

Engineering Smart Utilities

G'day ,
Welcome to the ACE Newsletter, where you receive the latest highlights that underscore our commitment to client success, engineering excellence, and community engagement.

Substation Automation System Bench Testing



ACE team has been collaborating closely with the customer on upgrading and testing their substation automation system. Our engineers have set up the SCADA server and protection relays, ensuring seamless communication via IEC61850 (MMS).

With the communication testing now complete, we are moving on to the next stage: injection testing using Omicron testers to simulate relay inputs. These exercises ensure that the automation system functions as expected when deployed to the client's live environment.

To learn more about how ACE can assist you with your automation needs, please visit our website.

[Learn More - Substation Automation](#)

Solar Farm SCADA & Control Systems Engineering Solutions



It's often assumed that installing top-tier hardware—such as network switches, PLCs, RTUs, GPS clocks, and SCADA servers—will automatically ensure that a solar farm operates smoothly and delivers optimal energy output. However, this approach frequently overlooks the critical importance of system design and integration.

In reality, without a well-designed framework and proper integration, even the best equipment can lead to inefficiencies. Poor data processing, communication failures between devices, or mismatched communication protocols can result in reduced energy generation and operational downtime.

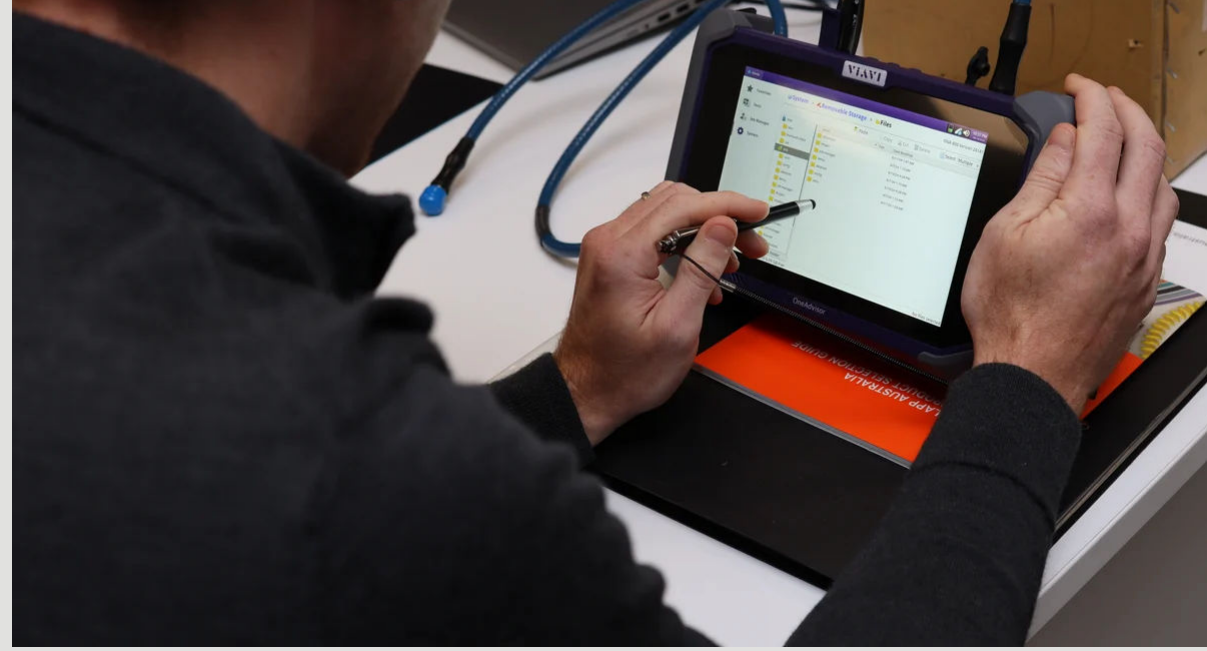
Our team goes beyond traditional solutions by not just prescribe hardware but by customising our design, programming, and testing to fit each client's unique operational needs. Our approach enhances performance and ensures that your solar farm operates at its highest potential. Whether you're planning a 100 MW or 300 MW solar farm, we ensure your system is optimized to meet the growing demands or energy purchase agreements.

To learn more about how ACE can support your projects, watch the short video via the link below.

[Solar Farm SCADA Integration](#)

UHF Tool for Radio Telemetry

Hardware Design

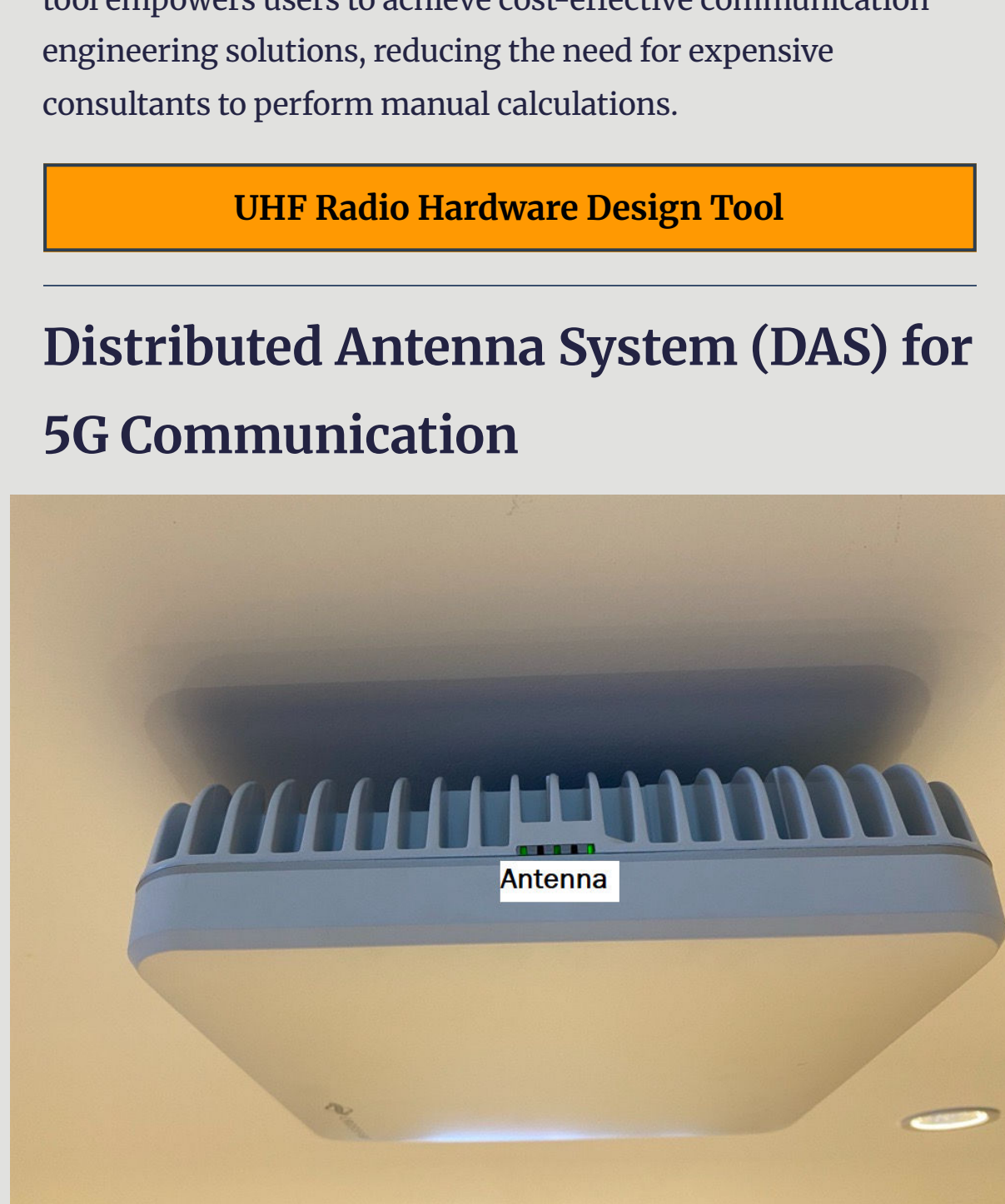


To streamline the process of determining the optimal antenna height and selecting the appropriate radio hardware for communication paths, we have developed an online tool. This tool assists engineers, consultants, and end-users in calculating the ideal antenna height to minimize wireless signal interference and maximize coverage, ensuring reliable communication in UHF radio or cellular systems.

Users can input site-specific details, such as path length and wireless signal strength, and receive recommendations for hardware components like radios, antennas, and accessories. By simplifying the design and hardware selection process, the ACE tool empowers users to achieve cost-effective communication engineering solutions, reducing the need for expensive consultants to perform manual calculations.

[UHF Radio Hardware Design Tool](#)

Distributed Antenna System (DAS) for 5G Communication



ACE team has been actively involved in deploying Distributed Antenna Systems (DAS) over fibre optic links to support 5G communication infrastructure in Western Australia. This technology improves connectivity within buildings, offering faster speeds and more reliable connections via 5G reception.

ACE's team worked extensively on tasks such as installation and cellular signal testing, and ensuring seamless 5G reception across multiple locations within a building.

By leveraging ACE's expertise in 5G technology, clients can ensure robust, high-performance connectivity for their buildings or sites.

Reach out to ACE today to explore how our services can enhance your 5G infrastructure needs.

[Contact ACE](#)

Career Advice

[Pathway to become a Great Engineer](#)

[White Papers](#)

[Case Studies](#)

[Industry Blogs](#)

Please feel free to share our newsletter on social media.



Australian Control Engineering, Headquarters: Level 5, 200 Adelaide Terrace, Perth, Branches: Brisbane, Newcastle, Melbourne, Hobart, WA, QLD, NSW, VIC, TAS, Australia, +61 1300 561 881

[Unsubscribe](#) [Manage preferences](#)

Send free email today

HubSpot