



Who we are

We are a product development company that supports organisations to bring highly technical products and services to market. Our technical and commercial teams work with healthcare organisations every day to ensure their projects are market leading.



How do we give you advantage?

- > Deep knowledge of the healthcare sector
- > Passionate about technology and innovation
- An end-to-end service that can accelerate your progress while reducing complexity and risk
- > 30 years of providing unique solutions



Our Experience



Elderly Fall Detector

A privacy preserving gesture recognition radar system for use in applications such as fall detection in care homes and vulnerable households.



Test System for 5G Broadband

Comprehensive 5G test system to support the mass testing of multiple-input and multiple-output devices, which operate at mm-Wave frequencies.

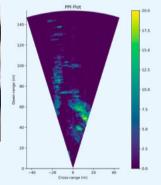


Production Line Monitoring

Sensor systems to monitor pharmaceutical manufacturing processes, allowing prediction of component failure to avoid costly line shutdowns.



Sensors for Automatic People Counting



Our client required a low SWaP (Size, Weight and Power) design of a radar module, capable of detecting people and assets out to 50m in crowded environments. We implemented a sectoral horn antenna array which allowed the required detection.

What we offer

Plextek offers access to engineering expertise, suited to fit your requirements. Dynamic sector alignment means we can propose novel solutions facilitated by cutting edge technologies. Our engineers have world leading expertise in mm-Wave, antenna design, radars and signal processing.



Skills and services we provide

- > Sensor Systems
- > Communication Systems
- > RF System Design
- > 5G Systems Engineering
- > mm-Wave
- > Antennas & Propagation

- > Spectrum Monitoring
- > Radar Systems
- > IoT (inc Cloud-based services)
- > Embedded Software
- > Asset Tracking
- > Data Science

- > Product Design
- > Digital Transformation
- > Rapid Prototyping
- > Product Realisation
- > Obsolescence Management
- > Supply Chain Management



RF ECG Monitor

Real-time monitoring of patients using a multi-antenna system to ensure highly precise and secure communication, used in over a third of all US hospitals.



Novel Material Sensor

Design, simulation and fabrication of a number of awardwinning metamaterial surfaces to enable novel antenna design.



Millimetre-Wave Radar

Dual fixed and mobile antenna solution capable of detecting objects and movements from a fixed mm-Wave radar.



3D Lung Imaging

Game changing device that uses structured-light analysis to assess 3D movement of the chest to measure lung function, now in clinical use.



Connecting Patients

A novel vital-signs monitoring device, simple for service users but capable of providing rich data to medical and care professionals remotely.





Laurence Weir Head of Biomedical Engineering



Connect with me on LinkedIn

Plextek is a company built on innovative ideas. Innovation runs in the fabric of our company culture. The people we hire, the projects we work on, the way we set up our processes and how we communicate, all support independent thinking and creativity.

Companies come to us to tackle their hardest engineering challenges that need outside-the-box thinking.

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