

ROJONE[®]
PTY. LTD.



R.F. | Microwave | Cable Assemblies | Connectors | Antennas | Components | Design

Product Profile

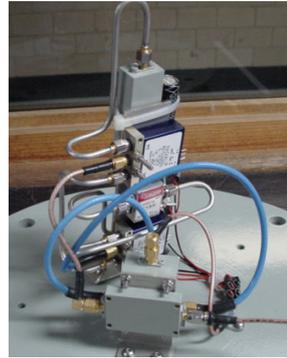
Rojone Pty Ltd



IPC Certified Technicians



CNC Semi-Rigid Bending Machine



Active BiCone Antenna



Eleonore Cato
Founder (1934-2008)

Established in 1981 & still operated by one of its two original founders, Rojone is proudly one of Australia's top RF & microwave design, manufacturing and distribution companies. Business has been conducted from our 2100 sq.m facility at Ingleburn, NSW, since 1990 and employs 60 dedicated professionals to service over 2,000 domestic & international customers.

Rojone began manufacturing Coaxial, Fibre Optic, Multi-Pin & Circular cable assemblies & harnesses. This remains one of our core activities, growing stronger in capabilities & technology investment each year. Our most recent acquisition is a CNC Semi-Rigid Coax bending machine for high precision, cost effective & even phased matched RF Coax assemblies.

What surprises customers most when visiting Rojone is that we don't just make cable assemblies, we engineer & manufacture good quality products such as Antennas, Amplifiers, Couplers, Dividers, Combiners and Filters, together with small custom subsystems. We have designed an impressive line of GPS L1 and L2 components, smart antennas, high performance ruggedised antennas, splitters that pass or block DC, amplifiers and repeater systems that have been used in the Collins Class Submarines and are installed in just about every RAAF base in Australia.

For over 30 years we have supplied local and overseas Telcos with quality cellular in-building antennas, broadband, low IM (PIM) splitters, couplers, loads, attenuators and network combiners to solve complex network issues with smart solutions.

Our Partners



RF Coaxial Connectors

BOARD TO BOARD

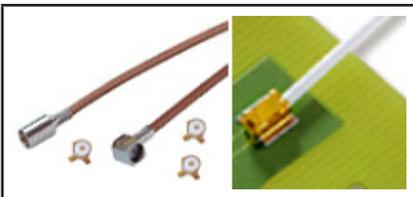


IMP to 6 GHz, Micro Coax 50 Ohm low profile 2, 2.6 and 3mm, board to board connectors.

SMP to 40 GHz, SMP-COM to 12.4 GHz 50 Ohm Blind Mate, excellent Shock & Vibration performance.

BMR-Spring 8 GHz / 50 Ohm / Snap-on. Robust board-to-board connector solution. Can handle board-to-board distance tolerance of at least 0.078.

BOARD TO CABLE



UMP, MMS, MMT, MCX, SMB, MC-Card, QMA, N, SMA, QN & TNC series, 50 Ohm coax, frequencies 3, 6, 8 & 11 GHz, some SMT & 360° cubic rotation.

RF SWITCHING CONNECTORS



Moebius, MC-Card, QMA, N, SMA, QN & TNC.

6 GHz / 50 Ohm. A "two in one" solution! High power versions available in N, SMA and TNC series. Microminiature switches available in MC-Card, R-MCX, Moebius, SMT and edge mount configurations, ideal for antenna & RF power amps.

TELECOMS COAX CONNECTORS



N, DIN 7/16, 50 Ohm, to 11 GHz Low PIM & Composite designs.

QMA, WQMA to 6 GHz, 50 Ohm, some optimised to 18 GHz, Quick Lock, High density & water proof options.

QN to 11 GHz, 50 Ohm, high screening RF leakage as low as -90 dB to 3 GHz PIM -155 dBc.

NON-MAGNETIC MEDICAL CONNECTORS



Radiall's non-magnetic medical connectors are used on MRI equipment providing electromagnetic immunity to ensure readings are not affected by outside magnetic distortion. The range includes MMCX, SMP, SMB and cable terminals.

RF Coaxial Connectors

MICRO MINIATURE CONNECTORS



MCX, SMB, SMB-LOCK & SMC to 4 GHz, 50-75 Ohm connectors.

MINIATURE STANDARD CONNECTORS



SMA 18 GHz / 50 Ohm / Screw-on. Stainless steel SMA is designed for high frequency airborne and military applications.

Some connectors are specified up to 27 GHz. Brass SMA-COM is for telecom and industrial applications.

SMA 2.9 (K) 40 GHz / 50 Ohm / Screw-on. Intermateable with SMA and SMA 3.5. Also available SMA 2.9 hermetically sealed.

Suitable for microwave components.

STANDARD BAYONET COUPLING CONNECTORS



BNC, BNC 75 HDTV, BNC-TRX 50 & 75 Ohm, to max 4 GHz.

BNCW Series, Waterproof IP65 / IP67 50-75 Ohm.

BNC 75 HDTV is a true 75 Ohm BNC, handles a data rate up to 3 Gbps or higher. Conforms to SMPTE 292M and 424M standards.

STANDARD SCREW COUPLING CONNECTORS



TNC 11 GHz, 50 or 75 Ohm & 18 GHz / 50 Ohms / Screw-on. Precision N connectors dedicated to high frequency applications and test & measurements. Features a Hex nut.

N type 50 & 75 Ohm, DIN 7/16 50 Ohm to 11 GHz.

Composite design for weight, PIM.

RF Coaxial Connectors

COAXIAL DIN SERIES CONNECTORS



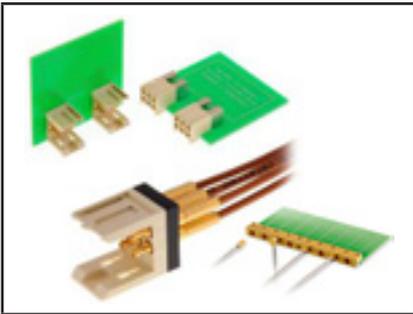
DIN 1.0/2.3, DIN 1.6/5.6 and Type 43 Series to 10 GHz, 50 Ohm complies with CECC and IEC Standards, DIN 47297.

HIGH VOLTAGE COAXIAL CONNECTORS



HN, HN2, BR2, BD2, BNC HT, SHV, MQ HT & THT20 series connectors, rated to 2 GHz.

HIGH DENSITY COAX 2MM SYSTEM



Coaxipack 2, DC to 3 GHz, 50 & 75 Ohm 2mm metric system. IEC61076-4-104.
Custom made multiport coax modules ideal for rack & panel, module-to-module or module-to-cable to increase density.

REVERSE POLARITY (WLAN) CONNECTORS



RP-MCX, RP-SMA, RP-BNC, RP-TNC, DT-F, RP-MCX, 50 & 75 Ohm configuration, including reversed thread types.

FAKRA CONNECTORS



4 GHz / 50 Ohms / Snap-lock. The new generation automotive RF connector, European standard.

RF Coaxial Connectors

TWO WAY / CB CONNECTORS



Rojone stocks a complete range of UHF PL259, SO239 and PAL connectors & adaptors for the Radio communications two way industry.

RF COAX IN-SERIES ADAPTORS



Full range of in-series adaptors, SMA-SMA, N-N, 7/16-7/16, TNC-TNC, BNC-BNC, etc. including reverse polarity and reverse threaded styles, in a range of configurations inline, bulkhead, hermetically sealed, right angle, etc.

RF COAX BETWEEN-SERIES ADAPTORS



Huge range of between series adaptors, SMA-N, SMA-BNC, N-7/16, TNC-SMA ... the list is endless. Again the range includes reverse polarity and threaded options, inline, right angle, bulkhead, panel mount, and hermetically sealed.

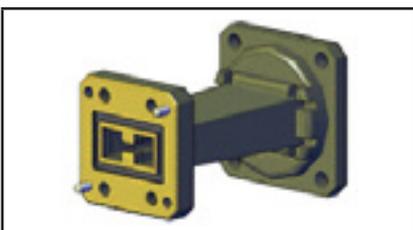
Call us today with your requirements.

WAVEGUIDE-TO-COAX ADAPTORS



Standard and specialised Waveguide interfaces to SMA, N, TNC or APC coaxial adaptors.

WAVEGUIDE-TO-WAVEGUIDE ADAPTORS/TRANSITIONS

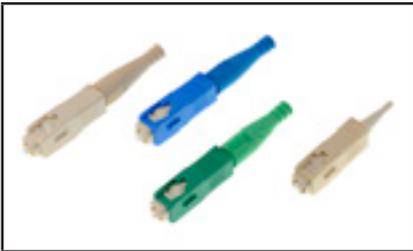


Full range of Waveguide to Waveguide adaptors/transitions, both ridged and flexible solutions.

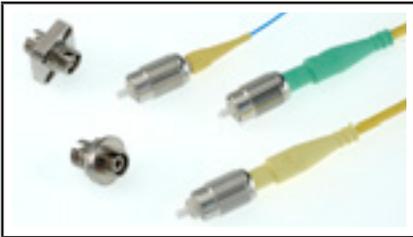
FIBRE OPTIC SINGLE & MULTIMODE CONNECTORS



LC small form factor connector is based on 1.25mm ceramic ferrule technology with a plastic body and a latching system. LC is used in all high density fibre optic applications. Available in multimode and singlemode PC and APC configurations.



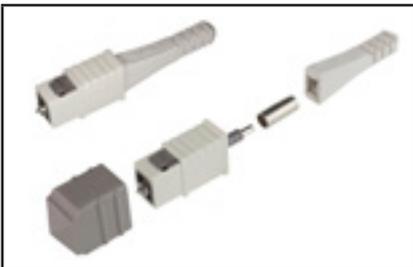
SC connector is based on 2.5mm ceramic ferrule technology with a plastic body and push-pull type. SC is used in many applications, mostly in datacom and Telco/CATV networks. Available in multimode and singlemode PC and APC configurations.



FC connector is based on 2.5mm ceramic ferrule technology with a threaded metallic body screw-on type. FC is mainly used for Telecom-Datacom applications and for measurement equipment. Available in multimode and singlemode PC and APC configurations.



ST connector is based on 2.5mm ceramic ferrule technology with a metallic body and bayonet locking system. Available for multimode, singlemode and large core fibres. Widely used in instrumentation, medical and datacom networks applications.

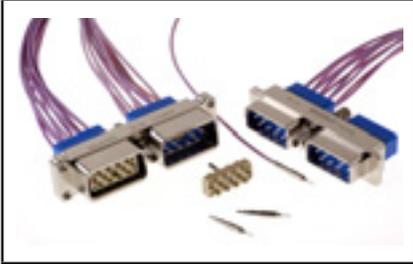


EC is a Radiall proprietary connector designed for Telecom & CATV networks, with a plastic body and push-pull type. Very low return loss makes EC also highly recommended for sensor applications. Available in multimode and singlemode PC and APC configurations.



FMA is one of the first generations of fibre optic connectors. Used in many applications, such as industrial and medical, metal body, IE61754-22 & MIL-C-83522 compliant, available for a large range of multimode fibres.

ARINC 801 FIBRE OPTIC INTERCONNECTS



Luxcis is an aerospace & harsh environment single & multimode solution with high optical performance, for RF over fibre, sensors, in-flight entertainment, avionics data transmission and high speed data networking including wavelength multiplexing.

FIBRE OPTIC CONTACT INSERTS



MIL-PRF-29504 Termini were designed to fit standard MIL-DTL-38999 circular & ARINC 404 & 600, HE5010 EPX rectangular multipin 12 & 16 size electrical cavities.

ENVIRONMENTAL FIBRE OPTIC CONNECTOR PROTECTION



R2CT® Radiall is a flexible outdoor IP65 or IP67 for duplex LC terminated fibre optic. Ideal for telecoms operators & RJ45 connectors 5-7mm diam. cables.

OSIS Series® Radiall is fundamentally the same as R2CT, but with a quick lock push pull connection for high density stacking.

EXPANDED BEAM FIELD DEPLOYABLE FIBRE FOR TACTICAL COMMS



Pro BEAM® Radiall is a unique interconnect solution that is much less sensitive to dust, pollution & alignment sensitivity due to environmental conditions.

Ideal for field deployable army & navy communications systems, oil research, transportation and any harsh environment application requiring durability, with multiple connection performance reliability.

ODC® OUTDOOR OPTICAL



The ODC® connector was designed for FTTA (Fiber-To-The-Antenna) outdoor links in Telecom wireless applications. It is a robust waterproof connector.

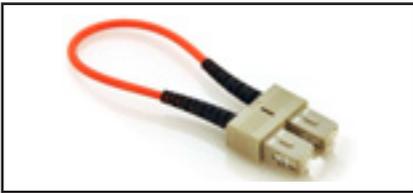
Cable assemblies available in 2 or 4 channels, multimode and singlemode. ODC® is a registered trademark of HUBER+SUHNER.

FIBRE OPTIC ATTENUATORS



From stock we offer a range of FC, ST, SC, ST Bulkhead and LC attenuators, 5, 10, 15, 20, 25 and 30dB attenuation values.

FIBRE OPTIC LOOPBACKS



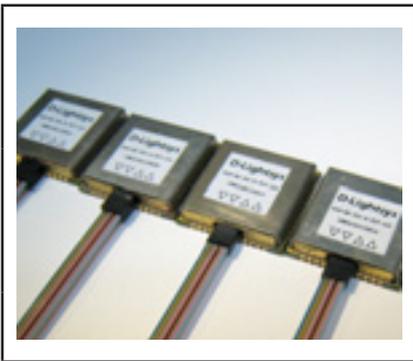
LC to LC, SC to SC and MTRJ loopbacks designed to provide a return patch for a fibre optic signal such as in fibre optic test applications or network restoration.

FIBRE OPTIC ADAPTORS



We offer a range of adapters ST, FC, SC & LC panel mount & bulkheads, between series adapters, SC to FC, ST to SC, FC APC Simplex to FC APC Simplex bulkhead, SC APC Simplex or Duplex to SC APC Simplex or Duplex bulkheads or LC Simplex to LC Simplex bulkhead, single mode.

OPTICAL TRANSMITTER / RECEIVER



S-Light and D-Light high quality optical interconnect modules, extended temp range, -40° to +100°C, S-Light +55° to +125°C, performance controlled & monitored in RT.

Link budget >15 dB for D-Light & >18 dB for S-Light, large bandwidth, from DC to 10 Gbps in 4 ranges, low power < 250 mW @ 2.5 Gbps/90°C, 125mW typ/ Channel D-light.

Very small packaging, 16x16x3mm, SMT QFN, LCC, RJK & pin-thru SFF compatible as well as pluggable modules. ARINC 804/D ±160 Qualified.

FIBRE ASSEMBLIES & TOOLING



Comprehensive range of fibre optic assemblies, basic configurations to complex patch cords & harnesses for harsh environments, using multipin circular or rectangular connectors in addition to sophisticated tooling kits for customer assembly.

FLEXIBLE & SEMI-RIGID COAX CABLES



Comprehensive range of RG & proprietary cables including:

- Military spec RG and M17 Full Range.
- LMR[®] Series Times Microwave, cost effective, low-loss RG alternative.
- LLSB[®] M17 qualified, low smoke, zero halogen cables.
- Shipboard cables by Times Microwave.
- Triaxial & Quad cables from Trompeter USA.
- Corrugated RFS or Andrews/Commscope coax cables.
- Foam PE dielectric cables.

Radiating / Leaky Feeder Coax Cable.

Radiating Coax / Leaky Feeder 50 Ohm cables are used to provide broadband RF coverage to 2.5 GHz in buildings, mines and other enclosed areas. Times T-RAD range has watertight designs for direct burial applications.

FLEXIBLE RG / M17 / LMR[®] COAX ASSEMBLIES DC-18 GHz



Flexible RG / M17 Coax assemblies DC-18 GHz. Using MIL-C-17 standard, RG type & LMR[®] Times Microwave cables. Our cables are cost effective and are optimised electrically for your band of interest. These cables can be phase matched, versions include low loss, low IM, non-magnetic as well as halogen free & flame retardant assembly manufacture.

N & 7/16 JUMPER CABLES, LOW INTERMODULATION



N & 7/16 Jumper cables, low intermodulation performance using ultra flexible LMR[®] Times Microwave & corrugated cable assemblies terminated with N or 7/16 connectors. Dedicated to wireless infrastructure installation, antenna drop cables and base stations. Low intermodulation testing & reports available.

CONFORMAL / HAND FORMABLE ASSEMBLIES DC-20 GHz



Using tin-dipped braid technology, low loss and high shielding efficiency, with some degree of flexibility to allow easy routing during installation (without spring-back effect) and multiple repositioning on site.

Cables & Assemblies

SEMI RIGID ASSEMBLIES DC-40 GHz



Semi Rigid, solid tube cables feature optimal shielding effectiveness, at high frequencies, with low insertion loss. Cables diameters range from 0.047" to 0.25", typically 50, 75 & 95 Ohm impedance to select from.

Rojone can build your assemblies to print, using step files generated from packages such as SolidWorks, imported directly into our CNC automated bender for cost effective, highly reliable assemblies.

HIGH PERFORMANCE TEST CABLES DC-40 GHz



High performance Test Cables DC-40 GHz for applications requiring excellent electrical performance, high mechanical endurance and excellent resistance to wear and corrosion.

SilverLine™ Times & TestPro™ Radial test cables offer stability & repeatability. Made with high frequency, ultra low loss cables. Radial uses low density PTFE wrapping technologies, offering a range of high power, phase stable, armored & phase matched assemblies suitable for a range of applications: test bench, outdoor use, navy, airframe, ground radars.

CORRUGATED ASSEMBLIES DC-20 GHz



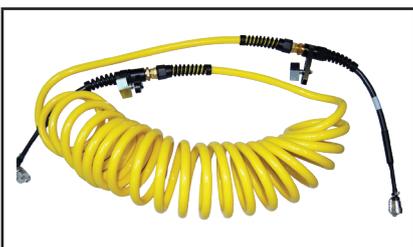
Low loss, low intermodulation, outdoor wireless infrastructure use for long length transmission lines.

MULTI-PIN AND COMPOSITE WIRE & CABLE HARNESSSES



Multi-pin Circular, rectangular military connectors and fibre optic and composite Wire & Cable Harnesses. We design & manufacture custom wire harness products requiring 2-26 gauge wire, single or multi-conductor, standard or hi-temp, fibre composite, for almost any application. Our services include engineering, design, support, prototyping, wire and cable marking, strip and crimp, splicing, over moulding and other wire harness manufacturing services.

CUSTOM DESIGNED ASSEMBLIES



Rojone offers a full Design & Fabrication service, robust re-engineering of existing product development of new assemblies for mining, survey machine control as well as phasing harnesses.

Circular Multipin Military Connectors



MIL-DTL-38999 SERIES I, II, III & MICRO38999



Bayonet or threaded coupling, crimp rear release contacts, available in aluminium, composite or Stainless Steel / K firewall.

Series III available for Quadrax, ELIO fibre, power & some PCB configurations.

Miniature sizes 3, 5 & 7 with 50% shorter length and 33% smaller diameter with the same number of pins.

MIL-DTL-5015 SERIES I & III



MS310 threaded coupling with solder or crimp contacts.

MS345 threaded coupling, with crimp rear release contacts.

MIL-C-26482 SERIES I & II



MS311 Series 1 Solder screw coupling.

MS312 Series 1 Crimp front release contacts bayonet coupling, grounding fingers options.

MS347 Series 1 Crimp rear release contact, bayonet coupling, aluminium or stainless steel bodies.

BACK SHELLS & STRAIN RELIEFS



MIL-DTL-85049 back shells, cable clamps, dust caps, dummy receptacles and strain reliefs, shrink boots, EMI / RFI shielded shells, custom configured back shells & accessories. Composite, non-corrosive.

CONTACTS



Full range of signal, power, coax and fibre optic terminus contacts are available for Military circular and rectangular connectors, including MIL-M39029 series.

Circular Multipin Connectors

WATERPROOF CIRCULAR MULTIPIN CONNECTORS



RO4 & R28 Series, waterproof to 20m, 2 to 12 contact config, R28 miniature high density version. Size 12-20mm diameter, 40mm maximum length.

1108 Series Waterproof to 30m, 2 to 37 contact config, hermetically sealed receptacle available.

PUSH-PULL CIRCULAR MULTIPIN CONNECTORS



PRC03 & PRC04 push-pull 2 to 37 contact config, cost effective lightweight connectors.

PRC05 & PRC07 Miniature push-pull connectors, 2-12 contacts.

MINIATURE SCREW-ON MULTIPIN CONNECTORS



RO3 series miniature 2, 3, 5, 6, 8 & 12 pin screw-on multipin connectors, 12-20mm diameter, 39mm maximum length.

RO3 & R27 series 2-12 contact configuration.

R27 series 8 or 12 contact, screw-on multipin connector, 12-15.5mm diameter, 34mm maximum length.

AUDIO & VIDEO



XLR Cable & chassis connectors.
SpeakON lockable loudspeaker connector.
EtherCON RJ45 data connector.
S-VHS D Series.
Phono (RCA).
BNC 75 Ohm cable & chassis connectors from Neutrik.

LEMO STYLE CONNECTORS



LEMO's high quality push-pull connectors are found in a variety of challenging application environments including medical, industrial control, test and measurement, audio-video, and telecommunications.

Rectangular Multipin Connectors

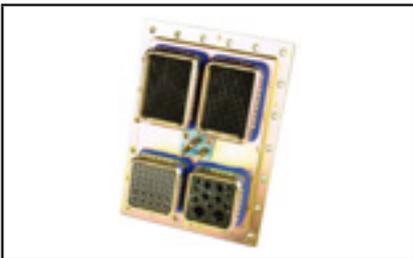
DSX – MIL-C-81659 ARINC 404 & ARINC 600 SERIES



ARINC 404 series is used in commercial & military avionics equipment, and includes a huge number of inserts, keys and contact configurations.

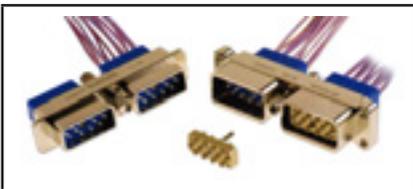
ARINC 600 series is mainly used in avionics bays in commercial aircraft, for LRU's and other high performance aeronautical equipment.

MPX – MIL-C-83527 SERIES



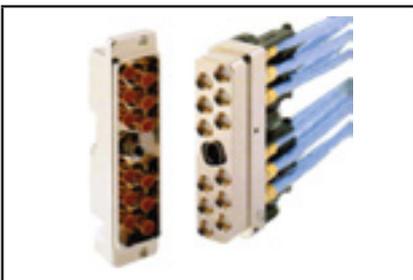
Radiall's MPX series is a robust rectangular connector designed to meet all the requirements of the MIL-DTL-83527B specifications and conform to EN 3682 European standard. This connector is particularly well suited for military and commercial aircraft where harsh environments are an issue.

EPX™ – EN4644 SERIES



The EPX™ series offers a wide range of solutions based on two insert sizes with a large variety of shells and contacts. The EPX™ series offers a higher density of contacts than 38999 connectors and is completely modular & expandable.

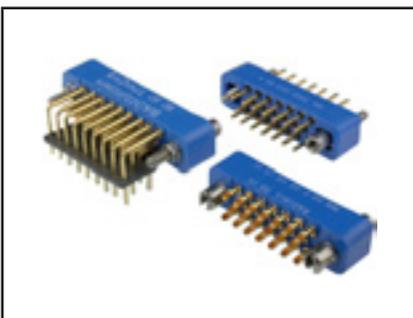
HDQX SERIES



HDQX series is designed for Ethernet & RF signals. It combines compact size with the ruggedness needed for high reliability & signal integrity in harsh aerospace and military environments. Available with 12 size 8 cavities.

Using ARINC 600 Quadrax contacts, size 8 BMA RF Coax, Triax & Twinax contacts, light weight, stackable, contacts ground to the shell for extremely high electrical continuity.

MM & MB MIL-C-28748 SERIES



MM & MB miniature rectangular connectors are rugged connectors offering high performance for high contact density. Light weight and small size.

Applications include civil and military aircraft, in-flight equipment, instrumentation and missiles.

MM Series offers contact arrangement from 7 to 50 contacts #22 Size.

MB Series high contact density range offers arrangement from 2 to 75 contacts #20 Size.

Rectangular Multipin Connectors

D SUBMINIATURE – MILITARY MIL-C-24308 & INDUSTRIAL



Military D Sub connectors conforming to MIL-C-24308, removable machined crimp contacts 20/24 or 26/28 AWG.

5 shell styles, 9, 15, 25, 37 & 50 Way.

High Density D Sub Mil connectors, 9 Way size 15 contacts, 15 Way 26, 25 Way 44, 37 Way 62, 50 Way 78 and 104 contact.

Configuration using M24308 crimp contacts.

Mixed Power/Signal/Coax D Sub Mil connectors, available in 9, 15, 25, 37 & 50 Way shell configurations with a variety of removable components.

10, 15, 20 & 40A power, straight or right angle coax or high voltage. Contact also sold separately.

Industrial range, metal shell, tin plated, precision turned contacts, 9, 15, 25, 37 & 50 Way connectors.

Solder bucket, straight & angle spill for PCB mounting, crimp versions with removable 20/24AWG contacts.

Alternatively insulation displacement connection for flat multi strand 26/28 or single strand 28/30 AWG wires.

D Sub Accessories – full range of backshells straight, 45 and 90 degree plastic, metalised or metal, screw and slide locks, plus the full range of tooling.

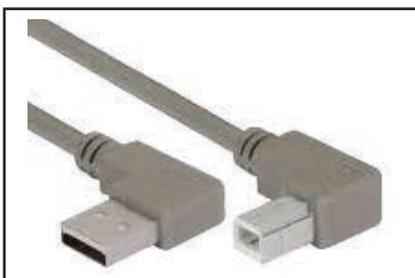
MODULAR TELECOM RJ CONNECTORS FOR CAT 5E, CAT 6 & CAT 7



Full range of module plugs, jacks & assemblies, UTP, shielded, double shielded. Cables ranging from the standard Low Cost Cat cables, thru to Low Smoke Zero Halogen, a colour range is also available including salmon pink for military Applications.

Affordable ruggedised, waterproof range of RJ45 products are also available for outdoor IP applications.

USB 2.0 A, B & MINI, USB 3.0 A, B & MICRO



Comprehensive range of USB 2.0 & 3.0 straight and right angle plugs, over moulded assemblies, curly cord assemblies, shielded panel mount couplers, Weather proof USB connectors.

For outdoor applications as well as dust caps and a range of in series and inter-series adaptors.

TWO-WAY & RUGGEDISED MINING & SURVEY ANTENNAS



Full range of 27 MHz CB, VHF & UHF mobile, hand held ground-independent and base station antennas.

300-500 MHz range of ground-independent 6 dB whips, heavy duty mobile antenna & elevated feeds, in addition to Next G / Cellular range of supporting antennas.

CELLULAR – TELECOMS / IN-BUILDING (IBC) LTE ANTENNAS



Range of narrow and broad band antennas from 700 to 700 MHz Omni and Directional in-building antennas, 4G LTE Low PIM Designs.

Thru to outdoor rated, high gain log periodic, Collinear Antennas & Yagi Antenna.

WIRELESS 900 MHZ, 1.9, 2.4, 3.5, 4.9-5.8 GHZ & MIMO ANTENNAS



This is a comprehensive antenna range of antennas for just about any indoor or outdoor applications.

We offer Omni Directional Collinear, Hand held / Portable antennas, Omni-directional sectorial arrays, Yagi's, Grid, Sector / Directional Panel with mechanical down-tilt, Patch, Log Periodic, Parabolic Dishes, MIMO multi & broadband, dual polarity and spatial diversity.

UV Stable construction, most antennas come complete with mounting hardware.

GPS ANTENNAS L1 / L2 / GLONASS



Active & passive antennas, land & airborne solutions, combination GPS/Glonass & GSM antennas, high performance timing antennas, environmental versions, GPS choke rings for survey and timing.

Smart L1 antennas, incorporating high sensitivity L1 receivers.

RAIL & HEAVY TRANSPORT ANTENNAS



Sinclair heavy duty antennas, designed for rail and transport including the world renowned Excaliber™ Series.

These antennas cover the major frequency band allocations from lowband VHF up to 2.4 GHz including ATCS, GSM, GSM-R, Tetra, Public Safety, Trunked and Conventional Mobile Radio, Cellular, PCS and IDEN.

GPS REPEATERS L1 & L1 / L2 / GLONASS / OMNISTAR



Commercial repeaters L1 for lab testing, GPS demonstration or low cost timing, time stamping for ticketing applications.

High performance L1 / L2 installed in military aircraft hangars & test bays for jet & aircraft maintenance or military rapid deployment activities in harsh weather conditions, including portable systems.

Armoured vehicle repeats, both military and civilian, to ensure GPS coverage inside armoured or shielded vehicles.

EZITRAK® SECURITY & TRACKING SYSTEM



EziTrak® Security & Tracking system offers real-time vehicle/asset location & tracking together with reporting for efficient & effective asset management.

Cost effective SMS event alerts for private or small business security to online real time web access, black box and reporting functionality.

MASTS



The Hilomast range of pneumatic telescopic masts are approved to international Mil Std 810E environmental standard for operation and storage, including low pressure (high altitude) operation.

SMC offer a huge range of masts, operated manually with a foot pump or small compressor.

ATTENUATORS DC TO 40 GHZ



Huge range of fixed 2.9mm, SMA, BNC, F, N, TNC, 7/16, Waveguide, frequencies range from DC to 40 GHz, in various power combinations to 300 Watts.

Programmable, step rotary, step push button, step toggle, variable attenuators, precision attenuators, bench & inline attenuators.

TERMINATIONS DC TO 40 GHZ



1 to 300 Watts, N, TNC, BNC, QN, QMA, SMA all the standard fixed termination connectors series including Waveguide terminations and our unique range of Low PIM Cable loads, better than 150 dBC @ 2 & 43 dBm cost effective & ideal for cellular in-building systems.

Radiall has just introduced its harsh environment SMA DC-26GHz and SMP (DC-18GHz) offering IP67 rating and 48 Hour salt fog testing, ideal for Military, Medical, Telecom & Aerospace applications.

LOW (PIM) INTERMODULATION <150dBc CABLE ATTENUATORS & LOADS



Rojone has designed a range of economical, compact Low PIM < 150dBc, DC-3GHz Broadband N or DIN 7/16, 50 Ohm, Cable Loads & Attenuators.

Select 25, 30, 50 or 100 Watt loads, alternatively 50 or 100 Watt, 3, 6, 10, 20 or 30dB Attenuators.

COUPLERS, HYBRIDS, X-BAND / DIPLEXER



Cellular/telecommunications 700-2700 MHz, 7/16, N type, QMA, QN, Low PIM version, 3, 4.8, 6, 7, 8, 9, 10, 12, 13, 18 & 20 dB Directional couplers.

UHF Couplers, 200 to 520 MHz, range of coupling values & connector types.

Multi octave couplers, 2-4, 4-6, 8-12, etc through to 40 GHz and broadband couplers .5 to 18 GHz, SMA.

DIVIDERS / SPLITTERS / HYBRIDS

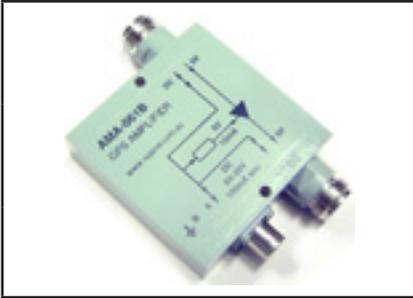


Cellular/telecommunications 700-2700 MHz, 7/16, N type, QMA, QN, Low PIM version, 2, 3, 4 & 8 Way configurations.

GPS splitters, DC blocked on some or all ports.

Huge range of octave band 2, 3, 4, 6, 8, 12 Way splitters ranging in frequencies from DC to 40 GHz SMA, N, TNC, BNC etc connector styles.

GPS AMPLIFIERS & DIVIDERS



Developed exclusively for GPS applications, Rojone's Amplifiers and DC Feed are high performance devices designed to boost GPS signals for long range transmission or to overcome noisy environments. They can also be used as DC Feeds for GPS antennas. The DC through can be regulated or bypassed to the antenna for 5V systems.

MULTI-NETWORK COMBINERS



This fully integrated Multi-Network Combiner Module was designed specifically for in-building applications. This combiner accepts up to 4 networks into a distributed antenna system and offers 4 identical RF output ports.

Particularly within in-building applications where power budget is a limiting factor, this combiner design directs all RF energy into the Distributed Antenna System instead of dissipating power through multiple stage loads. This solution allows multiple sectors to be combined into one single sector for better trunking efficiency and frequency planning.

The module's integrated design is configurable from 1 to 4 inputs and from 1 to 4 outputs. Unused input ports are broadband terminated using low power loads; unused output ports must also be broadband terminated using high power 100 Watt loads to ensure optimum performance.

FILTERS



Link 16 Cavity filters, 960-1215 MHz, Hi-Q band pass cavities, low band aviation & VHF filters, custom designed or build to print filters.

Many of these products are no longer manufactured by their original designers. Rojone has been able to help its customers by Reverse Engineering these older style products, on occasions even able to improve on the performance providing added life to military and commercial systems still in service.

COAXIAL LIGHTNING PROTECTION DEVICES



Protect your valuable RF equipment against unnecessary damage from induced electromagnetic pulses.

DC Blocked or DC pass multi-strike designs, broadband to 6 GHz, Replaceable Gas Tubes, various power ratings.

Indoor & outdoor IP67 versions with brackets or bulkhead mounting.

Excellent IL/RL performance.

Many connector types available – N, 7/16, BNC, TNC and SMA, some low Intermod designs.

Suitable for GSM, LTE, GPS, SCADA, LMR®, Utilities, Public Safety, Oil, Gas, and Mining.

Smart Panel™ Times, 12 or 24 N or 7/16 single point grounding eliminating grounding kits.

PoE - POWER OVER ETHERNET DEVICES



L-Com Global PoE DC injector with surge protection built-in. This unit features ultra fast gas tubes and high current diodes for optimum performance. It is a must-have for all PoE devices for ultimate protection. The unit has been designed to be used with a huge variety of radios using up to 60vDC.

RADIO MODEMS



Satel is a leading world supplier of Radio Modems for wireless data communications & alarm transfer.

Range includes 1, 5, 10 and 25 Watt radios, water proofing IP67, repeater unit. This product is used extensively for mining & surveying and carries all the necessary Australian & New Zealand approvals to the latest standards.

SWITCHES / RELAYS DC TO 40 GHZ



Radiall's RAMSES Range has a 10 million cycle life with its unique construction. A full range of mechanical relays are available. SPDT, DPDT and SP&T switches, failsafe, latching, transfers DC-1, DC-3, DC- 12.4, DC-18, DC-26.5 & DC-40 GHz in a range of connector styles including their SMT Power Micro-SPDT with 10 GHz capability Slimline Series.

Recently released is their new line of Low PIM (Passive Intermodulation) coaxial switches SPDT, DPDT, SP4T, and SP6T available with either SMA (up to 18 GHz) or N (up to 12.4 GHz) type connectors ideally suitable for the rapid growth of 4G/LTE networks has led to the need for better performing Low PIM devices.

WAVEGUIDE



Full range of Waveguide rigid & flexible, straights, twists. Components, pressure windows, attenuators, loads, tapers.

Waveguide to Coax adaptors, transitions, switches, build to print custom configurations suitable for most Military and civilian communications needs.

Support Products

TOOLING FOR MULTIPIN CONNECTORS



Comprehensive selection of MIL-C-22520 series tools, crimp tools hand and pneumatic, dies, positioners, turrets, insertion, extraction metal and plastic for military circular, rectangular, D Sub miniature connectors.

TOOLING FOR RF COAXIAL CONNECTORS



Full range of commercial and military spec MIL-C-22520 series quality crimp tools and dies for RF Coaxial connectors, Times LMR® crimp tools and accessories.

TORQUE WRENCHES, LMR® TERMINATION TOOLS & CALIBRATION SETS



SMA/2.92mm/3.5mm, SMC, 7mm, TNC, SSMA, N/SC & N Torque wrenches. Times LMR® Stripping tools, trimmers, deburring tools & cutters.

VNA Calibration kits, N, 3.5mm, VNA test cables, 3 Port field calibration tools 3.5mm, N & DIN 7/16.

CAT 5, CAT 6 & USB DATA SURGE PROTECTION



Range of indoor and outdoor devices, single or 4 up to 8 port CAT5 surge protection.

19" Rack mounted, 4, 12 & 12 port 10/100/1000 Cat5 & CAT6 Lightning Protection RJ45 Jacks.

TIMES-PROTECT® RF LIGHTNING PROTECTION TESTER



The LP-SPT™ provides the user with the capability to test virtually any lightning protection device or component to ensure its proper functioning and capability to protect critical and expensive RF equipment.

This tester has two terminals, N male and N female, to support testing of the most popular in line RF surge protection devices and can easily test RF surge protectors with any other interfaces by using commonly available RF adaptors

SELF-AMALGAMATING TAPE



Scapa Self-Amalgamating Tapes are rubber based, extremely versatile materials that are non-tacky, making them very easy to use and apply. Moisture protection and electrical insulation for various applications in addition to acting as protection against corrosion on joints and welds.

Scotch 23 Rubber Self Bonding Electrical Tape:
Highly conformable, self-fusing EPR. Non vulcanising. Insulation for low voltage applications & splices up to 68kV.

CABLE TIES & FIXINGS



Rojone carries a wide variety of fixings and cable tie types, including:

Inside serrated, outside serrated, releasable, without serration, direct fixation, stainless steel, fixing ties, cable tie mounts, fixing elements, clips and clamps, snappers and Klam clips.

All cable ties and fixings are available with different remarks, materials, lengths and colours.

STAINLESS STEEL BRAIDING (ARMOUR)



AISI 304 Stainless Steel wire thatched braid, from 7 mm to 300 mm circular bore, various wire thicknesses, lengths available up to 100 metres.

HEAT SHRINKABLE TUBING



Insulation tubing and sleeving, made from Chloroprene (CR), Polyvinylchloride (PVC), Polyolefin (PO), Polytetrafluoroethylene (PTFE) or Silicone (SI) as well as Hellerine lubricating oil for rubber and plastic sleeves.

HellermannTyton Heat Shrinkable Tubing for electrical insulation and mechanical protection.

Thin Wall Tubing, Medium and Thick Wall tubing, without (single wall) or with adhesive liner (dual wall).

Heat Shrink Tubing made of Polyolefin (POX), Elastomer (PES), Fluoropolymer (FPM), Polyvinylidene fluoride (PVDF) and polytetrafluoroethylene (PTFE).

Available in various shrink ratios from 2:1 up to 6:1 for different applications.

Custom Design Services

Rojone has a highly productive RF Engineering team that specialises in custom design and manufacture. Each team member has 10 to 30 years hands on RF design experience covering:

- RF PAs
- High performance cavity filters
- Cavity combiners
- RF connectors, adaptors
- RF system combiners
- RF directional couplers/dividers
- RF LNAs
- RF systems
- Wideband linear AMPs
- RF antennas
- High Power professional base stations up to 500W output RF power (VHF, UHF and Microwave band)
- RF design consulting



Over the years, our design team has helped many customers develop special products with satisfied results. During each project, we worked closely with our customers from concept design to the final test.

Examples of Custom Designed Products



High Performance Tower top RF system (LNA, filter, lightning protection) for defense.



Custom designed cross-polarised antenna for defense.



Custom designed EIA 8-13-S adaptor for 10KW UHF TV transmitter.
0-1 GHz/VSWR <1.05/30 Kw peak (Weight 3kg).



Custom designed RF system for in-building mobile phone applications. Multi-channel combiner/distributor for GSM-900, GSM-1800, 3G and LTE. This product has been widely used for casinos around the world.



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