblies and lengths available



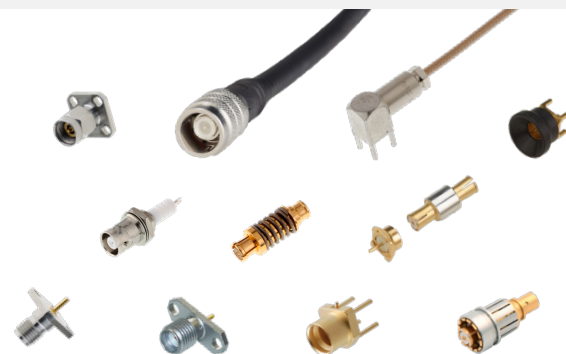
## ANTENNAS

- Manpack, vehicle and handheld radios
- UAV/UGV2 and other sensors
- Airborne, onboard and external
- Antenna frequency: 30 MHz and up
- Single, dual and multi-band, external or embedded
- Active and passive GPS (L1 and L1/L2)
- Overmolded, whip, patch printed
- N-type, TNC, SMA, and specialty connectors
- Custom design applications, low to high-power
- In-house antenna measurement system
- MIL-STD 810 compliant
- Available in AEP brand products



## RF COAXIAL CONNECTORS

- Comprehensive range of RF connectors up to 100 GHz
- All standard series: SMA, SMP, SMPM, N, TNC, SMB, SMC, SSMC, MMCX, MCX, BNC
- Blind mate: SMP, SMPM, SMPW, BMA
- High frequency precision connectors for test: 2.4mm, SMA2.9, TNC18
- High power antenna low PIM connectors: NEX10, 4.3-10, 4.1-9.5, 7-16
- High voltage connectors: BNC HV/MHV, HN, SHV
- Locking connectors: SMP-LOCK, SMB-LOCK, TNC Self-lock, SMA2.9 Self-lock
- MIL-PRF-39012 QPL connectors
- Quick Lock Formula (QLF) certified QMA and QN, and ruggedized version QRE
- RF Board-to-Board interconnects: SMP-MAX, IMP-MAX, POWER-MAX, IMP, MMBX
- Switching connectors: Moebius, MC-Card, SMA, QN
- Waterproof, stainless steel, lightweight, hermetic, and non-magnetic connectors available



## RF COAXIAL ADAPTERS

- Large selection of In-series and Between-series
- 50 and 75 Ohm
- Push-on and quick disconnect models for production test
- Precision adapters for test lab
- Many configurations available: straight, bulkhead, flange mount, press in, right angle, sealed, hermetic





## OPTICAL INTERCONNECT SOLUTIONS

### HARSH ENVIRONMENT FO CONNECTIVITY

- Ruggedized FO contacts: LuxCis®
- ARINC 801/EN4639-101
- ABS1379/EN4531-101 optical contacts
- High-density MT based interconnects for harsh environments:
  - C-MTitan™ and Q-MTitan™ ARINC 846
  - Expanded Beam solutions: ExoBeam™
  - Tactical cable assemblies, EB-LuxCis®

### CABLE ASSEMBLY & HARNESS CAPABILITIES FROM DESIGN TO DELIVERY OF HIGH-END OPTICAL SYSTEMS

- Simplex and multichannel assemblies designed by Radiall or built-to-print
- Field kits, test and maintenance solutions and training

## ACTIVE OPTICS

- Complete range of high-performance optoelectronic Active Optics by D-Lightsys®
- Fully qualified for harsh environments: DO-160; MIL-STD; ARINC 804
- Smallest form factor for single channel and multichannel modules (6.5 mm<sup>2</sup>/ch/Gbps)
- Lowest power consumption (<50 mW/ch Gbps)
- Protocol independent and large

bandwidth per channel  
(from DC to 10 Gbps)

- Various packages and form factors available (LCC, Socketed, SFF, others)
- Free space version for Board-to-Board contactless data link
- Flying since 2007



## RF & MICROWAVE COMPONENTS

- Comprehensive range of components up to 50 GHz
- Type N, BNC, TNC, SMA, SMA 3.5, SMA 2.9, 2.4mm
- Medium and high power terminations and attenuators up to 6 GHz and 1 kW
- Power dividers/combiners up to 26.5 GHz
- Rotary joints, phase shifters
- Low PIM models
- Microwave filters



## RF & MICROWAVE SWITCHES

- High reliability RAMSES patented modular technology
- More than 10 million cycles
- Frequency range up to 50 GHz
- Comprehensive range of SPDT, DPDT, DP3T, SPnT (1x3 through 1x12)
- Terminated and unterminated versions
- Smallest subminiature SPnT series
- TVAC switches (Thermal Vacuum) for ground segment application

- High performance titanium and platinum switches with long life span and guaranteed repeatability of 0.03dB on IL
- SPDT Quartz Series: Surface Mount Technology (SMT) up to 26.5 GHz
- Low PIM switch series -160dBc: passive intermodulation



# UNYIELDING DEFENSE

# SIMPLIFICATION is our INNOVATION

*We advance the design and engineering process for innovators, ground-breakers and pioneers of technology. We reduce weight, improve durability and streamline installation to provide leading-edge connectors that drive product performance.*

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## GLOBAL PRESENCE

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