



Case Study

Project: Shielded enclosure for SCADA network

Sector: Utilities



Background:

A Tier 1 telecommunications provider found that they were experiencing reliability issues with SCADA data transmission equipment located in electricity substations for a key customer, one of the UK's major electricity generation and distribution infrastructure operators.

The Challenge:

Locating sensitive electronics within a high-power electrical environment can be a challenge, due to the unwanted impact of electromagnetic field interference. It's the same reason we are asked to turn off phones and tablets during takeoff and landing on flights.

Our Approach:

Rainford Solutions' approach involved understanding the nature of the interference in detail – the particular field frequencies and magnitudes that were causing problems - and designing a shielding solution to provide the necessary mitigation.

Rainford Solutions has completed almost 4,000 customer projects to date, which gives us a huge library of building blocks from previous designs and experience to draw upon. It means that unique designs do not begin from a completely blank piece of paper, so development costs and crucially time to market are not inhibitors to a highly tailored solution.

The Solution:

Shielded enclosures were designed, first article prototypes were then tested and independently certified by a UKAS laboratory to prove the electromagnetic containment (EMC) shielding effectiveness.

Due to Rainford Solution's experience and 'design reuse' methodology the prototypes passed first time, and volume production on standard lead times was available immediately after.

Customer Outcome:

The new SCADA upgrade has allowed the electricity network operator unparalleled insight and control over their asset performance, saving millions of pounds and contributing to strategic environmental goals.



For further information on this project or to discuss your project requirements please visit www.rainfordsolutions.com or email sales@rainfordsolutions.com

Rainford Solutions Ltd, Rainford House, Mill Lane, Rainford, St Helens, WA11 8LS

T: +44 (0) 1744 889 886 | sales@rainfordsolutions.com | www.rainfordsolutions.com