

Smart Grid Connectivity Delivered Directly to the Meter



A smart meter equipped with a 4G chip communicates with an Airspan base station, enabling real-time monitoring and Home Area Networking while saving on infrastructure and expenses

Ausgrid (previously EnergyAustralia) is Australia's largest Energy Services Corporation with over 1.6 million customers. The company is a State Owned Corporation and covers the geographic region extending throughout Sydney, the Hunter and the Central Coast. Ausgrid is currently adopting new technologies to enhance electricity distribution network capabilities and have incorporated a smart grid strategy involving the deployment of electronic sensing, monitoring and control devices.

Challenge:

Ausgrid's goal is to enhance the customer experience on their grid while increasing the productivity of staff and improving the utilization of the grid. In addition, Ausgrid wanted to facilitate the "de-carbonization" of the grid and support a greener, more efficient grid.

Solution:

Ausgrid decided to work with Ericsson who aided them in incorporating several components of an advanced 4G Smart Grid plan to the network, including Airspan's 4G technology and infrastructure.

Ausgrid felt confident that 4G standards and technologies have matured, that the technologies are more affordable than alternatives, and that deploying a 4G network would prepare them for the future and position them to innovate and show leadership in the energy industry.

The Ausgrid grid is utilizing Airspan's feature-rich Air4G base station which communicates with a chip embedded directly into the smart meter.

Airspan offers a cost-effective and quick-to-deploy solution that easily reaches across the grid, supplying the company with high-speed connectivity.

Operating on the 2.3 GHz band, the network is used to carry traffic from Ausgrid's distribution monitoring equipment and to facilitate Ausgrid's field computing



requirements. The application is a predominantly machine to machine telemetry network but it will grow and evolve as the smart grid concept grows worldwide. The network will also function as the 'last mile communications' for a fully integrated smart grid between the zone substations and network elements outside the zone substations, which would include up to two million end devices.

The 4G connectivity enables the network to act as the gateway to the home area network which will allow customers and retailers to control individual consumer energy consumption.

Conclusion:

Ausgrid is maintaining its reputation as an Energy innovator by being amongst the first to deploy a 4G smart grid network. Incorporating Airspan's leading-edge technology will help Ausgrid achieve their goals with a robust, secure and affordable solution.

Airspan Benefits:

- Robust, reliable and efficient
- High speed data rates
- AMI backhauling
- Direct-to-meter smart grid solution
- Distribution Automation (DA) communications
- End-to-End authentication and inherent high-end security
- Pay-as-you-grow model
- Rugged - built to withstand harsh environments
- Maximum capacity and coverage
- Wide variety of frequency coverage, 700 MHz to 6 GHz



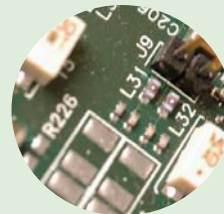
Airspan 4G Equipment



Air4G
Macro
Base Station



MiMAX USB
Subscriber
Unit



4G Chip
Embedded in
Smart Meter

Contact Airspan Networks Today:

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