

Case Study

Sensient Technologies



About Us

Mobile Signal Solutions are UK based installers of commercial signal boosting systems, focused on improving mobile phone signals indoors.

Our professional team are approved installers of carrier grade equipment compatible with all UK networks. We work with the client from site survey to installation and offer maintenance & support contracts. Working together we ensure 100% network coverage, no budget overruns, and we offer upfront payment or leasing options.

Our main aim is that clients are happy to recommend us to others. Each system is voice and 4G compatible but we also future proof the design to carry other new mobile frequencies as they are launched e.g. 5G and 6G compatible systems.

The Property

To ensure the safety of production workers on the company site, the HSE department recently introduced a new lone-worker system. The system features a small pager-like device that individuals carry with them, which can communicate via a mobile signal. In the event of an emergency, trained admin workers serving as first responders are notified. It is worth noting that the service provider for the mobile signal is O2.



The Challenge

The building was originally constructed as a metal-framed warehouse but later transformed into an office and lab space. Due to the presence of external metal, the building acted as a Faraday cage, impeding the penetration of mobile signals into the interior areas, particularly away from the windows and open entrances.

Why A System Was Required

We conducted a thorough survey of the building with the aim of enhancing the signal strength in the area. Based on the findings, we designed a Distributed Antenna System (DAS) to improve coverage for the entire safety system, ensuring excellent O2 signal availability throughout the building.



The Results

The implemented signal enhancement has created a work environment where lone workers can feel secure and remain easily reachable at all times through their allocated mobile devices. In case of an emergency, first responders can be immediately contacted, regardless of their location within the building.



What Causes Poor Coverage?

Distance from the local base station or the construction of the outer walls are the main factors. Outer stone walls blocking signal is a common problem in many older buildings, due to the thickness of the walls signal finds it difficult to permeate indoors, especially in basements and areas with no windows.

In modern buildings, the high level of energy insulation also causes signals to be blocked. Buildings using foil backed insulation on roofs and walls, alongside variants of window panes where the glass contains metal particles to reflect the sun's rays means walls, roofs and windows all block the mobile signal.

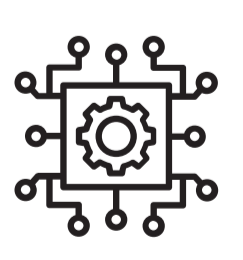
Need A Solution?

If you're looking to improve connection across your site but aren't sure where to start give us a call today. Our team are happy to talk through your options and set up a survey.



Step One: On-Site Survey

You will meet with our surveyor to discuss your needs in full. You can discuss areas of importance and agree on a design plan for the system you require.



Step Two: System Design

Our surveyor will then design the best possible system. The surveyor will then meet with the operations team to put a cost together for that system.



Step Three: Installation

Before you know it we will have a team of highly skilled engineers on-site and your system will be up and running and providing flawless mobile signal throughout.

"We also have increased signal for our company mobile phones which wasn't part of the project scope, but was a very welcome bonus.

I would recommend MSS for their professionalism, efficiency, and expertise, it was a quality experience from start to finish and I wouldn't hesitate to call on them again for any future mobile signal issues."

Nick Bussey
IT, Sensient

