Digital Infrastructure Solutions

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Digital infrastructure is the foundation of any connected business and reliable communication and power is vital for reliability.

Digital Infrastructure Solutions

In today's fast-paced world, reliable and efficient digital infrastructure is essential to keep critical communications running smoothly.

At ART, we offer a comprehensive range of innovative remote communication and power solutions designed to ensure your digital assets are operating reliably, securely, and efficiently-no matter the location.

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Our tailored solutions are built to meet your specific needs, providing scalable and dependable support for digital infrastructure.

From engineering assessments through to design and construction, ART's solutions include a range of remote deployment units, vertical infrastructure (masts and towers), communication shelters on skids and foundations, and power trailers adapted to suit your business's needs.



Engineering services

ART's experienced team provides comprehensive engineering services to support critical infrastructure projects, including in-house CPEng and REPQ qualified structural/civil and electrical engineers. Our expertise includes engineering assessments, preliminary and detailed engineering design, and development of IFC and As-Built engineering drawings. We conduct tower strengthening assessments, tower/mast certification and re-certification, ensuring structural integrity and compliance. Additionally, we offer maintenance recommendations, installation setup advice, and complete project drawings and documentation, ie Manufacture's Data Reports (MDRs) and Installation/ Operational/Maintenance Manuals (IOMMs).

Project construction

ART's construction services cover every stage of project execution, ensuring high-quality, safe methodologies and reliable results.

Mobilisation

We can efficiently mobilise resources and equipment to ensure seamless project execution.

Civil works

Our civil services include trenching for power and communication feeds and site earthing grids, completing insitu concrete foundations and placement of pre-cast blocks to establish strong foundations for tower and shelter infrastructure.



Rigging

We specialise in tower assembly and erecting, including placement of outriggers and guy wires, as well as installation of ancillary equipment including ladders, aircraft warning lights (AWLs), antenna mounts etc.

Our team ensures that all tower constructions meet industry standards through rigorous inspections, sign-off and certification, followed up with As-Built drawings and documentation. Furthermore, we also provide optional on-going maintenance inspections and tower engineering re-certifications.

Products

Remote Deployment Units (RDU)

Our Remote Deployment Units provide secure, off-grid communication/power solutions for remote sites.

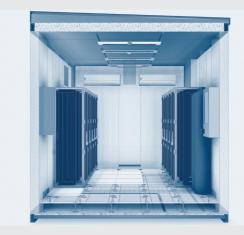
- RDU-S 30 m skid A sealed shelter with two communication racks, two battery racks, 18 foldable solar panels, outrigger ballast blocks, and a 30 m guyed tower.
- RDU-S 10 m skid A compact sealed shelter with one communication rack, one battery rack, eight roof-mounted folding solar panels, and a 10 m freestanding mast.
- RDU-S 6 m skid A small skid solution featuring two solar panels, a power cabinet, and a 6m free-standing mast.

- CPS-6S shelter A 2.5 m x 2.8 m sealed shelter with one 42RU communications rack and one 42RU battery rack, along with six roof– mounted foldable solar panels.
- CPS-6 power skid A 2.6 m x
 3.7 m skid equipped with six fixedmounted solar panels, an external steel enclosure with DC air conditioning, and up to 16 x 78Ah lithium batteries.
- HeliPod remote power solution Designed for independent operation, the HeliPod enables off-grid power for remote communication infrastructure. It features a folding solar array, along with storage for batteries and control equipment, with optional PTZ cameras and remote monitoring capabilities.



Communication Shelters

ART's Digital Shelters feature a modular design, offering flexible structural sizing and a configurable floor layout for maximum space efficiency. The structure is also expandable, allowing for additional cabinet capacity as client needs evolve.





Key features include:

- + Modular structural design
- + Modular and efficient floor layout design (up to 17 racks)
- + On site expansion capabilities
- + Flexible multiple points-of-entry for comms, power, fibre optic
- + Sub-floor cabling
- + Solar/generator/mains/hybrid power capability
- Modular and expandable power rack with 12, 24, 48DC & 240AC
- + Insulation rating R3.5 with optional FRL -/180/180

Vertical infrastructure – towers and masts

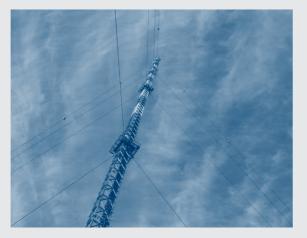
ART is committed to delivering highquality, client-focused solutions. In 2023, ART purchased Flight Brothers, one of Australia's market-leading suppliers of communications structures for over 40 years. With our combined expertise, we deliver custom endto-end solutions for the renewables, resources, and communications industries.

We also listen to your needs and design tower or mast structures that ensure performance and value while also providing expert advice on maintenance. Every tower is unique, shaped by location-specific factors such as climate, topography, and wind speed. Our skilled team designs, tests, and refines each solution before manufacturing to guarantee precision and durability.

With steel fabrication workshops in NSW and SA, ART delivers in-house custombuilt structures using Mil-Spec materials, offering tailored solutions for tower design, strengthening, and specialised antenna mounts.

Towers

- FT towers Australian-made, light-duty free-standing towers with a modular design for height flexibility from 9 m to 30 m in 3 m increments.
- F & FX towers Heavy-duty, Australian-made free-standing towers, custom-designed through detailed engineering analysis to suit specific locations. Heights range from 10.5 m to 60 m.



Guyed Masts

Our guyed masts are available in multiple configurations to suit different load, height and wind region requirements. Constructed with a stainless-steel core triangular lattice frame, our masts are available in five load categories:

- + Light-load (305 mm width) Up to 45 m high.
- + Light/Medium-load (360 mm width) Up to 80 m.
- + Medium-load (450 mm width) Up to 70 m high.
- + Medium/Heavy-load (550mm width) Up to 120 m high.
- + Heavy-load (650 mm width) Up to 90 m high.
- + Heavy-duty extreme winds (750mm width) Up to 180 m high.

Heights are dependent on load, footings, and wind region conditions. The guy wires range from 8 mm to 13 mm galvanised steel, with a typical radius of two-thirds the mast height. To minimise twisting in high winds, we offer solutions including larger mast frames and optimised lower membranes.



Roof mounts

Our Australian-made 3 m roof-mounted pole is designed for commercial buildings and can support a 1.2 m solid microwave antenna. The 114 mm diameter pipe ensures direct mounting compatibility with most microwave dishes.



Remote Deployment Guyed Mast Outrigger (RDGMO)

The RDGMO is a rapid-deployment guyed mast solution featuring three outriggers that support the guy wires for stability. This system allows for quick setup and redeployment as required.



Tower accessories

ART offers a range of optional tower accessories to enhance safety, accessibility, and deployment efficiency. These include:

- + Antenna mounts
- + Tower headend configurations
- + Face mounts
- + Aircraft warning lights
- + Tower ladders
- + Lightning and earth kits
- + Fall arrest systems
- + Cable hanger brackets

ART is committed to delivering high-quality, client-focused solutions.

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Trailer products

Premium Trailer

Our Premium Trailer is a dual-axle trailer designed for providing remote power needs to deliver autonomous power for off-grid infrastructure. It includes a lockable container for secure battery and control equipment storage, with a solar array mounted on the roof.

Essential Trailer

The Essential Trailer is a compact singleaxle trailer designed for rapid deployment, providing reliable autonomous power for remote off-grid applications. It features a fixed solar array and a compact battery storage area for reliable energy supply.

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