
NetComm - Keeping Watch on Tsunami

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The company's Commercial division specializes in providing business, enterprise and government with broadband technologies designed to meet the latest requirements of modern telemetry, M2M communication, WAN and legacy serial applications. Rugged 3G and 4G products are designed to provide reliable data communications to resource hungry applications in areas such as meteorology.

Business challenge

Monitoring a coastline as vast and remote as Australia's is challenging for any authority. It requires a full suite of data to be uploaded every minute of everyday across multiple locations. This was the challenge facing Australia's Bureau of Meteorology when implementing its component of the Australian Tsunami Warning System.

The Australian Bureau of Meteorology used NetComm to develop a robust and reliable warning system for the Australian coastline. NetComm turned to Sierra Wireless to integrate reliable and advanced wireless connectivity to their networking devices.

NetComm was commissioned to develop rugged CallDirect 3G routers for mounting on offshore and onshore stations to ensure greater connection reliability while reducing the costs associated with having PC units attached to each station," said David Stewart, Managing Director, NetComm.

Many of the installations are within cellular range of the shoreline and include radar units that collect data from sensors to monitor sea level changes. These sea level data is collated and uploaded to the Bureau's headquarters where it is combined with tidal measurements, seismic readings and data from a variety of other ocean sensors to form the basis of regional tsunami alerts.



Sierra wireless AirPrime Embedded Wireless Module

The installation and operation of sensor equipment in remote and offshore locations required a robust wireless solution. After careful consideration, NetComm selected the AirPrime MC Series module as it is a proven solution already used in critical networking devices.

“With lives depending on the protection offered by the Tsunami Warning System it was crucial for us to use a reputable supplier for premium functionality and performance,” said Mr Stewart.

NetComm’s CallDirect cellular routers use AirPrime modules to offer uninterrupted high-speed broadband connectivity using the 3G network to eliminate the need for installing expensive PCs between the radar and modem. The antenna diversity of the AirPrime module improves fringe performance in remote locations such as the offshore stations of the Tsunami Warning System. Moreover, Sierra Wireless has been providing integration and verification support that guarantee the overall performances of NetComm CallDirect router.



Results

AirPrime embedded wireless modules provided an effective and reliable solution to help safeguard the lives of many people living in low-lying areas along Australia’s northern coast. Precisely because this solution is so cost-effective, greater numbers of people throughout the Asia-Pacific region can now benefit from increased levels of protection afforded by the network. AirPrime modules benefit NetComm by providing:

- High-speed connectivity
- Improved fringe performance thanks to antenna diversity
- Proven performance, quality and reliability

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- Easy integration

Solution:

- Sierra Wireless AirPrime MC Series Embedded Wireless Module

Key Benefits:

- High-speed connectivity
- Improved fringe performance thanks to antenna diversity
- Proven performance, quality and reliability
- Easy integration