commtel™

rapid site solution

product offering for rapid site solutions
advanced shelter system.

commtelns.com

what is the rapid site solution?

Rapid Site Solution (RSS) is an innovative and advanced solution for the deployment of complete communications infrastructure to remote and isolated areas, where high availability communications are critical.

The RSS is suitable for remote sites, high fire zones, mountain sides and cyclone regions. It is built from the ground up to deliver high performance in extremely harsh and demanding environments.

The RSS is a compact site incorporating equipment racks, power system, batteries, air conditioning, generator, solar system and tower or monopole, in a single managed entity.

Deployment is straightforward with steel sub-structure assemblies minimising ground disturbance, and concrete or steel piers extending the height of the site in flood prone areas.

Where space is limited the solar array can be mounted on the roof of the structure to minimise the shelter footprint and the panels are pre-cabled prior to site delivery to improve quality, consistency and reduce installation risk and time onsite.

Prefabricated Structure

- Lattice Tower up to 60m
- Steel Monopole up to 30m
- Minimal Excavation or Concrete Required
- Relocatable
- Standards based Design

Containerised Solution

- Easy Transport to any site in standard ISO containers
- 25+ Year Product Life
- Rapid On-site Installation and commissioning with all major systems pre-installed

Integrated Control

- Fully integrated controls, managed remotely via single NMS or by customers own SNMP based management platform
- CommTel SmartShelter control core manages shelter for Bushfire Attack Level (BAL) survival.
- Energy Management and Reporting

Designed, engineered and built for Australian conditions

Minimal environmental footprint due to unique install solution

Rapid site deployment with ability to pre-install major systems

Relocatable & re-usable infrastructure including

Modular design, allowing scalable sites & customisable

survivability in extreme conditions.

Flexibility and customisation is a key feature of the RSS product, with multiple applications and models available.

Different configurations of the RSS can be designed and built to customer specifications due to the unique modular design of the product, and the Australian based engineering teams.

Smaller, smarter and scalable designs can be used for Radio Base Station hubs, power generation sites, LTE infill or other applications thanks to its unique modular design.

Site survivability through added fire protection, allowing RSS assets to withstand fires with minimal damage, and resume normal operation after a fire has passed.

Various BAL (Bushfire Attack Level) shelters are available from BAL-LOW to BAL-FZ.

The containerised solution allows for rapid installation and commissioning, as all major systems can be preinstalled and integrated off-site, which in turn saves time, cost and reduces risk on site.

This also enables the rapid deployment of new supporting or replacement infrastructure in the event of a natural disaster such as fire, floods or earthquakes.

Built in accordance with AS3958:2009 Standards and CommTel's own quality control systems, the structure is designed for the protection of critical equipment and infrastructure in times of emergency.

RSS BAL Ratings

FZ	Direct exposure to flames, embers and 40kw/m2 heat flux
40	Increased level of embers and up to 40kw/m2 heat flux, debris ignition
29	Increasing level of embers, ignition of debris, up to 29kw/m2 heat flux
19	Increasing level of embers, ignition of debris, up to 19kw/m2 heat flux
12.5	Ember attack, up to 12.5kw/m2 heat flux
LOW	There is insufficient risk to warrant specific construction requirements

RSS™ SingleSite Install
Come by Chance, NSW

RSS™ SingleSite (Flood Zone)
Trilby Park, NSW

RSS™ SingleSite after Bushfire
Broombee Mountain, NSW

hardend applications.

Remote and isolated locations pose major challenges when installing infrastructure. From fire and flood zones to the tops of mountains, the environment can be unforgiving and difficult to access.

Designed and built for extreme conditions, the RSS can be installed into isolated or remote areas, where access is limited or restricted.

RSS's compact footprint and containerised solution with all major systems pre-installed, delivers a fully commissioned communications site within days, not weeks.

With its innovative use of above ground substructures to support containers, towers, and/or monopoles, ground disturbance is minimised, allowing for low environmental impact and low rehabilitation cost if decommissioning or relocation is required, as is the case in mining applications.

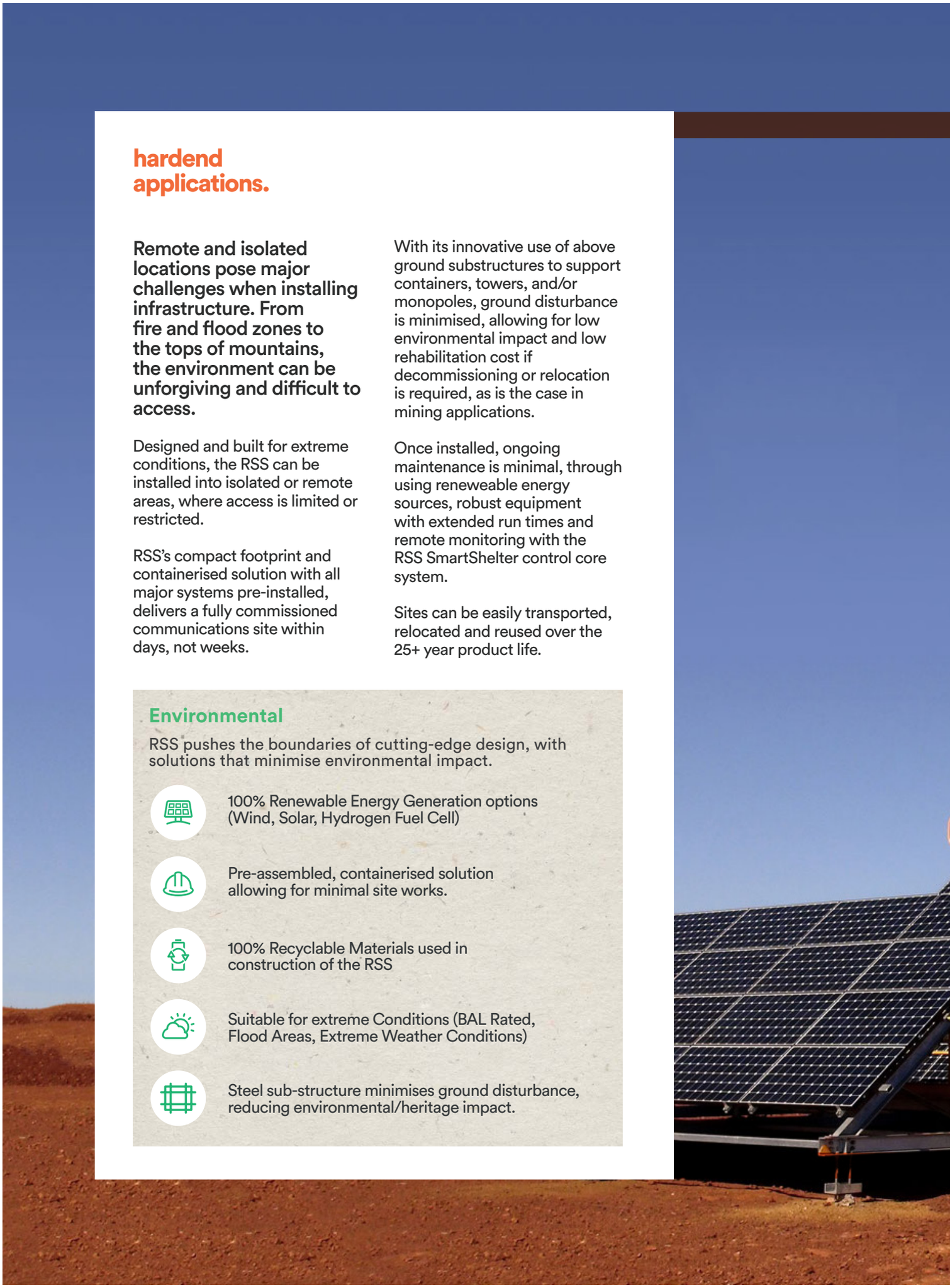
Once installed, ongoing maintenance is minimal, through using reneweable energy sources, robust equipment with extended run times and remote monitoring with the RSS SmartShelter control core system.

Sites can be easily transported, relocated and reused over the 25+ year product life.

Environmental

RSS pushes the boundaries of cutting-edge design, with solutions that minimise environmental impact.

- 100% Renewable Energy Generation options (Wind, Solar, Hydrogen Fuel Cell)
- Pre-assembled, containerised solution allowing for minimal site works.
- 100% Recyclable Materials used in construction of the RSS
- Suitable for extreme Conditions (BAL Rated, Flood Areas, Extreme Weather Conditions)
- Steel sub-structure minimises ground disturbance, reducing environmental/heritage impact.



RSS™ SuperSite Installation
Pilbara Region, Western Australia

configurations.

The Rapid Site Solution represents the next generation of prefabricated radio base station designs.

The RSS product suite includes six main products, which can be customised to meet individual customer specifications.

The RSS SuperSite is dimensioned for high capacity applications that require considerable power generation and equipment installation. Suitable for major RBS sites, camp sites or data centres and incorporates an integrated 60 metre tower, generator, solar panels and batteries.

The RSS HubSite accommodates most standard site requirements with space for back-up batteries and a segregated diesel/hybrid power system for medium sizes RBS sites with a 60m integrated tower.

The RSS CompactSite is designed to accommodate medium RBS site requirements with a smaller 20 to 40 metre structure requiring a small footprint.

The RSS SingleSite is designed for small RBS or repeater sites. It accommodates all the essential elements required for a fully autonomous solar hybrid site with high power capacity, rapid deployment and up to 20 metre monopole.

The RSS MicroSite replaces trailers and skids in situations where a more robust small site is required with a 5 to 12 metre structure. It is used for LTE and TETRA infill and can be easily relocated.

The RSS PowerSite delivers a robust and cost effective approach to equipment housing for small optical fibre sites or power upgrades to existing radio base stations.

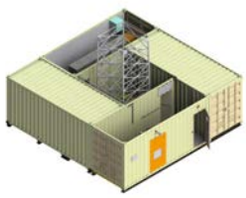
rss supersite

SuperSite Capabilities:

- Tower options to 60 metres
- 14 Equipment cabinets
- Full-time AC power (48v Inverters)
- Air Conditioning
- Battery systems to 12,000Ah
- Integrated solar arrays to 25kW
- Integrated diesel generators to 30kVA
- Optional integrated hydrogen fuel cell to 5kW
- Optional wind generators to 15kW
- Enhanced fire suppression systems
- Access control systems
- Lightning protection systems

SuperSite Inclusions:

- 100% Insulated, vinyl floor, cable trays
- Emergency and standard LED lighting
- Power distribution
- Fully integrated power and HVAC system control
- Remote monitoring
- Basic fire and security system
- Filtered air pressurization



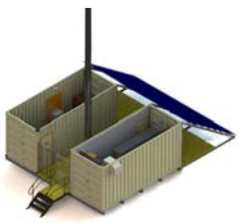
rss hubrsite

HubSite Capabilities:

- Tower options to 60 metres
- 6 Equipment cabinets
- Full-time AC power (48v Inverters)
- Air Conditioning
- Battery systems to 6,000Ah
- Integrated solar arrays to 25kW
- Integrated diesel generators to 30kVA
- Optional integrated hydrogen fuel cell to 5kW
- Optional wind generators to 15kW
- Enhanced fire suppression systems
- Access control systems
- Lightning protection systems

HubSite Inclusions:

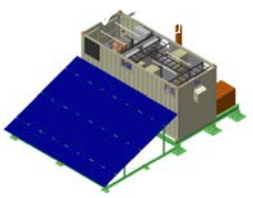
- 100% Insulated, vinyl floor, cable trays
- Emergency and standard LED lighting
- Power distribution
- Fully integrated power and HVAC system control
- Remote monitoring
- Basic fire and security system
- Filtered air pressurization



rss compactsite

CompactSite Capabilities:
- Monopole to 40 metres
- 6 Equipment cabinets
- Full-time AC power (48v Inverters)
- Air Conditioning
- Battery systems to 3,000Ah
- Integrated solar arrays to 15kW
- Integrated diesel generators to 30kVA
- Optional integrated hydrogen fuel cell to 5kW
- Optional wind generators to 15kW
- Enhanced fire suppression systems
- Access control systems
- Lightning protection systems

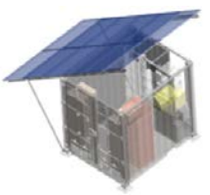
CompactSite Inclusions:
- 100% Insulated, vinyl floor, cable trays
- Emergency and standard LED lighting
- Power distribution
- Fully integrated power and HVAC system control
- Remote monitoring
- Basic fire and security system
- Filtered air pressurization



rss singlesite

SingleSite Capabilities:
- Monopole to 20 metres
- 4 Equipment cabinets
- Full-time AC power (48v Inverters)
- Air Conditioning
- Battery systems to 3,000Ah
- Integrated solar arrays to 15kW
- Integrated diesel generator to 18kVA
- Optional integrated hydrogen fuel cell to 5kW
- Optional wind generators to 15kW
- Enhanced fire suppression systems
- Access control systems
- Lightning protection systems

SingleSite Inclusions:
- 100% Insulated, vinyl floor, cable trays
- Emergency and standard LED lighting
- Power distribution
- Fully integrated power and HVAC system control
- Remote monitoring
- Basic fire and security system
- Filtered air pressurization

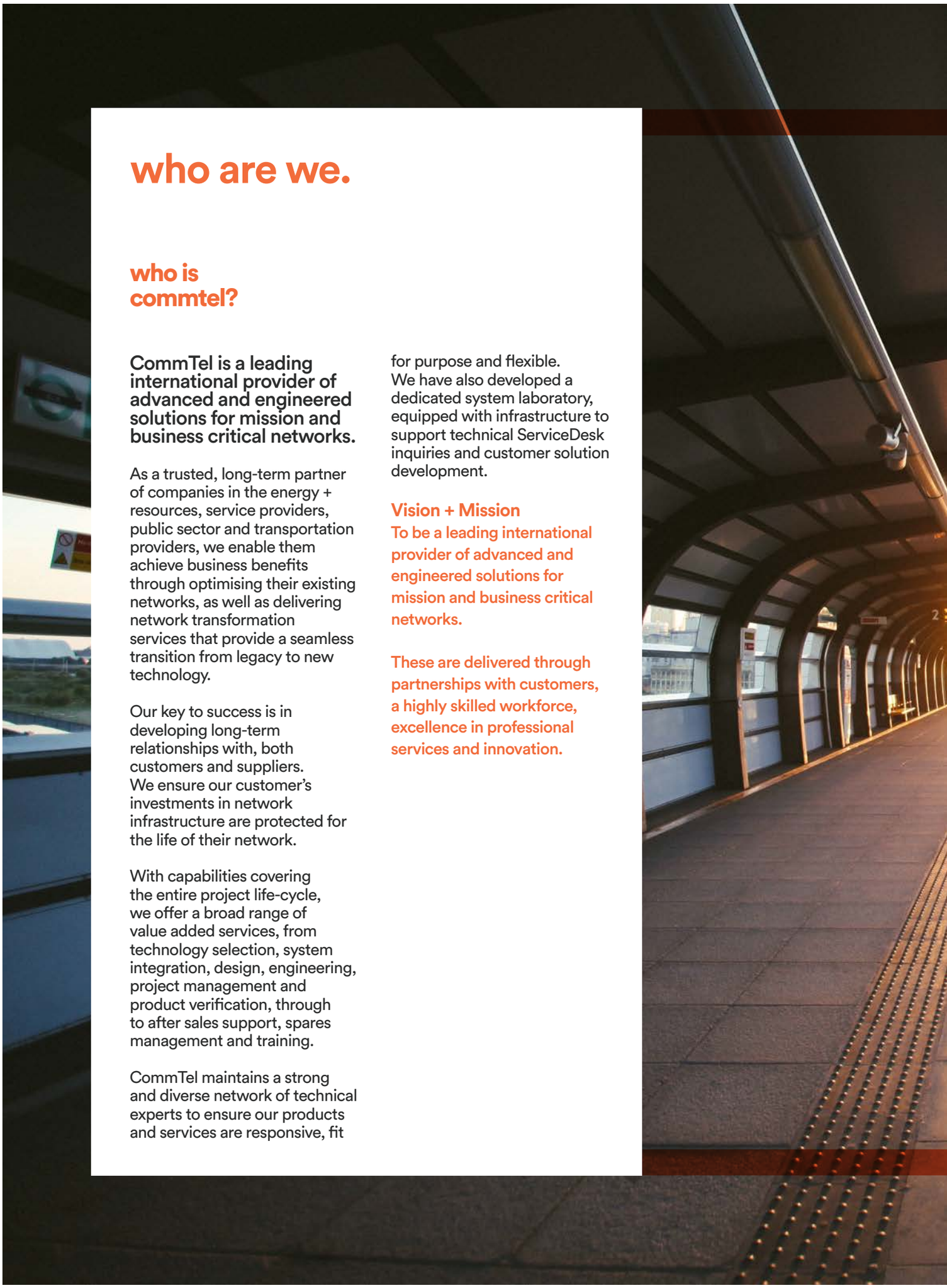


rss microsite

MicroSite Capabilities:
- Monopole to 12 metres
- 3 Equipment cabinets
- Full-time AC power (48v Inverters)
- Air Conditioning
- Battery systems to 2,000Ah
- Integrated solar arrays to 3.5kW
- Integrated 48VDC diesel generator to 3kW
- Access control systems
- Lightning protection systems

MicroSite Inclusions:
- 100% Insulated, vinyl floor, cable trays
- Emergency and standard LED lighting
- Power distribution
- Fully integrated power and HVAC system control
- Remote monitoring
- Basic fire and security system
- Filtered air pressurization

Specifications, features and options are subject to change and are dependent on configuration purchased. Images for Illustrative purposes only. Pictures are not to scale and actual product may differ in appearance. Inclusions will vary depending on RSS configuration.



who are we.

who is commtel?

CommTel is a leading international provider of advanced and engineered solutions for mission and business critical networks.

As a trusted, long-term partner of companies in the energy + resources, service providers, public sector and transportation providers, we enable them achieve business benefits through optimising their existing networks, as well as delivering network transformation services that provide a seamless transition from legacy to new technology.

Our key to success is in developing long-term relationships with, both customers and suppliers. We ensure our customer's investments in network infrastructure are protected for the life of their network.

With capabilities covering the entire project life-cycle, we offer a broad range of value added services, from technology selection, system integration, design, engineering, project management and product verification, through to after sales support, spares management and training.

CommTel maintains a strong and diverse network of technical experts to ensure our products and services are responsive, fit for purpose and flexible. We have also developed a dedicated system laboratory, equipped with infrastructure to support technical ServiceDesk inquiries and customer solution development.

Vision + Mission

To be a leading international provider of advanced and engineered solutions for mission and business critical networks.

These are delivered through partnerships with customers, a highly skilled workforce, excellence in professional services and innovation.

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