

A dramatic scene of firefighters battling a massive fire. In the foreground, several firefighters are visible from behind, wearing orange and silver protective gear and carrying air tanks. They are using high-pressure hoses to spray water onto a towering wall of orange and yellow flames that fills the upper half of the frame. The scene is set outdoors on a grassy area.

# **SIMOCO CONNECTED FIREFIGHTER**

**PROVIDING COMMUNICATIONS FOR  
FIREFIGHTERS IN MISSION CRITICAL  
SCENARIOS, WHERE SAFETY AND  
TIMELY RESPONSE TO INCIDENTS  
ARE PARAMOUNT**

**simoco**  
wireless solutions





## The Connected Firefighter

# Introduction

Firefighters need fast, reliable communications with clear audio, better safety systems and situational awareness to help them plan their response and be ready for the unexpected. They face some of the harshest conditions on the planet.

Their communications technology needs to be able to withstand extreme heat, remain operational in difficult to reach areas and deliver high fidelity while experiencing high levels of background noise and interference. Reliable communications are essential in mission critical situations as this can be the difference between success and failure - sometimes between life and death. Simoco delivers value to fire and rescue services not only via world-class technology but also unrivalled levels of delivery and support throughout the entire solution lifecycle, from strategy and design to implementation and maintenance.

Simoco has been providing fire and rescue organisations resilient solutions to keep them safe and connected spanning the last 8 decades. Firefighters are challenged every day to keep their communities safe from fires in populated cities, wild bush fires, floods, environmental hazards and much more. Using our trusted technology and experience in mission critical communications, firefighters can be rest assured that their communication will get through.

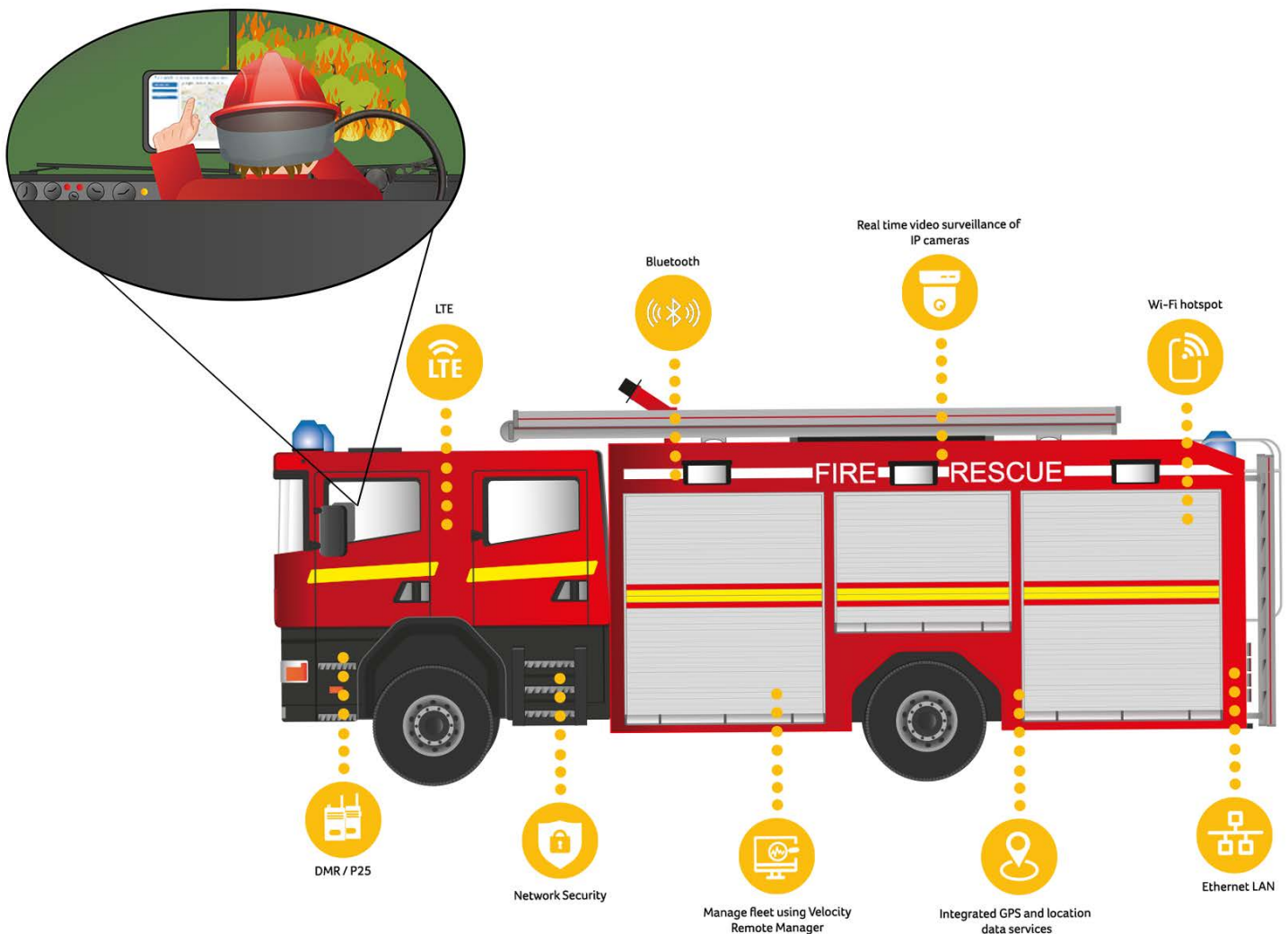
# Velocity a unique solution for the fire industry

A connected fire truck with an effective on-board communications system provides reliable connectivity when fire fighters need it most. It integrates previously unconnected systems which help reduce OPEX costs and provides increased operational health and safety.

Simoco's unique intelligent communication solution, Velocity will transform communications for firefighters. Velocity provides a converged communication network of multiple bearers such as Digital Mobile Radio (DMR), Long Term Evolution (LTE) and provides a host of connectivity options such as Wi-Fi, Bluetooth, Ethernet LAN ensuring voice and data will always get through.

Firefighters responding to an emergency response will stay connected to colleagues at the scene and also to control room operational staff. Firefighters can connect either through radio devices for mission critical communication or use smartphones and tablets to access critical information over the best bearer. This results in keeping the entire fire ground connected, regardless of roles, locations or devices that are used.

A growing number of public safety agencies such as fire are increasing use of tablets in the field and this trend will continue as mobile devices provide flexibility and enhanced data collecting functions. Velocity provides firefighters the ability to view personnel on a map, access to pre-fire plans, allow storage of photos, complex building maps and much more.



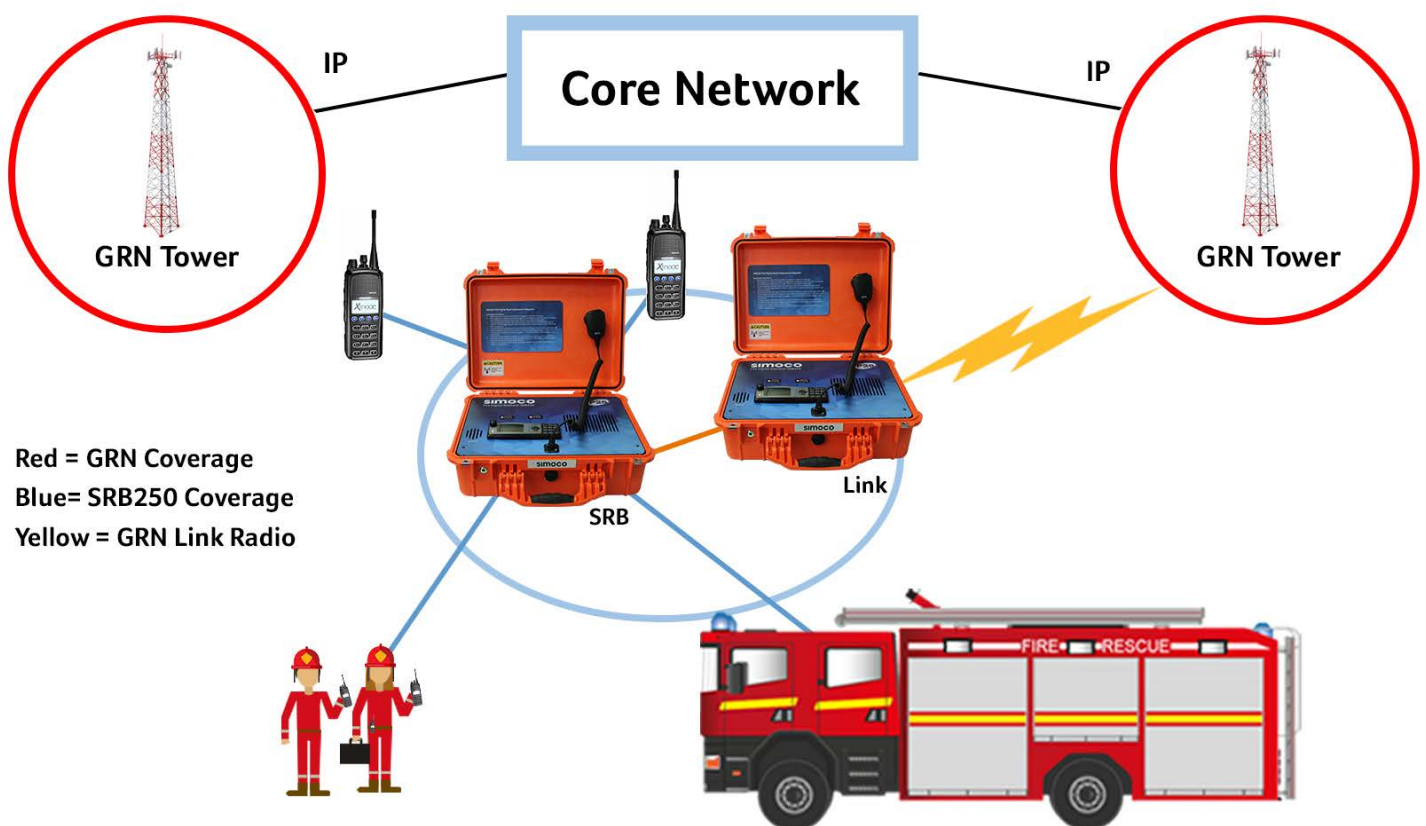
# Rapid Deployment Repeater Solutions

Setting up two way radio communications at an emergency incident can be a challenge. Incidents such as bushfires raging in the wild, outbreaks of fire in urban areas, occurrence of natural disasters such as localised flooding or emergency mission tactical scenarios require public safety agencies to have the right communications technologies in place before these emergencies hit.

The Simoco SRB250 is a transportable rapid deployment repeater that is designed to provide radio coverage to a critical incident, emergency situation or extends existing Public Safety systems, either analogue or APCO Digital P25. It provides deployable “on demand” coverage for vehicle and portable radio users in VHF or UHF. It is an ideal solution to keep firefighters connected.

## Features

- ▶ P25 repeater perfect for ruggedised field use and rapid deployment
- ▶ Inbuilt duplexer
- ▶ Simple deploy and repeat mode (single button, closed box)
- ▶ High duty cycle operation with open lid, generously heat sinked power amplifier
- ▶ 25 Watt transmit power
- ▶ Battery state of charge LED indicators
- ▶ Network interface via link radio
- ▶ P25 transparent repeat function, repeats encryption intact, regenerates P25 frames
- ▶ Long battery life
- ▶ Excellent heatsinking for cool operation at high power
- ▶ Remote control of repeater via P25 status messages
- ▶ Inbuilt AC mains battery charger
- ▶ Water resistant Pelican package
- ▶ LiFePO4 battery technology





# P25 your partner in public safety communications



In high-stress and extreme situations, efficient team communication can be the difference between life and death. Firefighters and incident commanders need a radio that works every time, without distraction or doubt. Emergency service organisations such as fire agencies rely on resilient radio systems with coverage in harsh conditions and remote often inaccessible areas. Simoco Wireless Solutions' consultative approach means that fire agencies can benefit from radio systems that work according to their operational requirements.

Building on decades of experience, Simoco have long been providing ruggedised and reliable P25 mission critical communications for the fire industry. We offer a broad range of P25 technologies and devices, so that every project we take on is bespoke to that organisation. We have a wealth of experience in delivering P25 projects worldwide including for the Department of Environment, Land, Water and Planning (DELWP) in Australia. Our extensive P25 product range is trusted by public safety agencies across the world.



Simoco P25 radios, infrastructure and AVL systems provide affordable, robust communication and tracking solutions with a wide range of options and functionality. P25's large cell sizes and relatively high power mobiles make it suited for large geographies with medium population densities. Where population densities are low and large areas are to be covered, P25 Simulcast offers an economical and scalable solution.

## P25 Phase 2

P25 Phase 2 available in 2022.



# DMR complete end-to-end DMR solutions for the fire industry

Clear radio communications is essential for fire fighters in order to keep the public safe. Simoco Xd is built on DMR standards with a cloud-based distributed architecture that does not require expensive and vulnerable central switching hardware. Simoco Xd is also DMR Tier III compliant, thereby eliminating supplier lock-in associated with systems that use proprietary arrangements for routing traffic.

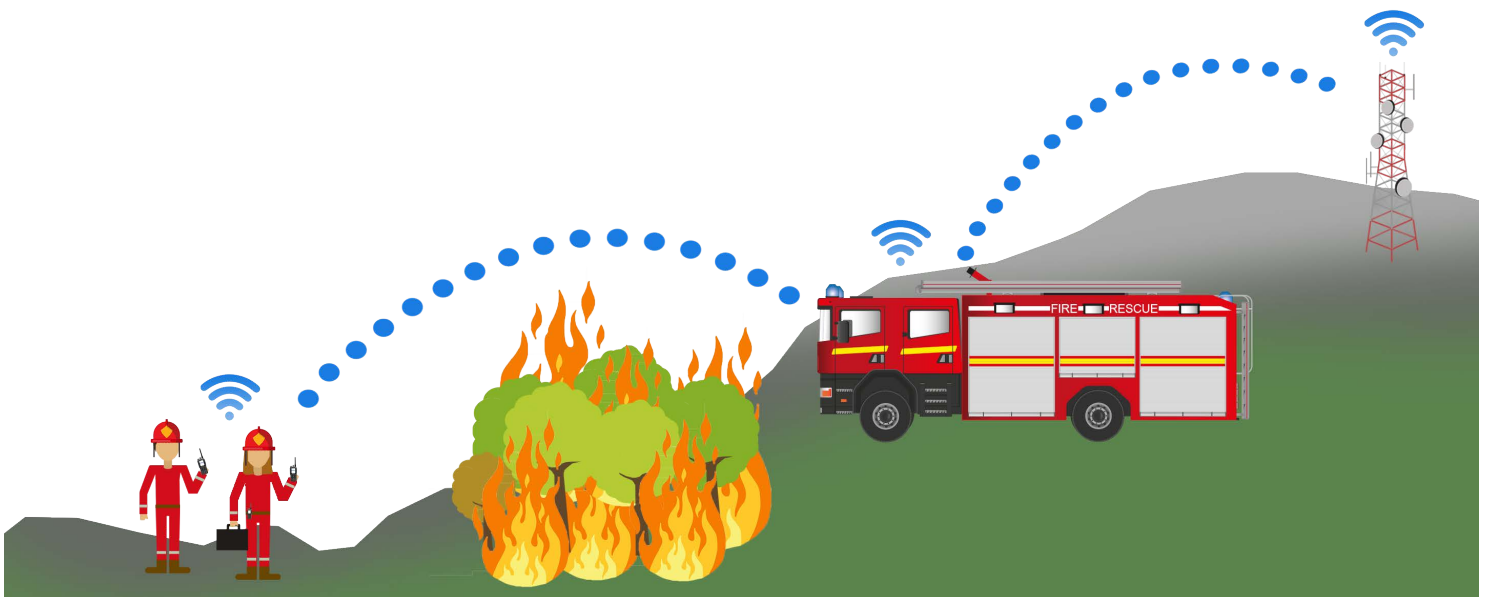
Our rich heritage and outstanding expertise as a radio and wireless communications systems integrator means we can design, build and operate complete solutions from terminals to infrastructure and applications. Operational teams can communicate clearly with a range of Simoco DMR terminals that provide enhanced features such as full duplex calling and AES256 encryption. Additional safety features such as GPS, intelligent man down and lone worker provide the protection of firefighter personnel in challenging environments.

Background noise is prevalent in the fire industry from noisy sirens, engines roaring and equipment running sounds levels regularly exceed 85dBA. Simoco's noise cancelling accessories provide clearer communications specifically designed for noisy environments.

## DMR Coverage Extender

Harsh environments always provide a challenge often proving to be the most difficult when it comes to upholding a communications network – most often due to poor signal. Simoco's DMR Coverage Extender (DCE) ensures firefighters never find themselves disconnected.

DCE improves portable radio coverage for personnel by using the higher power of the mobile radio within the vehicle to extend the range of the portable back to the radio system. This can be installed in a fire truck where DCE can extend your radio network when firefighters are outside of the vehicle, inside of a building or in any marginal coverage area. Firefighters can extend all of the benefits of DMR to their portable radio devices; including GPS, Man Down, Lone Worker and other core features.



# Wireless solutions built to drive efficiency



## All in one intelligent communication solution

Our solutions provide an affordable and best in class intelligent communications which consolidate all your devices and peripherals providing your fire fighters the reliability and resilience it needs from a mission critical communication network.

## Wi-Fi hotspot

Fire trucks enabled with Wi-Fi coverage can provide communications for fire fighters when responding to fires. Access to extensive information from the vehicle, they can identify sites with hazardous materials and access building plans to determine the best method of access, and better protect emergency personnel and citizens.



## Real time video surveillance streaming

Our solutions rely on constant mobile connectivity which makes possible to monitor security from a remote location and alert authorities immediately when problems arise.

## Network Security

Fire agencies are tasked to follow proper cyber security governance policies and mitigate networking risks to protect sensitive information which is sent back to headquarters. Velocity is designed with security in mind and includes the use of advanced security protocols such as virtual private networks (VPN). Other security features include setting up Demilitarized Zones (DMZ), MAC filtering, IP filtering, port filtering and port forwarding provide a standards-based security solution for connecting and managing remote assets, enabling customers to guard against malicious access to sensitive data.



## Real time monitoring, maintenance and updates

Using Velocity Remote Manager allows firmware updates, configurations and maintenance to your wireless on board device from a remote location while ensuring that sensitive data stays safe.

## Location data services

Accurate location data is essential as lives often depend on it. Our solutions are fully equipped with integrated GPS providing location-based data for computer-aided dispatch and fleet management applications which help locate firefighters in need.



## Complete fleet management for control room operations

Your fire fighters can use our software with integrated geofencing to track vehicle routes and driver behaviour on the road. The intelligence in our devices allows control room managers to monitor route efficiency, look for redundancies or wasted time, and reconfigure routes for maximum effectiveness ensuring fire fighters can respond to fires as quickly as possible.

## Centrally manage your fleet of fire trucks

Minimise one-off vehicle troubleshooting by monitoring, managing, and analysing connectivity and security issues from anywhere.





# simoco

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