

Ferranti Technologies Ltd

Land Systems





Focused on
Customers & Driven
by Quality



Ferranti Technologies Ltd

Supplier to the world's leading defence organisations including the UK MOD, Ferranti Technologies has provided advanced electronic technology for the UK aerospace and defence industries for over 40 years.

Customer Focused, Innovative Solutions

Ferranti Technologies' reputation is founded on decades of experience and a commitment to quality that sets us apart from our competitors. With a wide range of skills, facilities and expertise, Ferranti Technologies is able to provide customised, innovative solutions focused on customer requirements.

Solutions to suit a variety of platforms

Our solutions are available for air, land and sea based platforms from stand alone units to fully customised integrated systems. Our capabilities are operationally proven and in use all over the world.

Engineering & Manufacturing

With a multi-disciplined team of Hardware, Systems and Software Engineers, Ferranti Technologies can undertake detailed design, development, prototype manufacture and engineering qualification. Our well equipped Manufacturing facility brings concepts to life through a seamless transition into full scale manufacture.

Through-life Support

Ferranti Technologies' Customer Support team offers a comprehensive, through-life maintenance support service for a wide range of electronic and precision electro-mechanical equipment, for both proprietary and other OEM products.

Experience you can rely on

Working within a variety of industries, Ferranti Technologies supplies complex electronic products for arduous or safety critical environments:

- Civil Aerospace
- Military Aerospace
- Land Defence
- Naval Defence
- Rail Transport



Systems & Solutions

Ferranti Technologies offers a range of high performance, cost effective products & systems designed to improve mission performance and operator safety through enhanced situational awareness and faster decision making.

Products & Systems

Blending combat experience with today's advanced technology, Ferranti Technologies is able to offer a range of solutions suitable for a variety of applications. Our solutions are operationally proven and in use all over the world.

Our solutions include:

- Power Supply and Energy Storage
- Power Conversion and Distribution
- Helmet Mounted Systems
- Training & Simulation
- C⁴ISTAR
- Force Protection
- Soldier Systems
- Identification & Surveillance
- Enhanced Vision Systems

Applications

- Fixed & Rotary Wing Aircraft
- Land Vehicles
- Marine Vessels
- Servicemen
- Homeland Security





Faster Decision Making, Day and Night



Training & Simulation Systems

Blending combat experience with today's innovative simulation technologies, we offer flexible, robust and cost effective trainers and simulators providing effective training in real life conditions.

Flexible Training Solutions

Ferranti Technologies offers flexible, robust and cost effective trainers and simulators providing effective training in real life conditions.

Appended Crew Trainer

A mobile training system that links the combat system and vehicle, providing a complete simulation environment for the tank crew.

Independent Crew Trainer

A highly advanced, integrated, multi-participant tactics and armour combat trainer, specifically designed to provide real life training to AFV operators.

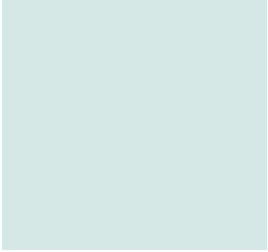
Driving Simulators

Vehicle mounted, driving simulators providing training in real life conditions. Mobile, scalable and modular, supporting several types of AFVs per cabin.

Simulator Services

Ferranti Technologies can offer a full spectrum of training services and support to ensure that customers who have purchased products or services - either from Ferranti Technologies or from third parties - acquire the necessary skills for effective operation and optimum performance.

Our T&S services focus on comprehensive education and training development, simulator support services, integrated logistics support, contractor logistics support, and other innovative service solutions, tailored to customer specification.



Soldier Systems

Our world leading Soldier System provides an integrated infantry combat system for dismounted operations from battalion level down to the individual soldier.

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The components of this modular system include:

- A range of soldier radios in the UHF and VHF bands
- Personal Digital Unit - a compact and light-weight rugged tactical computer giving the dismounted soldier powerful data processing and storage with embedded GPS and interfaces to all peripheral elements
- Displays to suit all combat roles including an 8" planning display, a 4.3" tactical display and the soldier eyepiece display
- Energy Distribution Box - smart power distribution unit providing "hot-swap" power from 3 sources on the soldier as well as an intelligent link to a vehicle interface unit to provide automatic data updates and battery charging direct from the vehicle's systems when mounted
- Soldier Navigation System (S-Nav) providing navigation and position reporting even when operating in GPS-denied areas
- A range of integrated ISTAR capabilities including Thermal Imagers, Micro Unmanned Air Vehicles and Unmanned Ground Vehicles





Advanced C⁴ISTAR Systems

Ferranti Technologies provides state-of-the-art, fully digital, integrated C⁴I mission management systems.

Enhanced Situational Awareness

Ferranti Technologies is able to provide a full range of C⁴I capabilities offering enhanced military effectiveness for Land Forces in both mounted and dismounted operations.

Our C⁴I systems and products are designed to support the military user by providing reliability, excellent performance and ease of use. Hardware is designed to meet the highest military standards of ruggedness and security whilst our software is written to meet the demanding needs of military users. Where relevant, our systems use common applications to provide common touch and feel whilst specialist applications are designed to provide specific functionality to support specialised tasks and roles.

Our C⁴I systems include

- Multi-function Combat Displays
- Communication & Information Systems
- Battle Management Systems

Multi-function Combat Displays

Ferranti Technologies supplies a range of rugged displays and computers for vehicles and dismounted troops.

Enhanced Tactical Computers

Providing state-of-the-art C² capabilities and tactical data dissemination to a broad range of combat, command and reconnaissance vehicles. Designed for success in the harshest conditions, this versatile range of tactical computers is fully battle-proven and currently in use by numerous armed forces around the world.

Communication & Information

Ferranti Technologies supplies command, control, communication, computers and intelligence systems, delivering mission-critical information & situational awareness to all levels of command.

Battle Management Systems

Ferranti Technologies' Battle Management Systems provide significant operational advantages to the user. The use of modular design and open interfaces allows common and specific applications to be easily integrated to meet a customer's specific needs.



Force Protection Systems

Ferranti Technologies' Force Protection products provide defence against threats for soldiers operating in both mounted and dismounted roles.

Broad Protection Offering

Protection is provided from threats as diverse as Laser Beam Riding ATGWs and CBRN attacks through to environmental challenges faced when operating in harsh environments where extremes of temperature can have a major impact on the safety and combat effectiveness of troops.

Our vehicle mounted Force Protection Systems are designed to be fitted as part of an upgrade or enhancement programme, or to be incorporated at the initial design phase of a new vehicle programme.

Fully Integrated Systems

Our Laser & RF Warning Systems can be integrated to on-board Battle Management Systems to provide manual, semi-automatic or fully autonomous responses using decoys, obscurants or return fire.

Dismounted Soldiers

For dismounted operations, Force Protection is supported through a range of unattended ground sensors operating in seismic, audio, video or radar modes. These sensors are managed through a user-friendly management station to ensure rapid alerts of potential enemy activity.

Defensive Aids Systems

Combat proven soft-kill protection suites for fighting vehicles.

- Laser warning & threat detection system
- Multi-threat detection system
- Vehicle infrared counter measure system
- Multi-spectral smoke system
- Threat management system

All these components are adaptable to a wide variety of vehicles and requirements and can be integrated with a full array of countermeasures including infrared and laser jamming systems, smoke grenades and decoys.

Life Support Systems

Our Life Support Systems for armoured fighting vehicles and main battle tanks include chemical, biological, radiological and nuclear (CBRN) detection and protection, as well as fire suppression systems, heating, ventilation and air conditioning.

The LSS can be powered by the platform engine or can be self-powered by an integrated auxillary power unit.



Power & Control Solutions

As a trusted supplier to the Defence sector for many years, Ferranti Technologies can work with you to design or upgrade your power & control equipment ensuring effective, robust and value for money solutions.

Ferranti Technologies boasts an engineering design team possessing a wealth of experience in the development of numerous complex, high reliability, safety and mission critical systems for aerospace, land and naval applications.

Our team of professionally qualified engineers are able to offer specialist technical expertise in a wide range of disciplines encompassing:

- Systems and safety engineering
- Safety critical hardware and software
- Design for harsh environments
- Design for electromagnetic compatibility
- Cross-functional turnkey solutions

This enables Ferranti Technologies to rapidly satisfy the most demanding of customer requirements.

The efficient realisation of complex products is guaranteed by our proven systems development and in-service support processes.

In conjunction with our accredited in-house manufacturing and environmental test facility, we

offer customers a single point of contact for the creation of custom built, optimised engineering solutions.

Capabilities

Ferranti Technologies' power and control capabilities for land based systems include:

- Control Systems
- Power Distribution
- Power Conversion

Control Systems

Hydraulic Control Units

Designed for use in heavy military engineering platforms and powered from a standard 28V DC vehicle supply, these HCUs contain multiple cards (microprocessor, digital & analogue I/O, PSU and filter and reversionary PLD) and are fully qualified to a number of US and UK standards including DEF-STAN 00-35, 59-41, 61-5, MIL-STD 810, 2175 and 461.



Engine & Transmission Control System

Designed for upgraded Armoured Fighting Vehicles and comprising 4 units (engine junction box, warning light box, electronic control unit, engine temperature sensors), these systems interface the new engine and automatic transmission to the existing vehicle control/instrumentation and electrical system.

Power Distribution Systems

Ferranti Technologies has successfully designed and manufactured a number of system Power Distribution Units (PDU). These distribution units can be either primary or secondary, controlling AC, HVDC and LVDC loads. The PDU can include full Health & Usage Monitoring Systems (HUMS) and Control and Monitor (C&M) to ensure your unit is safe, reliable and available in the harshest of conditions.

Power Conversion

Designed for use in harsh environments, these specialist power converters are for safety-critical uses such as Explosive Ordnance Disposal (EOD) equipments and onboard vehicle power conversion.

Ranging from 200W to 15kW, these power converters offer fully isolated supplies for various applications.

Technologies include:

- AC to DC Conversion
- DC to DC Conversion (HVDC and LVDC)
- DC to AC Inverters (HVDC and LVDC)
- Transformer Rectifier Units

Upgrades and Modifications

In addition to offering design services for new products, Ferranti Technologies has extensive experience in the upgrade and modification of existing equipment.

Upgrading existing equipment can offer significant benefits:

Reduced Cost

Leveraging supplier relationships, sourcing alternative materials and engineering development are just some of the ways we can help to reduce the cost of manufacture.

Reduced Down Time

Upgrading tired equipment can save you time. Our knowledge and expertise will not only provide you with the optimum solution, but our business processes ensure this is done with minimum down time.

Enhanced Safety

Maintaining the functionality of your power and control equipment ensures operational safety now and beyond to your future needs.





Manufacturing & Support Solutions

From concept design to ongoing maintenance, Ferranti Technologies provides a comprehensive range of electronic engineering and manufacturing services to suit a wide range of needs.

Ferranti Technologies is fully equipped to become your integrated electronic manufacturing service provider of choice.

Operating as an extension of your business, Ferranti Technologies can take care of your electronic manufacturing requirements from the initial concept design stage, right through to full scale manufacture and beyond.

- Initial concept design verification
- Design for manufacture/test
- Production readiness
- Printed Circuit Board Assembly
- Box build (LRU)
- In Circuit Test
- Functional Test
- Environmental Stress Screening

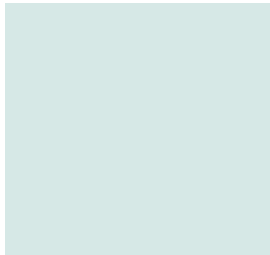
We can manufacture to both international and customer specified electronic manufacturing standards and are able to offer an offshore manufacturing option, if required.

Quality Driven Manufacturing

Our commitment to quality and continuous improvement underpins everything we do here at Ferranti Technologies. Over the past 5 years, Ferranti Technologies has taken great steps towards building a world class manufacturing facility, to meet the growing demands of our customers and business units. With investment in people and equipment but, most importantly, in ensuring our conformity to relevant industry standards.

As a supplier into the Aerospace & Defence industry for over 50 years, Ferranti Technologies has achieved the following quality standards:

- AS9100 Rev C
- AS9110
- SC21 Bronze
- BS EN ISO 9001 (with TickIT)
- EASA Part 21G
- EASA Part 145
- ISO 17025 (UKAS Lab)
- ISO 14001
- Nadcap AC7120



Full support throughout the lifetime of your products



Customer Logistic Support

In addition to our well equipped manufacturing facility, we are able to offer a wide range of support services comprising:

- Repair, Modification and Overhaul
- Post Design Services
- Integrated Logistic Support
- Obsolescence Management
- Documentation Support
- Preventative Maintenance
- Quality & Environmental Stress Screening
- Testing & Commissioning

The team has particular expertise in meeting the demanding requirements of customers operating in the aerospace and defence markets.

This, combined with a commitment to timely delivery and the provision of a cost-effective support solution, differentiates Ferranti Technologies from its competitors.

Fast, Efficient Repair & Overhaul

A fast and efficient repair & overhaul service ensures minimum system downtime for customers. A range of turnaround times are offered to meet the most demanding customer needs. A wide variety of product types are catered for, including:

- Electronic & electrical modules
- Circuit cards (Plated Through Hole & SMT)
- Wired racks and cabinets
- Aircraft cockpit instrumentation
- Precision mechanisms

All products are fully tested prior to return to the customer and are warranted.

Ferranti Technologies can offer you a full manufacturing & support service over the full lifetime of your products and beyond to your future needs.

Where Tradition Meets Innovation

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