

THE BRIEF

IoT Horizon Ltd is a leading provider of IoT (Internet of Things) and smart building solutions. The company specialises in leveraging sensor technology and analytics to optimise buildings for efficiency, sustainability and occupant wellbeing.

IoT Horizon was developing a portable air quality monitoring system and required a housing prototype to contain electronics and sensor components. They needed to iteratively make design changes and developments based on prototyping for further developing the product for final use.

THE APPROACH

STFC's Campus Technology Hub (CTH) supported IoT Horizon in preparing their CAD (Computer Aided Design) data to be suitable for 3D printing their prototypes. Advanced Manufacturing Engineers manufactured the prototypes on a large industrial 3D printer, supporting IoT Horizon in achieving a faster turnaround in prototype production, leading to quicker design iterations.

From this process, engineers at the CTH produced three prototype variations. They met with IoT Horizon between productions to discuss the outcome of each design amendment, and discussed how to optimise the design further for the 3D printing process.

THE BENEFITS

IoT Horizon now has three new 3D printed prototypes that have helped massively speed up the lead time in their new product development towards end-use. This will allow them to bring the product to market quicker and introduce a new service to their product range.

"This was an excellent project delivered by the team at the Campus Technology Hub. They delivered exactly what they had promised and the benefit to our company was far greater than the resources our team needed to commit to making the project a success."

- Dr Dan Bradley, Head of Research and Development, IoT Horizon Ltd

