STI Engineering
Communications & Electronics Engineers

incorporating RFInnovations
Leaders in Wireless Data

Emergency Response Data Radio System

- 5 Watts
- 100% duty cycle
- Forward error correction
- Discrete outputs for RF status
- Complete real time control via management interface

In an emergency the ability to effectively manage and communicate with emergency response units can mean a greater capability to protect and preserve the community and the environment.

The emergency services of the Australian Capital Territory have committed to use data radio technology to improve the effectiveness and coordination of their attendance to an emergency.

Using the Crescendo radio modems the emergency services can now use their private mobile data network to supplement existing voice systems and provide 2D and 3D visualisation of the emergency resources and emergency area.

The STI Engineering Crescendo VHF data radio is connected to an Australian Technology Information (ATI) in-vehicle data and information system fitted to all emergency vehicles. The central coordination centre has the capability to receive real-time GPS location of vehicles, points of interest and even jpeg pictures.

The biggest problem with coordinating an emergency response is that they are at a different location each time, and often many kilometres from the nearest infrastructure. To counter this problem the data network can operate without fixed infrastructure. The in-vehicle information system uses the Crescendo RF status outputs to coordinate the network minimizing data collisions and to maintain vehicles that can operate as end nodes as well as store-and-forward repeaters.

Utilising the 5 Watt output power and multiple mobile store-and-forward repeaters the network can cover geographic regions far greater than traditional fixed systems.

The system also utilises the radio's in-built Forward Error Correction to minimise the need for application retries and assist in maintaining synchronisation of the flexible network structure through deterministic message timing.

STI Engineering

STI Engineering Pty Ltd

ABN 97 065 523 579

22 Boulder Road Malaga 6090
Western Australia

Telephone: +61 8 9209 0900
Facsimile: +61 8 9248 2833
Email: sales@stiengineering.com.au
Web: www.stiengineering.com.au