

## **Critical Communications for Fire Fighters** Voice and data solutions to increase fire fighter safety and support operations





# **Powerful Solutions for Fire-Fighters**

Effective and reliable communications can make the difference between life and death. Nowhere is this more evident than in fire-fighting, when multiple hazards can endanger life, often escalating quickly and without warning.

Sepura's communications solutions are designed with firefighters in mind, to enable safer operations, greater efficiency and improved situational awareness.



Our radios are already trusted around the world by numerous fire services and other public safety organisations. By utilising the full power of Sepura's solutions, these organisations are able to deploy powerful communications for voice and data that can be relied on, no matter the operational environment.





## The Digitally Connected Firefighter Adding applications and wireless programming to support critical communications

#### **OVER THE AIR PROGRAMMING**

Sepura can now deploy Over the Air Programming to support their SC Series radios. This enables fleet administrators to update or personalise any radio connected to an approved, secure WiFi network, minimising operational problems caused by staggered upgrades or by radios being out of service for programming.



#### **REMOTE UPGRADE:**

SC Series radios can be remotely updated by WiFoi to install or download amends to the radio configuration, AppSPACE apps, Phonebooks, license files or control and triggers the other critical updates.

#### UNINTERRUPTED COMMS:

Downloading files to the radios foes not interrupt any TETRA communication. Once downloaded the user is s till in installation when appropriate.

**SECURITY GUARANTEED:** 

#### An end to end secure and authenticated connected is established before any download can begin. Data downloads are encrypted and authenticated to ensure integrity.

#### **AppSPACE & APPLICATIONS**

AppSPACE is Sepura's flexible applications environment and allows the simple, yet secure development and deployment of powerful apps on it's SC2 Series TETRA radios, allowing fire fighting teams to operate more effectively and more safely.

Our apps are designed to connect people, devices and systems to deliver critical information to the right people, at the right time.



Our capabilities include apps for hand-portable radios and mobile devices communicating with control rooms via middleware applications. These applications are capable of performing business logic and data analysis.

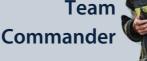
Sepura's applications are scalable solutions that evolve with customers' critical communications needs.



## Applications to support Team Commanders Mobilisation and Incident Response



Send photos and images to the TETRA radio: Image data can be sent directly to the Team Commander's radio from the Control Room, ahead of arrival at the scene - for example incident imagery, maps of building plans.





Automatically link your team and their radios: As Firefighters take radios in the fire truck, RFID or Bluetooth tags fixed to their uniforms automatically link the identity of each radio with the name or ID of each fire-fighter.

- Team Commanders can identify origin of emergency call if voice transmission is possible
- Provides a recorded audit trail of radio usage by individual, date and time which can be used to review operational procedures

Sepura can develop bespoke applications to support specific working models or administrative requirements. Please talk to you sales representative to see how we can support your ongoing operations and keep your staff safe.



# Request procedures of information on the radio:

The Team Commander can request and view incident specific information on their TETRA radio that will assist with managing the incident more efficiently. For example, the Team Commander can quickly access organisational databases to view the protocol for containment of hazardous chemicals.



## **Applications to Support the Operational Team**

All of our application examples described below can monitor your team's critical equipment and send an alert to the team commander or fire vehicle, allowing them to take appropriate action before the situation becomes critical.

### **Operational Team**



#### Air Level Alert:

Our radio apps can connect wirelessly to your breathing apparatus to enable team alerts when an officer's air alert is low.

An audio and vial alert can be sent to the Team Commander's radio, allowing them to provide additional support if required.



#### **Biometrics Alert:**

Devices which monitor the fire fighter's biometrics and vital signs such as heart rate monitors can be connected to the radio via Bluetooth.

When pre-set parameters are exceeded, an alert is sent to the fire-fighter and shared via the direct network to Team Commanders.



#### **Report Indoor or Outdoor Location:**

Report on individual's location and status, whether they are indoor our outdoor, to manage safety and best deploy resources.



#### Automate radio actions:

Through the flexible Automate application, the radio can be preset to automate actions that enhance reporting and improve on site safety. These can include:

- automated switch to DMO mode if TETRA network signal is lost
- automated messages sent to team or control if certain actions are undertaken, eg particular equipment deployment
- Access enabled to open equipment if within proximity to devices





# **Sepura Radio Terminals Overview**

### SC20 Hand-held Radio

- IP68 waterproof, submersible radio with unique WaterPorting<sup>™</sup> technology
- Large 2.4" high-resolution easy to view screen for use in all weather and working conditions
- High RF output and increased receiver sensitivity ensures maximum coverage in fire operations
- Bluetooth, RFID and Wi-Fi capable
- Hardware ready for LTE to provide path to future mission critical Public Safety LTE
- Batteries and accessories compatible between SC Series and STP9000 Series hand-portables





## SCG22 Mobile Radio

- Wi-Fi and applications ready mobile radio with identical user interface to hand held radios
- Wide range of installation options for use in control rooms, truck cabs and engine bays
- Proven gateway to extend communication into areas beyond network coverage
- Wide range of accessories for audio, power control and installation
- Secure communications, supporting the ETSI and SFPG recommended Air Interface Encryption and End to End Encryption standards





## **Sepura Radio Accessories**



### IP67 Ultra CSM

- Sepura's flagship speaker microphone for use in the most demanding environments, supporting water porting technology, Nexus fire accessories and 3.5mm audio connection.
- Change talkgroup using 15 position rotary dial
- Bright LED shines during Man Down/Emergency activation
- Large Push to Talk (PTT) button for ease of use
- WaterPorting<sup>™</sup> speaker and microphones
- Multi-coloured bezels for easy team identification
- Multi-coloured PTT extenders

## WaterPorting<sup>™</sup> Technology

Our unique WaterPorting<sup>™</sup> technology enables clear communications in all extreme wet weathers – either torrential downpours or heavy spray from firefighter backwash . WaterPorting<sup>™</sup> is designed to continually shed water from the audio pathways permitting intelligible audio to be transmitted and received. WaterPorting<sup>™</sup> even allows clear audio immediately after being retrieved from total submersion.





## **Additional Accessories**

- Flexible options to charge in headquarters and from vehicles, to best support emergency operations
- Wide range of audio accessories to suit operational need
- Long lasting batteries, designed to be charged again and again without performance degradation

