AEROSPACE-GRADE
RUGGEDIZED RF, MICROWAVE, AND mmWAVE COAXIAL CABLE ASSEMBLIES

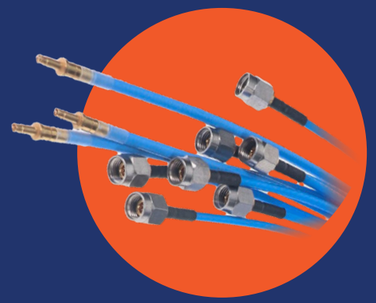
RF

The Glenair BluMark RF Promise:

- **Total vertical in-house manufacturing, US and EU**
- **World-class design, engineering, and test**
- **Fast-turnaround, high-availability solutions optimized for high-radiation, high-density, and high-frequency**

Glenair®

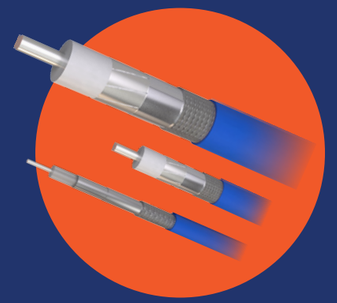
50 Ohm Flexible RF Cable Jumpers



SMA 086, SMA 141, SMA-N 141, N-N 141

BLUMARK COAX CABLES RF™

Mil/Aero-Grade Flexible RF Cables



047, 086, 141, 130, 160, 200, 235, 300, 450

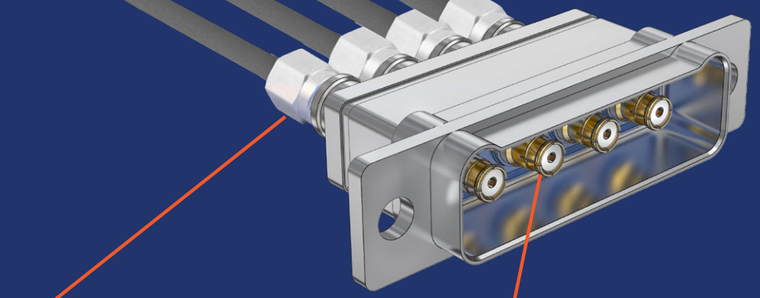
Glenair GMMD Modular Micro-D

Micro Miniature Board and I/O-to-Board Hybrid Coax Connectors

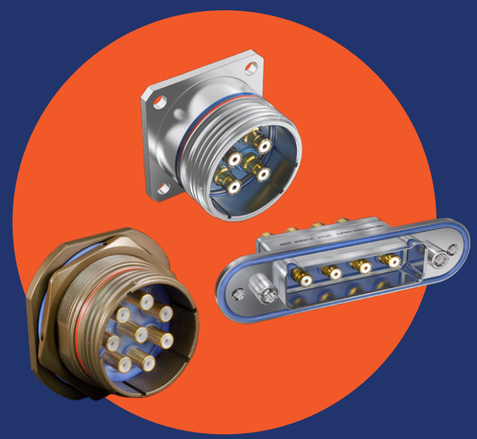
RF Connector Accessories

Dummy Receptacles and Protective Covers

Multi-Port Configuration
RF Assemblies: Rad-Resistant ETFE Jacket (left), Rugged Environmental (right)

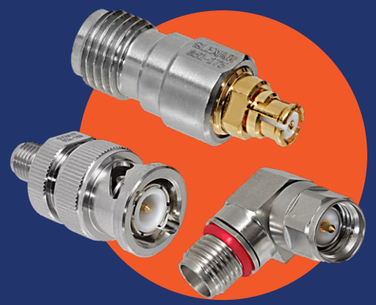


Rugged, Shielded, Vibration-Resistant Mil-Aero Grade Multi-Port RF Shells



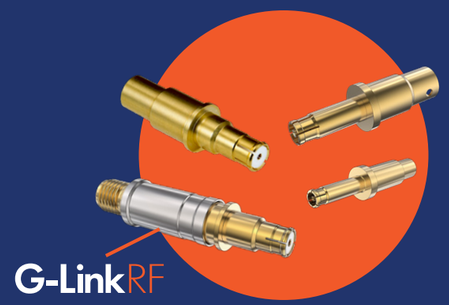
SuperNine RF, Series 806 RF, and Series 795 RF Multi-Port Connector Shells

Tight-Tolerance RF Connector Adapters



TNC-SMA, N-SMA, SMA-SMA, SMP-SMA, 2.92-SMA, BNC-SMA

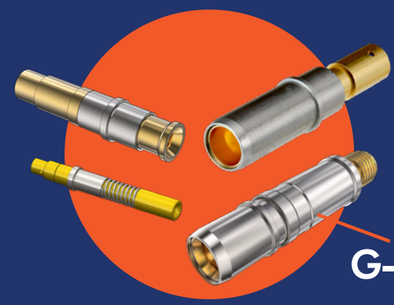
Drop-In Single-Channel RF Connector Pins for Multi-Port Shell Housings



G-LinkRF

Size #8, #12, and #16 *Plus* G-LinkRF 18 GHz RF BMB-to-SMA contact adapters

Drop-In Single-Channel RF Connector Sockets for Multi-Port Shell Housings



G-LinkRF

Size #8, #12, and #16 *Plus* G-LinkRF 18 GHz RF BMB-to-SMA contact adapters

BLUMARK RF COAX CABLES 50 Ohm

Coax cables are available in size categories including 047, 086, 141, 130, 160, 200, 235, 300, and 450 and are suitable for both flight- and test-grade equipment. Optimized for use with drop-in single-channel contacts as well as SMA-type coaxial RF adapters.

047	40 GHz Duralectic Jacket Double Shield .042 (1.1) Diameter	40 GHz FEP or ETFE Jacket Triple Shield .047 (1.2) Diameter
086	40 GHz FEP Jacket Tape + Braid Shield .104 (2.6) Diameter	40 GHz ETFE Jacket Tape + Braid Shield .097 (2.5) Diameter
141	30 GHz FEP Jacket Triple Shield .141 (3.6) Diameter	30 GHz ETFE Jacket Triple Shield .141 (3.68) Diameter
130	40 GHz FEP Jacket Triple Shield .135 (3.4) Diameter	40 GHz ETFE Jacket Triple Shield .135 (3.4) Diameter
160	40 GHz FEP Jacket Triple Shield .160 (4.1) Diameter	40 GHz ETFE Jacket Triple Shield .160 (4.1) Diameter
200	26.5 GHz FEP Jacket Triple Shield .201 (5.1) Diameter	26.5 GHz ETFE Jacket Triple Shield .201 (5.1) Diameter
235	26.5 GHz FEP Jacket Triple Shield .239 (6.1) Diameter	26.5 GHz ETFE Jacket Triple Shield .239 (6.1) Diameter
300	18 GHz FEP Jacket Triple Shield .304 (7.7) Diameter	18 GHz ETFE Jacket Triple Shield .304 (7.7) Diameter
450	10 GHz FEP Jacket Triple Shield .455 (11.6) Diameter	10 GHz ETFE Jacket Triple Shield .455 (11.6) Diameter

RF ADAPTERS

RF adapters are terminated directly to coax cables. Series GRF05 RF "adapters" are threaded devices that connect between or within a series.

TNC-SMA adapters | N-SMA adapters | SMA-SMA adapters | SMP-SMA adapters | 2.92-SMA adapters

RF CONNECTORS
AKA Coaxial Contacts

The RF industry describes these single-channel, drop-in coaxial pin and socket devices as "connectors." Even when used in multiport shells, the term "RF connector" is commonly applied. This high-frequency range of 50 and 75 Ohm drop-in contacts has been optimized for use in Glenair signature high-density, tight-tolerance multi-port interconnects.

SIZE #8 for Sr. 23 SuperNine/ Series 80

50 Ohm 18 GHz | 75 Ohm 12 GHz | 75 Ohm 4 GHz

SIZE #8 for Series 795/ Series 806 RF

50 Ohm 18 GHz | 50 Ohm 6 GHz | 75 Ohm 4 GHz

SIZE #12 for SuperNine Series 795 Series 806 RF

50 Ohm 40 GHz | 75 Ohm 3 GHz | 50 Ohm 3 GHz

SIZE #16 for SuperNine Series 795 Series 806 RF

50 Ohm 65 GHz | 50 Ohm 4 GHz

50 Ohm Coax

RF FACTORY-TERMINATED CABLE ASSEMBLIES

Factory-terminated RF connector and contact cable assemblies with BluMark RF coax cable.100% tested to ensure optimal RF signal performance. Various configurations available with industry-standard interface RF connectors and contacts.

Turnkey series GRF02 50 Ohm point-to-point RF jumpers offer excellent flexibility with a bend radius of 6mm or 1/4 in.

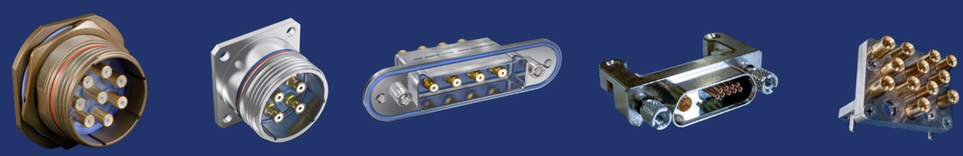
G-LinkRF

G-LinkRF is an RF connector adapter with a BMB-style mating interface, and a female SMA back-end interface for easy termination of SMA cables for use in size #8 BMB mating interface applications.

Multi-Port

"HOUSINGS" or "SHELLS"

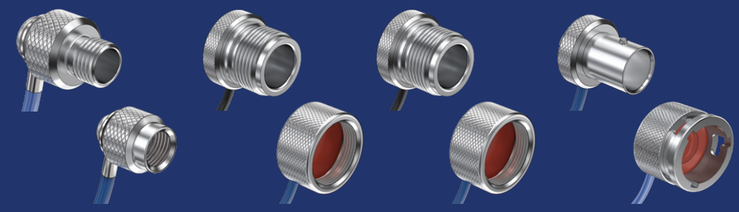
Rugged, environmentally-protected multi-port "Shells" are Glenair signature solutions that group multiple coaxial transmission lines into a high-density package with a common ground plane that eliminates EMI radiation through the interconnect device.



SuperNine® | SERIES 806 RF MIL-AERO | SERIES 795 RF | GMMD | VITA 67.3

DUMMY RECEPTACLES and PROTECTIVE COVERS

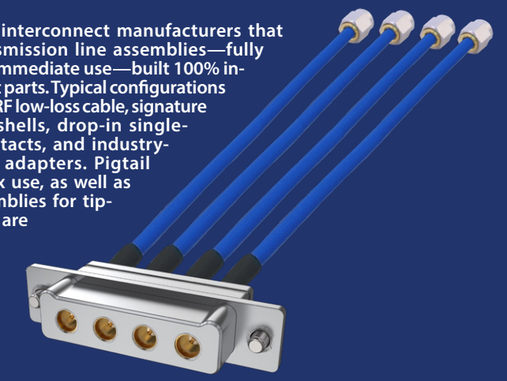
RF connector accessories include Protective Covers and Dummy Receptacles for use with standard single-channel RF coax connectors and adapters.



SMA Covers | Type N Covers | TNC Covers | BNC Covers

TURNKEY RF INTERCONNECT ASSEMBLIES

Glenair is one of just a few interconnect manufacturers that can supply turnkey RF transmission line assemblies—fully connectorized and ready for immediate use—built 100% in-house with Glenair component parts. Typical configurations are built with Glenair BluMark RF low-loss cable, signature high-frequency multi-port shells, drop-in single-channel high-frequency contacts, and industry-standard SMA-type coaxial adapters. Pigtail assemblies for inside-the-box use, as well as rugged environmental assemblies for tip-to-tail aerospace applications are supplied terminated, tested, and ready for immediate use.



GM8 RF HERMETICALLY-SEALED Multi-Port Interconnect Systems

- **Direct-attach or replaceable front-end connectors**
- **Spring-loaded connector interfaces deliver industry-best electrical and signal performance**
- **Optimized for use with Glenair BluMark RF cables**

Drop-in replacements for industry-standard M8-type multiport assemblies with Glenair signature design improvements

RF PERFORMANCE BENCHMARKS

Insertion Loss Budget (AKA Attenuation) – The acceptable amount of signal loss over a given cable length from the source to the output (expressed in dB).

VSWR Requirement (Voltage Standing Wave Ratio) – The maximum allowable ratio of reflected energy back to the source.

Return Loss Requirement – The minimum acceptable return loss (in dB), representing the allowable level of energy reflected back to the source.

Phase Stability Requirement – The maximum allowable phase change of a cable under specified thermal conditions.

Phase Tracking / Matching Requirement – The allowable phase difference between cables to maintain consistent phase alignment.

Operating Frequency Range – The specified range of signal frequencies over which the cable assembly is designed to perform.