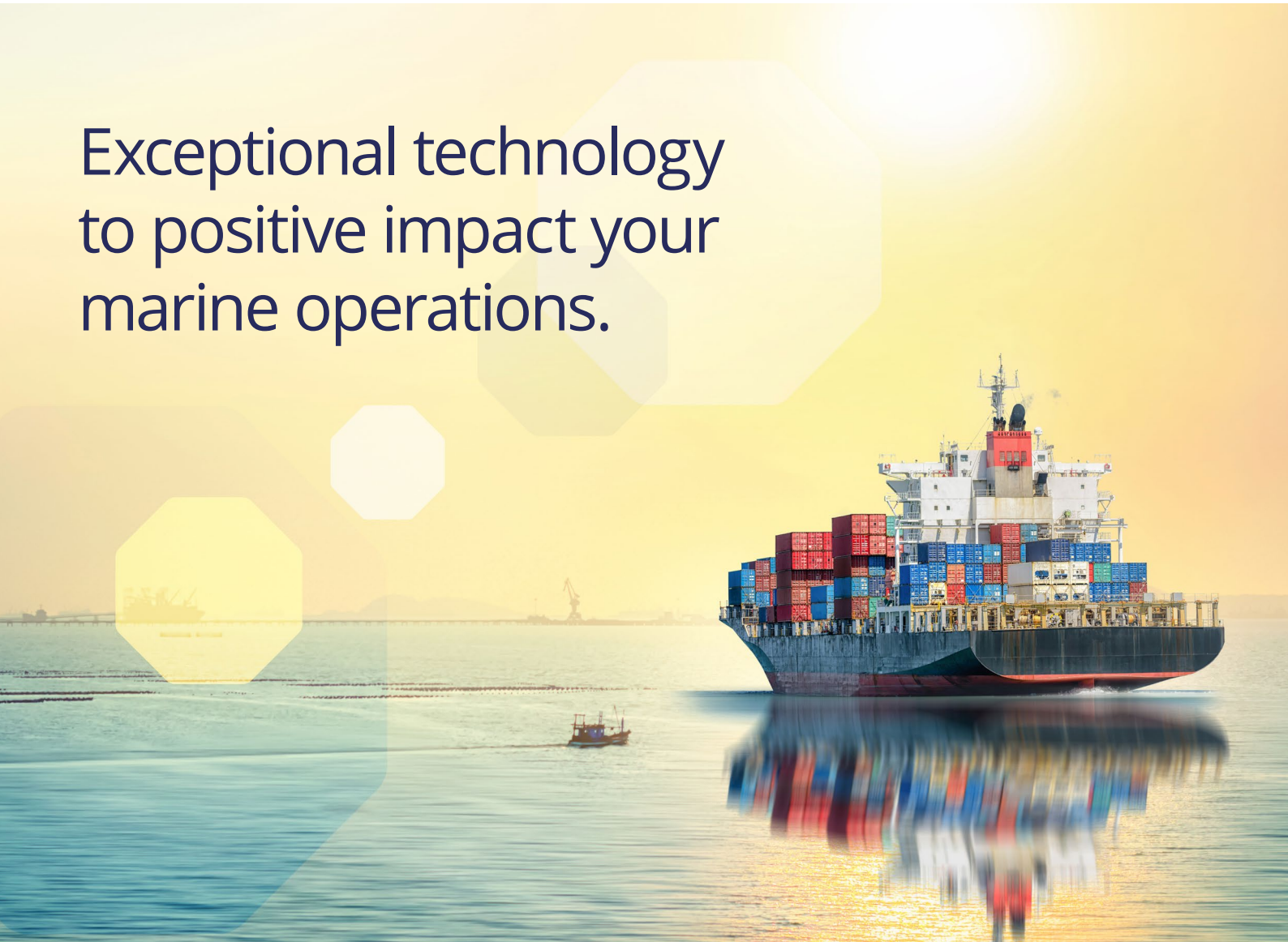
Plextek

Exceptional technology to positive impact your marine operations.



Introduction

We are Technology Specialists to support your marine development needs

Our clients come from different backgrounds and industries with a wide range of development needs. We have the breadth of expertise and knowledge across the technology landscape to support your unique project and give you the competitive edge.

- **Advanced communications**
- **AI & Machine Learning**
- **Antennas & Propagation**
- **Bespoke Sensor Systems**
- **Intelligent data insight**
- **IOT infrastructure**
- **Manufacture**
- **Product Design**
- **Radar Systems**

About Plextek

We have a 30 year history of providing technology solutions to a variety of organisations. Plextek understands today's key challenges for smarter technology development and can generate both the ideas and deliverable solutions to the assured level of security, performance, resilience and ergonomics that you need. We are a product development company that works with clients to achieve results based on their specific requirements.

Our engineering experience, supported by our library of IP for key technology elements, aids accelerated time to market and greater cost effectiveness.

What can we do for you?

As a specialist electronic engineering company, we produce novel & disruptive solutions that our clients can deliver to market.

How do we give you advantage?

- Deep knowledge of key markets and the best of technology
- We understand our customer's challenges and opportunities
- Passionate about technology and innovation
- Deeply committed to delivering the best possible solution
- Maximising return on investment and winning market share for our clients
- An end-to-end service that can accelerate your progress while reducing complexity and risk
- 30 years of providing unique solutions

Examples of our work:

Just a few examples of how we have assisted marine organisations with their technical challenges:

Marine Tracker

Plextek are delivering the design and high-volume manufacture of a critical element of an E-Passport solution. This consists of an advanced military grade hybrid TETRA-LTE GPS smart tracker device that provides life-saving features for rescue teams during emergencies. The intelligence-driven marine unit has been designed to ensure highly resilient and secure communications with seamless operation, whilst also facilitating a high level of tamper resistance, power efficiency, and a robust marine enclosure, enabling full environmental protection under extreme conditions.

Underwater Monitoring/ Tracking Beacon

This sensor provides the basis for a highly cost-effective covert surveillance capability. The concept involves the deployment of low Size Weight Power and Cost (SWaP-C) node fitted to an underwater asset. If disturbed and brought to the surface, the beacon relays its position to enable tracking of the removed asset.

Container Tracking

Following completion of a feasibility study into the use of UNB technology for container tracking, current analysis will validate the RF and system protocol and system architecture aspects of the system, and start to consider the practical on-ship aspects of installing a system.

Personal Location Beacon

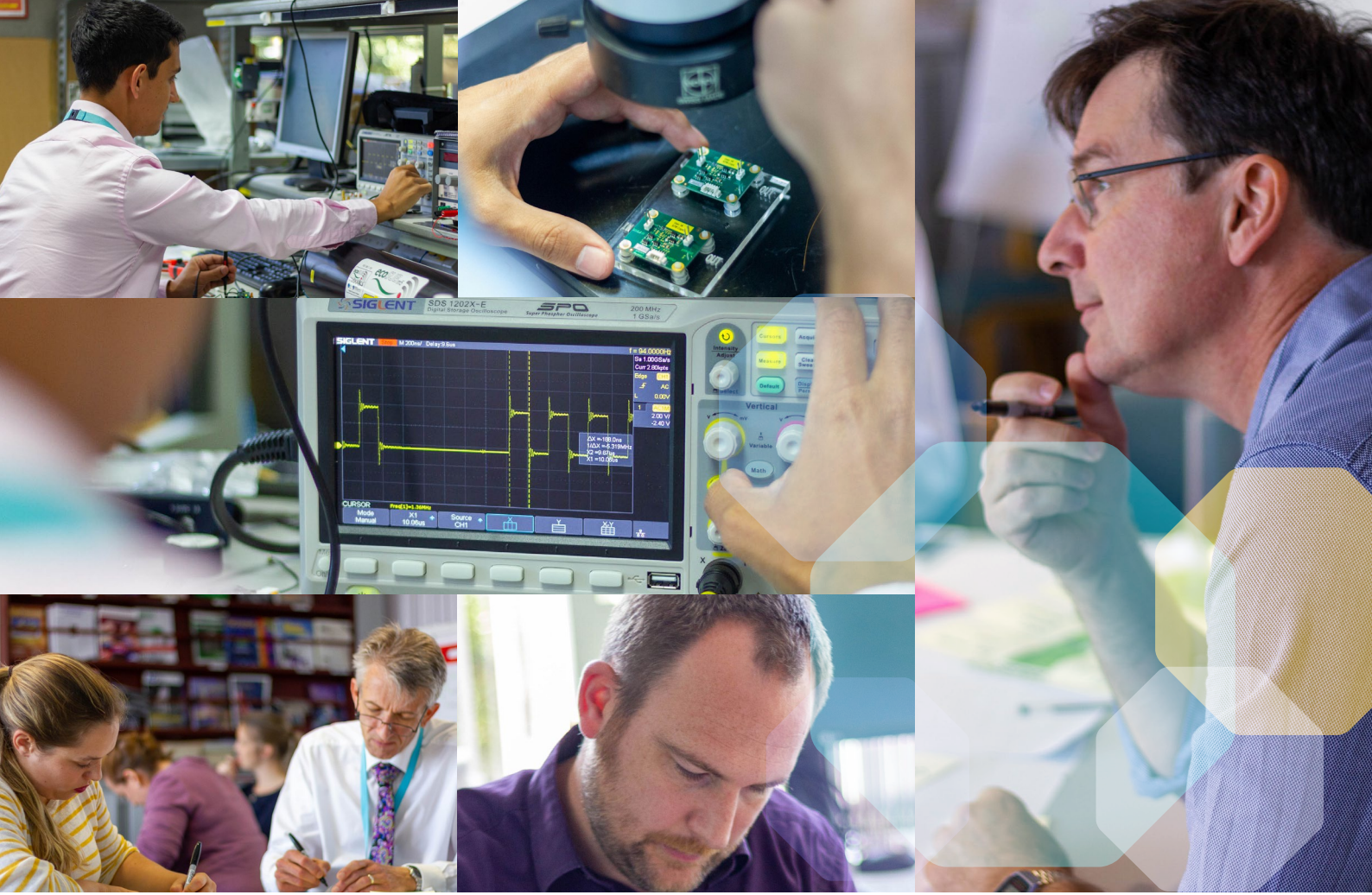
Our client's personal safety device for land or sea, is best attached to a life jacket or rucksack for alerting emergency services. Plextek developed the RF Power Amplifier, the antenna and matching circuits and PCB development. This system has stringent limitations on size, weight, power and cost.

Sonobuoy

For over 20 years, Plextek have been the design authority for the RF telemetry subsystem unit for our client which, together with passive sonobuoys, can provide a multi-static active system for wide area search, detection and locations of assets in water (ie icebergs or submarines).

Offshore Windfarms

We utilised machine learning techniques to better enable detection and tracking of potential risks in the vicinity of offshore wind farms. Wind turbines tend to scatter radar signals in many directions causing false detection tracks. Through a combination of modeling, simulation and scaled experiments, we demonstrated that applying Deep Learning architectures can help to remove wind turbine returns whilst retaining the returns from tracks of interest.



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Exceptional technology
to positively impact the future

Get in touch to find out how Plextek can help you to deliver your next innovation in technology.

email

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