# Business and Industrial Broadband Connectivity Solutions that Work



## Overview

**SOUTHERN REWORK FORMED IN 1995,** specializing in Point of Sale, scanning RF technology, hardware installation, and maintenance. With over 20 years' worth of satisfied customers, they've expanded service offerings to include:
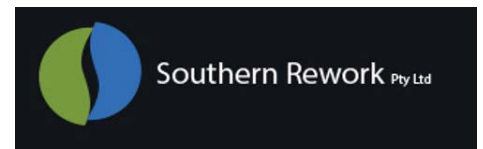
- Warehousing
- Data/communications cabling
- Software installation
- Project management

Based in Melbourne, Australia, Southern Rework's dedication to understanding the latest technology has earned them a reputation as a respected integrator, and they're enjoying growth with increasing partnerships with numerous diverse organizations both large and small, locally and nationwide – in markets from retail to technology.

The success of the company so far can be attributed to a commitment to quality and professional performance standards.

## Implementations

**"ENTERPRISE AND INDUSTRIAL CUSTOMERS RELY ON US TO PROVIDE AN INFORMED** recommendation on communications infrastructure," says Bruce McGregor, General Manager, Southern Rework. "These organizations focus on their core business and understand that communications infrastructure has a significant impact on operation efficiency, regulatory compliance, and employee safety. Our solutions touch the core of their business across their entire operation. We earn their trust every single day with our solutions."



"We recommend cnPilot™ E400 enterprise WiFi indoor modules and E500 enterprise WiFi outdoor modules, with an ePMP™ distribution network, managed by the cnMaestro™ management system. This package of technology is proven to be reliable and cost effective, and is now deployed for business and industrial customers in more than 50 sites on Australia's Eastern Seaboard."
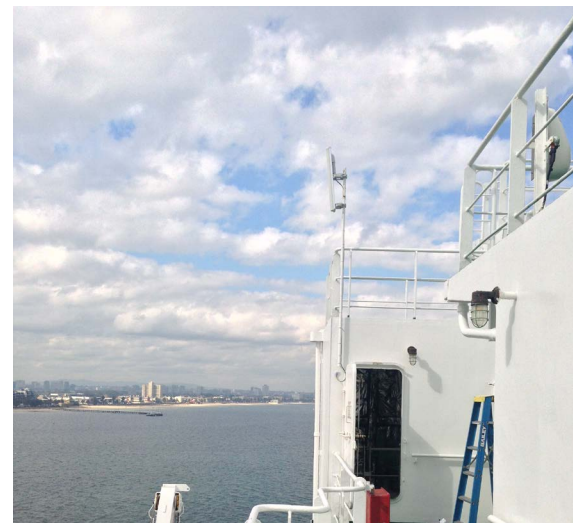
- BRUCE MCGREGOR, GENERAL MANAGER, SOUTHERN REWORK

"WiFi is the access layer where most interactions take place. We have deployed Cambium   Networks cnPilot™ indoor and outdoor solutions in many major installations. We recommend E400 enterprise WiFi indoor modules and E500 enterprise WiFi outdoor modules, with and ePMP™ distribution network, managed by the cnMaestro™ management system. This package of technology is proven to be reliable and cost effective, and is now deployed for business and industrial customers in more than 50 sites on Australia's Eastern Seaboard."

"Predominately these WiFi APs are installed in supermarkets and warehouses, which use multi-AP sites configurations, or cafés equipped with a single AP site," said McGregor. "We have also deployed to:

- Offices
- Shipping port and staging facilities
- Outdoor hotspots for businesses and industrial staging yards
- Homes of Southern Rework employees

"Our largest single E400 customer is a hospitality software vendor who is the source of our many single AP café sites," continued McGregor. "The use case is mobile devices (typically iOS) running hospitality applications. This has proven to be a simple, efficient, ongoing rollout. Initially, we had introduced the Cambium cnPilot E400 while they were in the midst of evaluating the Zebra AP7522E. For the customer, the AP7522E was expensive, difficult to deploy consistently – there were ongoing unresolved issues around iOS devices maintaining connectivity, and at the time, there was no cloud solution from Zebra. We were initially asked to help resolve the iOS connectivity issues. We'd been evaluating the cnPilot E400 at the time, and left an E400 with the customer's support centre for their consideration. After testing the E400, the customer is placing recurring orders for the cnPilot solution."

"In shipping and transportation, we have deployed ePMP 1000 wireless broadband links in ship-to-shore communications. The scenario here consists of two ships and two ports. The ships sail between the ports daily and, while in port, use the ePMP links for crew intranet/internet access. The ePMP links are deployed with sector antennas and have been trouble free since the initial deployment in 2014. The significance of this deployment is that each link is in effect 'broken' daily at the departure port and automatically re-establishes itself at the destination port."

## Southern Rework Differentiation as an Integrator

**"WE DON'T LEAVE ANYTHING TO CHANCE," SAID MCGREGOR. "WE DEPLOY THESE TECHNOLOGIES BY**
configuring and testing them at our facility and then shipping them to the customer location at the café. The café staff physically deploy the AP, typically where their existing modem or router is located. Frequently, the chosen location is traditionally not the best site for an AP, as it tends to be in a cupboard or under a counter. Regardless of the AP location, the cnPilot E400 provides excellent WIFI coverage."

"Network management is vital to the success of any deployment. The cnMaestro management system is as much a part of the success of this program as is the AP itself. On the rare occasion we have had a problem, they've been quickly resolved remotely via cnMaestro. The management system enables us to quickly:

- Diagnose connectivity issues

- Change and manage passkeys

- Re-deploy network configuration settings

- Manage and deploy software updates"

"cnMaestro tools make our support role much simpler and less invasive to the end users, dramatically reducing downtime, and increasing network performance and end user satisfaction. We know before our customer if there is an AP offline, and we can diagnose connection issues without going to site. cnMaestro facilitates this without adjusting firewalls, or port forwarding.

## Solutions

**"IN THE RECENT MONTHS, ABOUT HALF OF OUR DEPLOYMENTS HAVE DISPLACED MOTOROLA/ZEBRA**
products," said McGregor. "We are also attracting many new business users who are upgrading from domestic modem/routers with wireless technology."

**WIRELESS BACKHAUL**

| *e*PMP 1000 Point-to-Point Backhaul | |
|---|---|
| Frequency | 2.4 and 5 GHz |
| Throughput | 200 Mbps in a 40 MHz channel |

**WIRELESS DISTRIBUTION**

| *e*PMP 1000 Distribution Network Solution | |
|---|---|
| Frequency | 2.4 and 5 GHz |
| Throughput | 100 Mbps in a 20 MHz channel |

| *e*PMP 2000 Distribution Network Solution | |
|---|---|
| Frequency | 5 GHz |
| Throughput | 100 Mbps in a 20 MHz channel |
| Hypure Technology | Smart Beamforming and Intelligent Filtering for interference mitigation |

**WIFI ACCESS**

| *cn*Pilot™ E400 Enterprise Indoor WiFi Access Point |
|---|
| 802.11ac dual band access point with MIMO |
| 16 SSIDs supporting 256 concurrent users |
| Cloud-managed via cnMaestro. On-site controller option available |

| *cn*Pilot™ E500 Outdoor WiFi Access Point |
|---|
| 802.11ac dual band access point with MIMO |
| 16 SSIDs supporting 256 concurrent users |
| Cloud-managed via cnMaestro. On-site controller option available |

## Why Southern Rework chose Cambium Networks technology:

- **Price that meets** the needs of customers seeking an enterprise class WiFi solution, with a low total cost of ownership (TCO) over the long term.

- **Availability** of hardware and software technology ready for immediate installation.

- **Ease of Deployment** that reduces the time and skill level required for installation, ensuring availability of dependable broadband access.