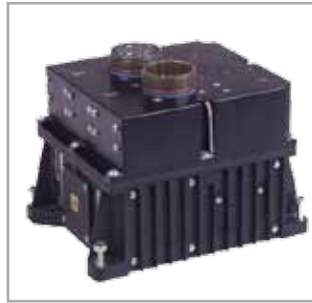


Power & Control Solutions

For Arduous and Safety Critical Environments





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' Power and Control group 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, military 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 facilitate 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.

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.

Aerospace

The following products are just some of the specialist solutions that Ferranti Technologies has developed for the Aerospace industry. Working with you, our design team can transform your requirements into qualified, quality assured and production ready designs.

Converters

AC - AC Voltage/Frequency Converter

These Converters can be designed in a number of forms, but in all cases can be either single or three phase input or output.

DC - DC Converter

These Converters take aircraft, vehicle or ship derived DC power and provide a pre-determined steady state DC output.

AC - DC Converter

These Converters take aircraft, vehicle or ship derived AC power and provide a steady state high or low DC voltage output.

Inverters

An Inverter is a power conversion unit that converts aircraft derived DC power and converts it to aircraft single or three phase 115/230 V AC 400Hz.

Transformer Rectifier Units (TRUs)

Ferranti Technologies has designed, manufactured and has extensive in-service experience of TRUs that provide regulated 28V DC power derived from the aircraft main AC Generators or emergency Ram Air Turbine.

Typical values range from 50Amps to 400Amps with full Built In Test overload capability, electrical monitoring and protection.

Battery Charger & Battery Charger Rectifier Units

Ferranti Technologies has the ability to design a stand-alone Battery Charger or combined Battery Charger and Rectifier Unit to enable AC power conversion and battery charging from a single LRU. Typical battery technologies include:

- Sealed Lead Acid
- Ultra Low Maintenance NiCad
- Sealed NiCad

Power Supplies

Ferranti Technologies has extensive capability and experience in the design & manufacture of power supplies, from simple low power units to complex, high power, multi-output with complex monitoring and switching requirements. These power supplies can be supplied as a fully qualified and certified stand-alone, LRU, sub-assembly or PCB (SRU) for incorporation into a customers top level assembly, system or vehicle.

We also have experience in the development of emergency and standby power supplies utilising high reliability storage capacitors as an alternative to heavy, complex and high maintenance battery packs.



Land Systems

Ferranti Technologies also has a proud heritage in the custom design and manufacture of robust power distribution systems that are in service across the British Army.

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

- Engine Control
- Power Distribution
- Hydraulic Control
- Complex Power Supplies

Control Systems

Hydraulic Control Units (HCUs)

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).

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 System Power Distribution Unit to integrate a military Bridge Layer System onto an existing Main Battle Tank Chassis.

This system provides additional logic control and the distribution of 28V DC vehicle supply to bridge laying hydraulic system.

Total power capacity is 2.25kW.

Complex Power Supplies

Designed for use in harsh environments, these specialist complex power supplies are for safety-critical uses such as Explosive Ordnance Disposal (EOD) equipments.