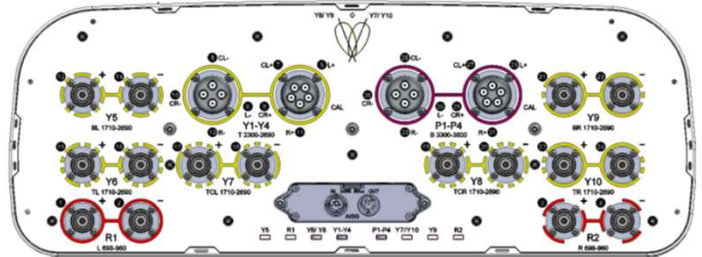


Transforming Connectivity with a Multi-Operator Core Network (MOCN) Solution in Australia

■ Background

In a fast-evolving telecommunications landscape, ensuring efficient and reliable mobile connectivity is paramount. Two leading telecom operators in Australia entered a Multi-Operator Core Network (MOCN) arrangement to improve mobile connectivity in regional areas. This agreement enabled spectrum sharing across multiple bands—700 MHz, 1800 MHz, 3600 MHz, and 3700 MHz—while allowing both operators to share active mobile network infrastructure. The objective was to expand coverage, improve efficiency, and enhance customer experience.



■ Challenges

The collaboration faced several key challenges:

- **Spectrum Integration:** The new sites had to support diverse spectrum resources from both operators without compromising performance.
- **Capacity Demands:** Infrastructure needed to be scaled up to handle higher data throughput as user numbers increased with spectrum sharing.
- **Customer Experience:** Ensuring high-quality and consistent service performance was critical as demand grew.

■ Results

The 32-Port Antenna solution delivered measurable benefits:

- **Economic Efficiency:** Shared sites improved base station utilization, reduced redundant construction, avoided resource waste, and lowered both CAPEX and OPEX.
- **Environmental Sustainability:** Energy-efficient design contributed to reduced power consumption and carbon reduction goals.
- **Enhanced User Experience:** Dual TwinBeam improved capacity and throughput; integrated TDD supported diverse scenarios, ensuring faster speeds and better overall service quality.

With PROSE's 32-Port Antenna, network sharing becomes smarter, greener, and more efficient. By simplifying deployment and boosting performance, the solution delivers clear wins—lower costs, reduced energy use, and a better customer experience—setting a new benchmark for future-ready mobile connectivity.

■ Solutions

To meet these requirements, PROSE Technologies introduced its **32-Port Integrated Antenna solution:**

- **Multi-Band Integration:** Combines 2Low, 2Mid, 2TwinBeam, 2.6TDD, and 3.5TDD bands into one compact unit.
- **Flexible Configurations:** Available in 2m and 2.7m lengths to adapt to different deployment scenarios.
- **Simplified Deployment:** Integration of multiple functions into a single antenna reduces installation complexity and eases maintenance.

