

GLOBAL PRODUCT LINE

Brochure



SIMPLIFICATION IS OUR INNOVATION

Radiall 

MULTIPIN INDUSTRIAL CONNECTORS

For use in railway and other industrial applications

CIRCULAR CONNECTORS DERIVED FROM MIL-STD-5015 VG95234

INDUSTRIAL SERIES	RAILWAY SERIES	DESCRIPTION
KVBS	RF KVBS	Thermoplastic insert. Insulation according to NFF 61030
CVB	RF CVB	Reverse bayonet, faster coupling and anti-vibration
CVBS	RF CVBS	Bayonet protected by stainless steel stud, heavy duty
CVBR	RF CVBR	Coupling nut with roller-stud, higher number of mating cycles
GVJ	RF GVJ	Reverse bayonet, oversized shell, more robust
CVS	RF CVS	Threaded connectors
CT	RF CT	Reverse bayonet derived from MIL-C-26482 series 1



MODULAR CONNECTORS

SERIES	DESCRIPTION
GM	Modular connectors system
GMM	Modules available for many different applications: Ethernet data, RF coaxial, fiber optic, power, signals up to 14 wires
GMH	Modular connectors system with handle



DATA TRANSMISSION CONNECTORS

- Bayonet Ethernet connector, vibration and shock resistant
- Materials and finishes compliant with the requirements for railway applications

INDUSTRIAL SERIES	RAILWAY SERIES	DESCRIPTION
EVBS C7	RF EVBS C7	Ruggedized CAT 7, CAT 6A data connectors
EVBS	RF EVBS	Ruggedized CAT 5, CAT 5E and CAT 6 data connectors



ATEX CONNECTORS

- Can be used in hazardous and potentially explosive environments
- Oil and gas, mining and power plant industries
- Certification: 94/9/EC ATEX directive

INDUSTRIAL SERIES	DESCRIPTION
CVBEX	Explosion-proof bayonet connector according to EN 60079-0/-1 and EN 61241-0 / -1





Radiall is a global manufacturer of leading-edge interconnect solutions. We offer an extensive range of RF coaxial connectors and cable assemblies, coaxial switches, fiber optic and microwave components, multipin connectors and more. Our global presence allows us to support our customers on a local level.

INNOVATION LEADERS

Radiall is a global leader in the design, development and manufacturing of innovative interconnect solutions. Dedicated to understanding our customers' needs since 1952, we have built an award-winning reputation in engineering ingenuity by providing a constant flow of creative system solutions to the telecommunications, aerospace, defense, instrumentation, industrial and medical markets.

SPACE QUALIFIED COMPONENTS

- Comprehensive range of space qualified coaxial components up to 50 GHz
- Large connector interface selection: SMP, SMP-LOCK, 2.4 mm, 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



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 mm²/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 links
• 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, 2.4 mm
- 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 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



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 0.03 dB on IL
- SPDT Quartz Series: Surface Mount Technology (SMT) up to 26.5 GHz
- Low PIM switch series -160 dBc: passive intermodulation



TESTPRO CABLE ASSEMBLIES

BENCH TEST CABLE ASSEMBLIES

- VNA TestPro grade 40, 50 and 67 GHz
- Lab TestPro grade 18, 26.5, 40, 50 and 67 GHz
- Low Loss TestPro
- 5,000 mating/unmating life cycles
- Flex life: over 50,000 flex cycles per MIL IEC966-1
- Phase and loss stability for long calibration intervals

- Connector series: SMA, SMA 3.5, SMA 2.9, 2.4 mm, 1.85 mm, N18, TNC18
- PC7 (ruggedized NMD version available)
- Low profile connector configurations
- TVAC options available
- Phase matching options



MULTIPIN AEROSPACE CONNECTORS

For use in both harness and equipment connections

NSX-ARINC 600

- Rack & 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 & Panel connector
- Used in major civil and military programs

- Numerous configurations available
- Specific front-release, front-removable contacts solution for receptacles

MPX - MIL-DLT83527

- Rack & 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 links

EPX™ - EN4644

- Disconnect panel, Rack & 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

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

HDQX SERIES

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

QUICKFUSIO™

- Miniature connector for sensors, EWIS and cabin applications

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-designed applications, low to high-power
- In-house antenna measurement system
- MIL-STD 810 compliant
- Available in AEP brand products



OPTICAL INTERCONNECT SOLUTIONS

HARSH ENVIRONMENT FO CONNECTIVITY

- Ruggedized FO contacts: LuxCis® ARINC 801/EN4639-101 with its expandable range of rectangular and circular connectors
- ABS1379/EN4531-101 optical contacts
- High-density MT based interconnects for harsh environments: C-MTitan™ and Q-MTitan™ ARINC 846
- Various Expanded Beam solutions: ExoBeam™ tactical cable

assemblies, EB-LuxCis®

- Ruggedized simplex and duplex LC, SC and ST connectors

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

- Simplex and multichannel assemblies designed by Radiall or built-to-print
- Synergy with active optics from D-Lightsys®
- Fiber management accessories
- Field kits, test and maintenance solutions and training



OUTDOOR INTERCONNECTIONS

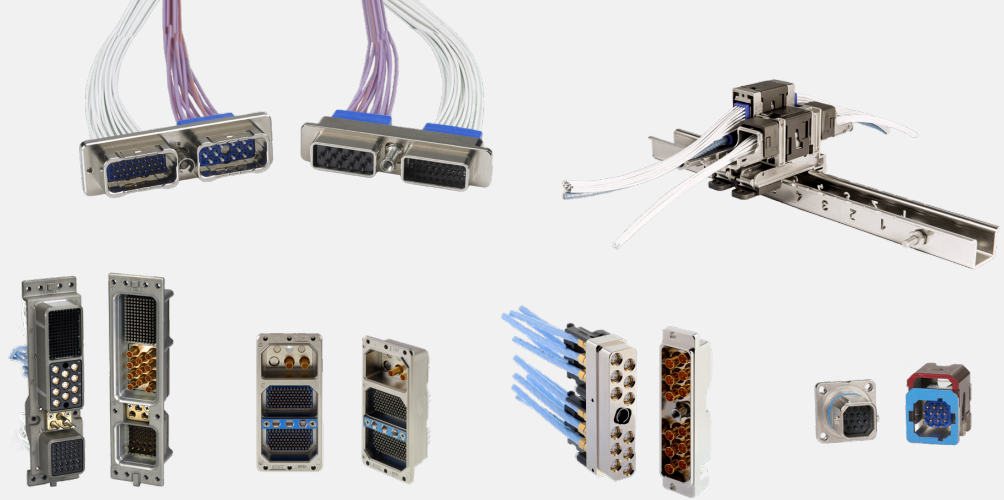
- OCTIS™: robust I/O solution for outdoor small cell and next generation RRU/RRH
 - Lightning and EMI protection
 - SFP/SFP+ transceiver integration, RJ45 for CAT 5E or CAT 6 Ethernet signal, power (AC/DC), signal, hybrid of power and signal
- R2CT®: flexible outdoor solution for FTTA and wireless telecom applications
- RXF: two and four channel outdoor optical connector

- OPUS: push-pull compact solution for fiber optic and coaxial outdoor links



Multipin Aerospace Connectors continued

- 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 Radial Touch – one-finger mating in a snap



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



RF COAXIAL CONNECTORS

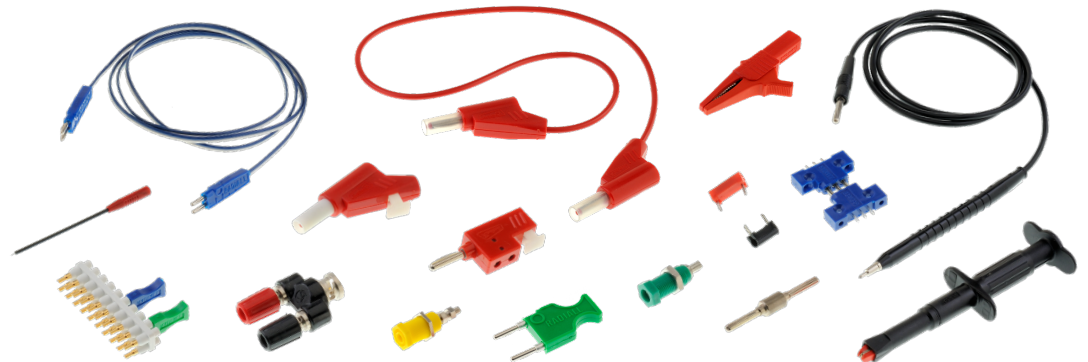
- Comprehensive range of RF connectors up to 100 GHz
- All standard series: SMA, SMP, SMPM, N, TNC, SMB, SMC, SSMC, MMCX, MCX, BNC
- Blind mate: SMP, SMPM, SMPW, BMA
- High frequency precision connectors for test: 2.4 mm, SMA 2.9, TNC18
- High-power antenna, low PIM connectors: NEX10, 4.3-10, 4.1-9.5, 7-16
- High voltage connectors: BNC HV/MHV, HN, SHV

- Locking connectors: SMP-LOCK, SMB-LOCK, TNC Self-lock, SMA 2.9 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



BANANA PLUGS

- 2 mm, 4 mm and adapters
- Excellent electrical conductivity
- Very low contact resistance
- Robust contact point pressure when connected
- Outstanding durability for high number of mating cycles



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.

AREA OFFICES LOCAL CONTACTS

EUROPE

ADDRESS	PHONE	FAX	EMAIL
FINLAND Radiall Finland PO Box 202, 90101, Oulu	+358407522412		infofi@radiall.com
FRANCE Radiall SA 25 Rue Madeleine Vionnet, 93300, Aubervilliers	+33149353535		info@radiall.com
GERMANY Radiall GmbH Carl-Zeiss-Straße 10, 63322, Rödermark	+49607491070	+496074910710	infode@radiall.com
ITALY Radiall Elettronica S.R.L. Via Zambelletti 19, 20021, Baranzate Milano	+39024885121	+390248843018	infoit@radiall.com
NETHERLANDS Radiall Nederland BV Hogebrinkerweg 15b, 3871, KM Hoevelaken	+31332534009	+31332534512	infofl@radiall.com
SWEDEN Radiall AB Sollentunavägen 63, 191 40 Sollentuna	+4684443410		infose@radiall.com
UNITED KINGDOM Radiall Ltd. Profile West, 950 Great West Rd., Brentford, Middlesex TW8 9ES	+441895425000	+441895425010	infouk@radiall.com

ASIA

CHINA Shanghai Radiall Electronics Co., Ltd. No.390, Yonghe Road, Shanghai, 200072	+862166523788	+862166521177	infozh@radiall.com
HONG KONG Radiall Electronics (Asia) Ltd. Room A, 16/F., Ford Glory Plaza, 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong	+85229593833	+85229592636	infohk@radiall.com
INDIA Radiall India Pvt. Ltd. 25D, Phase 2, Peenya Industrial Area, Bengaluru 560 058	+98028395271	+918028397228	infoin@radiall.com
JAPAN Nihon Radiall K.K. Sawada Building 8F, Shibuya-ku, Tokyo 150-0011	+0364274455	+0364274456	infojp@radiall.com

AMERICAS

USA & CANADA Radiall USA, Inc. 8950 South 52nd Street, Ste. 401 Tempe, AZ 85284	+14806829400	+14806829403	infousa@radiall.com
--	--------------	--------------	---------------------

GLOBAL PRESENCE

*Australia · Austria · Belgium · Brazil · Czech Republic · Denmark · Estonia · Greece · Hungary · Indonesia · Israel · Korea · Latvia · Lithuania
Malaysia · Norway · Philippines · Poland · Portugal · Russia · Singapore · Spain · Switzerland · Taiwan · Thailand · Vietnam · South Africa*