

# Isolated Marine Multicarrier Support for Scientific Service



## Protected Marine Species and National Park Island have a Promising Future with Multicarrier Support for Scientific Service

Rising Connection provides a robust and secure remote communication and monitoring service using the latest carrier-agnostic automated connection systems and other highly resilient services and solutions. The unique environment of Raine Island, a National Park (Scientific) on the outer edges of the Great Barrier Reef, is being protected and restored as part of the Raine Island Recovery Project (RIRP). Our solutions are contributing to the long-term existence of this important historical, cultural and scientific site and helping to secure the future of key marine species.

## The Communications Challenge



Raine Island is located on the northern tip of the Great Barrier Reef, approximately 620 kilometres northeast of Cairns. The entire island is an important environmental and cultural site and a protected national park (for scientific purposes) that is not accessible to the public.

The ecosystem of Raine Island is under threat due to changes in the island's landscape. Nesting green turtles, a vital seabird rookery and many other critical marine species are at risk. The Raine Island Recovery Project is a collaboration between the Queensland Department of Environment and Science (QLD DES) and the island's traditional owners, the Wuthathi and Merium Nation (Ugar, Mer Erub) Peoples. The project aims to protect and restore the island's critical habitat through undertaking landscape reprofiling, monitoring and researching to increase marine species' resilience and Indigenous ranger capacity.

The existing remote power and network system at Raine Island was developed over time and required IT, electronic, electrical, plus programming expertise sought and provided by various organisations and individuals, resulting in a system far from integrated.

The requirement for reliable satellite communication and robust equipment to suit the harshest marine tropical situations was an added challenge. Space on vessels to Raine Island is limited, and trips can typically last ten days to two weeks, so most installation work and support got carried out with only remote assistance from the Rising Connection team.



## Rising Connection's Solution



Rising Connection got approached to supply the QLD DES team with a multicarrier-capable solution. Taking into account the details of previous deployments and partners, which resulted in an overly complex and incoherent solution, we suggested an entirely fresh approach. We used our in-house developed, patented methodology to assess, design and integrate an appropriate and effective solution based on security, reliability and remote support.

Our team combined services from multiple sources and ISPs into a single resilient network connection designed for the challenges of the terrain and environment. For the solar system, we selected a solution based on Victron Energy's technologies combined with Pylontech Battery solutions. With the network infrastructure and system management, we opted for equipment from Peplink (Peplink, Pepwave & PepXIM). The AXIS Cameras chosen were the same as those used by other counterparts worldwide. We chose Amazon Web Services (AWS) for system hosting and network consolidation.

As a result of Rising Connection's proactive approach to developing business relationships with the work's best equipment developers and industry leaders, we provided a high-quality, reliable and resilient solution. We supply the RIRP team with sustainable power, networking, satellite communications support, video monitoring services and more.

## The Result



Rising Connection's solution ensures that a uniform methodology can be applied wherever QLD DES needs to deploy its systems. We allow QLD DES the highest possible connectivity regardless of carrier services in the area and the broadest options yet still giving a familiar site interface with integrated monitoring.

Part of our evolving approach to designing and implementing solutions for harsh environments or sites with difficult-to-access terrain includes making our system components 'flat packable'. This meant that suitable installers from within the QLD DES team could do most of the deployment with the assistance of remote support from Rising Connection integrators and solution architects.



## What is Next?

Rising Connection looks forward to the continued empowering of the services we provide to QLD DES and sharing a long-term commitment to the positive outcome our solutions have given to the RIRP team.

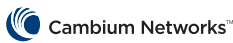
QLD DES has deployed our solutions in some highly challenging remote locations, with plans for additional deployments of new sites state-wide that can be made available to other agencies and interested entities. Extensive interest exists currently throughout the Great Barrier Reef Marine Park.





## Our Project Partners and Suppliers

Rising Connection worked with the following professionally selected businesses and organisations:



## Get the Reliable Connection and Protection Needed to Succeed

Boost efficiency, safety, reliability, and productivity with bespoke connectivity and power services from Rising Connection. For your solution needs, Contact Rising Connection.