



AA-MCS is a European Leader in Design, Development and Manufacture of Active and Passive, RF & Microwave Components and Sub-Systems from DC to 50GHz.

- SSPAs to 500W CW and 10GHz.
- Combiners and Dividers.
- Ultra Broadband Couplers.
- Filters.
- PIN Diode 'Hot Switches'.
- Non-ITAR Product & Available from Stock.



Frequency Standards designed for Commercial, Hi-Rel and Military Applications.

- Rubidium Frequency Standard Oscillators.
- Synchronization Products combined with GPS Receivers.
- GPS Disciplined Frequency Standards.
- Connectorised or Surface Mount Modules.



Miniature and Sub-Miniature RF Connectors for Defence, Avionics and Commercial Communications Applications to 40GHz.



Established 1930, a Leader in Design and Manufacture of Low Phase Noise Frequency Generation Products.

- Crystal Products.
- Integrated Assemblies.
- Low Cost & Precision Oscillators (XO, OCXO, TCXO, VCXO and TCVCXO).
- Military and Space Heritage.



Copper Mountain Technologies (CMT) produce lab-grade Vector Network Analyzers that provide high accuracy, wide dynamic range, a familiar UI and a broad variety of standard features.

- High Performance Vector Network Analysers - 9 & 20GHz
- Compact VNAs up to 7GHz
- Full Size Two and Four Port VNAs up to 8GHz
- Vector Reflectometers
- Calibration & Accessories
- Cost Effective Solutions



**Cobham Antenna Systems, incorporating Continental Microwave and Kevin.**

**Continental Microwave:**

- Spiral and Flat Plate Antennas.
- Sub-Systems.
- Waveguide Components.

Applicable for Hi-Rel, Defence and Space Applications.

**Kevin:**

- Rotary Joints.
- Rotating Systems.
- Slip Ring Assemblies to 40GHz.

Applicable for Defence, Air Traffic Control, Satcom, Space and Commercial Applications.



Communication Power Corporation (CPC) provides World Class, Pulsed and CW, High Power Amplifier Technology for Medical, Scientific, Industrial and Defence Applications including NMR, MRI, MRS, NQR and EPR.



**Microwave Solutions, incorporating Merrimac and Signal Technology.**

Crane Aerospace & Electronics Microwave Solutions designs and manufactures Critical Systems and Microwave Components.

- Applicable for the Space, Defence and Aerospace Markets.

**Merrimac.**

- Integrated Modules to 60GHz.
- Multi-Mix Multilayer Technology.
- RF & Microwave Components.
- Sub-Systems.

Applicable for Space, Defence, Aerospace and Commercial Applications.

**Signal Technology.**

- Frequency Converters and Integrated Microwave Assemblies.
- Frequency Generators and Sources.
- High Power Isolators and Circulators.

Applicable for Space, Defence, Aerospace and Commercial Applications.



Specialise in the Design and Manufacture of Commercial, Military and Space grade RF, Microwave and Millimeter Wave Components and Integrated Microwave Assemblies:

- Combiners, Splitters and Hybrids.
- Filter LNAs.
- Filters.
- Frequency Converters.
- Integrated Microwave Assemblies.
- Space qualified technology.
- SSPAs.



**Space Products**

- Electro-Mechanical Microwave Switches.
- Low PIM Switches.
- RF Coaxial Relays to 40GHz.
- Switch Matrices.

Applicable for Commercial, Defence and Hi-Rel Space Applications.



Applicable for Commercial and Defence Applications ranging from 10kHz to 40GHz including ELINT, COMINT, RWR, DF and SATCOM.

- Receivers.
- RF & Microwave Frequency Sources.
- Sub-Systems.
- Synthesizers.



IF, RF & Microwave Components and Sub-Systems for Hi-Rel, Space and Defence Applications to 40GHz.

- SSPAs.
- MMIC Development.
- PIN Diode Control Devices.
- Frequency Sources & Synthesizers.



**Incorporating Eurofarad, Sic Safco, Firadec, Microspire, Dearborn Electronics, Temx Ceramics, Astema and Vertura.**



Formerly Eurofarad, Exelia Technologies are Specialists in Multi-Layer Ceramic and Plastic Film Capacitors.

- EMI/RFI, Energy and HEMP Filters.
- Optical Encoders.
- Precision Potentiometers.
- RVDTs.
- Slip Rings.
- Sub-Assemblies.

Applicable for Defence, Aerospace and Space Applications.



- Aluminium Electrolytic Capacitors.
- Capacitor Banks.
- Modules.

Applicable for Industrial, Railway, Hi-Rel, Defence, Aerospace and Automotive.



Tantalum (Wet and Solid) Capacitors for the Professional Electronics, Space and Aerospace Industries.



- High Precision Inductors.
- Motor Stators.
- Transformers.
- Windings.

Applicable for High Performance Applications in Professional, Defence, Aerospace and Space Markets.



- Antennas and Switches.
- Radar Transponders.
- Test Equipment.

Providing complete Radar Tracking Solutions for:

- Manned Aircraft.
- Missile Systems.
- Surface Vessel Applications up to 10GHz.
- Towed Target.
- UAV.



Modules and Test Systems for Hi-Rel and Defence Applications.

- Phase Noise Test Systems.
- Single and Multichannel RF Synthesizers.
- Ultra Low Phase Noise.



**RF & Microwave Solutions**

- Antennas.
- Hi-Rel Test & Measurement.
- Lightning Protectors.
- Microwave Modules.
- Resistive Components.
- RF & Microwave Coaxial Connectors, Cables and Cable Assemblies for all Market Sectors.

**Fibre Optic Solutions**

- Cables.
- Fibre Optic Connectors.
- Harsh Environments and Test & Measurement.
- Systems for Private and Public Communications Networks.

**Low Frequency Solutions**

- Low Frequency Wires and Cables for Industrial and Hazardous Applications.
- RADOX™ High Grade Insulating and Jacketing Materials Provide Superior Quality Cable Solutions.



- RF & Microwave Connectors and Adaptors.
- Cable Assemblies for Commercial, Defence and Space Applications to 110GHz.
- RF & Microwave Cable.
- High Density RF Connector Solutions including SMP, SMPM and SMPM-T to 65GHz.
- Microbend® .047 and Mini 141®.
- Minibend® .086 Fully Flexible "Bend to End".
- RF Cable Assemblies usually available from stock.



Test & Support Systems (TSS) provides Defence Related Electronic Warfare Products and Services including Avionics Test Equipment and Simulators for EW and Avionics System Testing.



**inTEST Thermal Solutions, incorporating Temptronic, Thermionics and Sigma Systems.**

inTEST Thermal Solutions provides Thermal Products for:

- Environmental Test.
- Process Chillers.
- Semiconductor, IC and Module Test Applications.



ATS Series ThermoStreams providing Accurate, Controlled Temperatures at the Test Site from -95degC to +300degC.



Precision Temperature Forcing Systems (PTFS) have been replaced by the new ATS Series ThermoStream Systems.



Temperature Controllable Convection Chambers and Hot/Cold Plates.



Control Components, Modules and IMAs.

- Attenuators.
- Limiters.
- Power Amplifiers to 40GHz.
- Frequency Sources and Synthesizers.
- Switches.
- Integrated Microwave Assemblies.

Applicable for use in Hi-Rel and Defence Applications.



Microwave Devices supply mmW Components.

- Attenuators.
- Circulators & Isolators.
- High Power Loads.
- Millimetre Wave Horn Antennas.
- Parabolic and Cassegrain Antennas up to 110GHz.
- Rotary Joints from 0.64GHz to 110GHz.
- Switches.
- Waveguide Adaptors.



Millimetre and Sub-Millimetre Wave Products.

- Antenna and Quasioptical Products.
- Mixers and Detectors.
- Sources.
- Amplifiers.
- Multipliers and Control Components.
- Filters and Ferrite Products.
- Passive Waveguide Components.
- Converters and Test Modules.
- Space Heritage.



Modco, Inc. Designs and Manufactures High Quality Voltage Controlled Oscillators for Commercial, Industrial, Medical, and Military Applications.

- Frequencies from 10MHz to 12GHz.
- Surface Mount, TO8, Surface Mount.
- Custom and off the shelf solutions.

Applicable for Wireless Communications to 12GHz.



- MMICs.
- RF, Microwave and Millimetre Wave Diodes.
- Silicon Transistors.



Microwave Isolators and Circulators for Defence, Wireless and Telecommunication Applications from 380MHz to 26GHz.



- Systems for Signal Distribution Systems.
- IF, RF & Microwave Switching Systems.
- Multi-Couplers.
- RF Matrices.



ThinkRF Design and Manufacture PC Driven High Performance Signal / Spectrum Analyser with a highly configurable Software Defined Radio receiver coupled with real-time digitisation and digital signal processing.

- 8, 18 & 27GHz options.
- Up to 160MHz Real Time Bandwidth
- Probability of Intercept (POI) as short as 1.02 µs.
- Spurious Free Dynamic Range (SFDR) up to 100 dBc.
- Optional Support for External Local Oscillator.
- Optional Pre Amp and Preselect Filtering.
- Compact housing with rack mount option.



- Broadband Conical Inductors.
- Fixed and Tunable Inductors.
- High Quality, Microelectronic Coil Inductors.
- RF & Microwave Air Coil and Spiral Chip Inductors.

Applicable for Space, Aerospace, Defence and Commercial Applications.



- High Performance Amplifiers/ Sub-Systems.
- Tower Mount Amplifiers.
- Unmanned Aerial Vehicle (UAV) or DRONE Sub-Systems from 10MHz to 20GHz.



- 0° Combiners/Dividers.
- 90° Hybrid Couplers.
- 180° Hybrid Combiners and Absorptive Filters from DC to 6GHz.
- High Power, Multi-Octave Directional Couplers.

Markets include Defence, Commercial, Industrial and Test & Measurement. Mismatch Tolerant® Designs Operate at Rated Power into Severe Mismatches. Power Capability from 5W CW to 100kW CW.



Design and Manufacture of Low Cost Antenna Systems.

- Antenna Control and Tracking Systems.
- Earth Station Antenna systems from 1.2 to 20m.
- ISO 9001-2000 Certified.
- Low Cost Fly Away Antenna Systems including Motorisation.
- SNG Antenna Systems including Motorisation.



UK based Satellite Operator providing Ka Services in Europe, Africa and the Middle East.

- Excellent footprint coverage in the UK and Ireland.
- Fixed Satellite Broadband Hardware and Contended Bandwidth Tariffs.
- Focus on Quality and Flexibility.
- Highly Resilient Infrastructure and Support.
- Occasional Use and Dedicated Bandwidth.



Design and Supply Military and Commercial Grade Antenna Systems from 0.6 to 4.6m.

- Fly Away Antennas.
- Manual or Motorised Platforms with Controller.
- SNG Antennas.



Design and Supply Block Up Converters and Accessories for the Satcom market.

- 1 to 50W with Low Power Consumption.
- C & Ku Band Block Up Converters.



Design and Supply Rugged Antenna Systems with broad market appeal.

- Fixed Motorised Antennas.
- Fly Away Antennas.
- Manual or Motorised Platforms with Antenna Controller.
- SNG Antennas.



Applicable for Commercial and Defence Applications ranging from 10kHz to 40GHz including ELINT, COMINT, RWR, DF and SATCOM.

- Receivers.
- RF & Microwave Frequency Sources.
- Sub-Systems.
- Synthesizers.



- Redundancy Switch and IP Interface Modules.
- Systems Design and Consultancy
- System Installation and Commissioning.
- System Upgrades and Maintenance Support.
- Training Support.



Systems Design, Hardware Supply and Project Support for RF Monitoring Solutions.

- SAT DSA RF Monitoring with Advanced Features such as Carrier Under Carrier Interference Detection.
- Automatic and Fully User Configured Monitoring Plans.
- Fast Measurement Speed.
- Multiple User Access.
- TDMA Analysis.



Market Leader in Satcom Technologies for a Wide Range of Applications Across Market Sectors.

- Modems.
- Modulators.
- Demodulators.
- Fixed Satellite Broadband Hardware (Low cost Antenna System with Modem).
- Frequency Converters.
- IP Accelerators and Performance Enhancing Proxy.
- IP Hub Platforms including 'Dialog'.
- OEM Solutions.
- Redundancy Switches.



High Quality Product Range from DC to 27.5GHz.

- Baseband Routers and Components.
- RF Matrices.
- RF Routers.
- Standard and Custom solutions available.



Cost Effective Solutions for Carrier Monitoring.

- 4 or 8 L Band Inputs.
- Automatic and Remote Monitoring Capability.
- Hand Held and OEM Card Options.
- Simultaneous / Multiple User Access.



A Leading Technology Innovator offering products in both the Terrestrial and Satellite markets.

- Demodulators.
- DVB S, S2 and S2X Modulators.
- OEM Modulators and Demodulators.
- DVB-CID Extractor for RF Carrier ID Monitoring.



TTI Designs and Manufactures RF and Microwave Modules/Equipment from UHF/VHF Frequency Bands up to Ka Band.

- Block Up Converters in X, Ku and Ka Band.
- Ka Band LNAs.
- Ka Band Solid State Power Amplifier up to 200W.
- Phase Shifters, Oscillators and other RF Products.
- Satcom on the Move (SOTM) Antenna Systems.



**SATCOM SERVICES:**

**Systems Design, Implementation and Commissioning**

**Through-life Support & Maintenance during Warranty and beyond**

**Extended Warranties and RF Training**

**IP Connectivity Solutions over Satellite**