



# STP8200

## HAND-PORTABLE

Sepura's STP8200 Hand-Portable combines ruggedness and high performance with a **streamlined** user interface. The STP8200 has been designed to offer a cost beneficial solution to a cross section of users, ranging from traditional voice only PMR, right through to those who require enhanced personal safety and information security.

### TOUGH

The STP8200 has been designed to perform in the most physically challenging environments where users demand ruggedness and durability. In addition, the radio offers excellent water and dust resistance.

### HIGH PERFORMANCE

The STP8200's RF power is fully customisable up to **1.8 Watts** in TMO, DMO and when used as a **DMO Repeater**, delivers reliable communications when most needed. Coverage is extended beyond the reach of typical hand-held radios.

STP8200 also has the largest front-facing loudspeaker available in a TETRA hand-portable; it provides powerful, clear audio and alerting, even in the noisiest environments.

### FEATURE-RICH

The STP8200 boasts a comprehensive set of features and options, including GPS and **Man-Down** functionality both improving user safety. Secure encryption to ensure information remains confidential and extensive data service support. These features offer both excellent functionality and the potential to cope with additional future requirements.

# THE **STP8200** IS A RUGGED TETRA HAND-PORTABLE

## EMERGENCY OPERATION

THE EMERGENCY KEY IS LOCATED ON THE TOP OF THE RADIO IN A RECESS BETWEEN THE NAVI-KNOB™ AND THE ANTENNA - FACILITATING EASE OF ACTIVATION AND ENHANCING USER SAFETY.

## NAVI-KNOB™ OPERATION

WHEN USED IN COMBINATION WITH THE MODE KEY PROVIDES QUICK ACCESS TO TALK GROUPS, VOLUME ADJUSTMENTS, STATUS MESSAGING, TEXT ENTRY AND PROFILE SELECTION.

## LARGE TACTILE PRESS-TO-TALK KEY

LOCATED ON THE SIDE OF THE RADIO IMMEDIATELY BELOW A SOFT KEY.

## RUGGED ACCESSORY CONNECTOR

WITH SECURE SCREW DOWN FEATURE TO ENSURE A RELIABLE CONNECTION FOR A COMPREHENSIVE RANGE OF AUDIO ACCESSORIES.

## ERGONOMIC KEYS

LARGE, WELL SPACED KEYS, TO ENSURE EASY, ACCURATE, OPERATION EVERY TIME.

## POWERFUL AUDIO

THE LARGE LOUDSPEAKER DELIVERS LOUD, CLEAR AUDIO, EVEN IN THE NOISIEST ENVIRONMENTS.

## MAN-DOWN PERSONAL SAFETY OPTION

MULTI-DIMENSIONAL MOTION SENSING TECHNOLOGY IS USED TO AUTOMATICALLY PROVIDE MAN-DOWN DETECTION AND REPORTING.

## SMA ANTENNA CONNECTOR

DELIVERS 1.8 WATTS OF RF POWER IN TMO, DMO AND REPEATER MODES. INCREASES RANGE BY UP TO 20% WHEN COMPARED TO STANDARD TETRA HAND-PORTABLES, EXTENDING NETWORK AND DIRECT MODE COVERAGE.

## GPS OPTION

INTEGRAL SENSITIVE GPS ALLOWS MANAGEMENT TO EFFICIENTLY ALLOCATE RESOURCES AND TRACK USERS IN AN EMERGENCY OR WHEN 'MAN-DOWN' ACTIVATED.

## MISSED EVENT INDICATOR

A BLUE LED INDICATES THAT A CALL OR MESSAGE HAS BEEN MISSED.

## CLEAR MONOCHROME DISPLAY

CRYSTAL CLEAR VIEWING UNDER ALL LIGHTING CONDITIONS

## FEATURE ACTIVATION KEYS

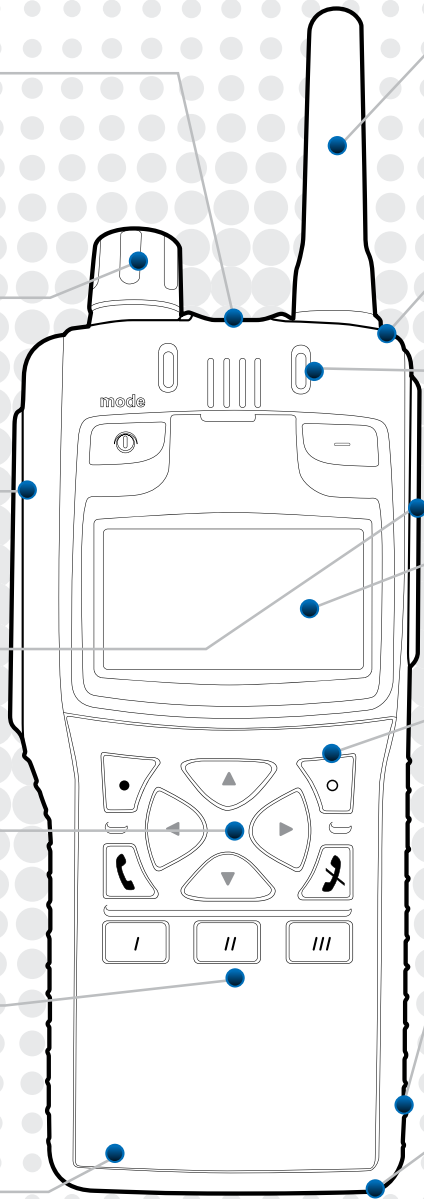
PROVIDE INSTANT ACCESS TO FREQUENTLY USED FEATURES VIA A SINGLE KEY PRESS.

## DMO REPEATER OPTION

'REPEATS' DIRECT MODE VOICE AND DATA TRAFFIC, EXTENDING COMMUNICATION RANGE BETWEEN PARTICIPATING RADIOS.

## PRODUCT DESIGN

TESTED FAR BEYOND ITS IP54 CLASSIFICATION THE STP8200 HAS BEEN DESIGNED WITH AN INTERNAL METAL CHASSIS AND TOUGHENED PLASTIC CASING.



TOUGH • HIGH PERFORMANCE • FEATURE RICH



Product is not actual size

### STP8200 HAND-PORTABLE:

- Rugged
- High Power RF and Audio
- Fully integrated, ultra-sensitive GPS option
- Automatic Man-Down reporting option
- Smart Card based End-to-End Encryption requires only a software upgrade for activation<sup>2</sup>
- DMO Repeater ready (frequency efficient Type 1A option) with Call Participation
- A wide range of market leading accessories
- Supported by Sepura's market-leading software tools, including Radio Manager

The STP8200 is a rugged TETRA hand-portable radio designed and built to exceed industry standard IEC529 IP54 for dependable day-to-day use.

### FEATURE-RICH TETRA RADIOS

The STP8200 Hand-Portable offers a display area of 4 lines of 14 characters. The wide viewing angle and crystal clear monochrome display allows user to view the display in all lighting conditions, from **direct sunlight** to complete darkness.

Sepura was the 'first in TETRA' to introduce **Large Character Mode** on hand-portable radios. On the STP8200 all text can be displayed in large format (double normal size) or very large format (approximately four times normal size) to give better legibility.

The User Interface (UI) is common to all other Sepura hand-held and vehicle radios. By employing the same easy-to-use UI system, training costs can be substantially reduced and users can move easily between radio types during their working day.

Eight customisable **feature activation keys** support rapid access to functions considered important to the operational role of the radio user.

### AT THE FOREFRONT OF USER SAFETY

The fully integrated **GPS** receiver in the STP8200 is capable of processing extremely low strength signals meaning that 'clear sight of sky' is no longer essential. In addition to the standard position reporting, the STP8200 can send current GPS location information when an Emergency Call, Lone Worker or Man-Down alert is initiated.

The **Man-Down** reporting option uses multi-dimensional motion sensing technology to monitor both the orientation and motion of the radio user. If certain parameters are exceeded, Man-Down functionality will automatically place the radio into the emergency mode generating an alert, complete with location report, directed to a predefined address.

This technology enables control rooms to track both the movement of staff and to be automatically alerted in the case of a field worker becoming incapacitated.

### ... AND SECURITY

Information security is critical to a growing number of agencies, so the STP8200 can be supplied with any of the TETRA air interface encryption algorithms plus support for Smart Card based End to End Encryption<sup>2</sup>.

### ACCESSORIES AND MANAGEMENT TOOLS

The STP8200 is supported by a wide range of audio accessories including an advanced car kit allowing hands-free voice operation and data connectivity whilst in the vehicle.

A choice of battery capacities and battery charging options are available to meet today's operational needs. The powerful and flexible Sepura Radio Manager tool allows radio configuration and software changes to be managed remotely, saving time and reducing costs.

These accessories and management tools are all shared with STP8000 and STP8100 radios, reducing the cost and simplifying the management of mixed terminal radio fleets.



# STP8200

## HAND-PORTABLE

### DIMENSIONS

Height: 133mm  
 Width: 61mm (54mm)  
 Depth: 32mm (Standard Battery)  
 Depth: 37.5mm (High Capacity Battery)

### WEIGHT

With Standard Battery: 250g  
 With High Capacity Battery: 275g

### FREQUENCY BANDS

299 - 344MHz – STP8230  
 344 - 400MHz – STP8235  
 380 - 430MHz – STP8238  
 407 - 473MHz – STP8240  
 806 - 870MHz – STP8280

### POWER SUPPLY

7.4V (nominal) Lithium Polymer Battery Packs  
 Intelligent Reporting Batteries  
 1260mAh Standard Battery  
 1400mAh Mid Capacity Battery  
 1880mAh High Capacity Battery  
 Hi Cap battery exceeds 19 hours for 5/5/90  
 duty cycle @ 1.8 watts.

### RF PERFORMANCE

RF Power – MS Power Class 3L (1.8 Watts)  
 RF Power – customisable for TMO/DMO/REP  
 Adaptive Power Control Supported  
 Receiver Class – A and B  
 Receiver Static Sensitivity -112dBm  
 Receiver Dynamic Sensitivity -103dBm

### PRODUCT PERFORMANCE

Audio Power - >1 Watt  
 Operational Temperature (Conformance tested)  
 -20°C to +60°C  
 Operational Temperature (Min/Max)  
 -30°C to +70°C<sup>6</sup>  
 Storage Temperature -40°C to +85°C<sup>1</sup>  
 Dust & Water Protection IP54  
 Shock, Drop & Vibration ETS 300 019

### PRODUCT OPTIONS

GPS  
 Man-Down Alarm<sup>4</sup>  
 DMO Repeater Type 1A  
 Air Interface Encryption Algorithm  
 Smart Card based End to End Encryption  
 Wide Range of Languages including Chinese,  
 Cyrillic, Korea, Arabic and Turkish

### DISPLAY AND USER INTERFACE

Active LCD area 37 x 19 mm  
 High visibility Transflective  
 Monochrome Display,  
 Normal, Large & Very Large Mode Text  
 8 Configurable Feature Activation Keys (7 + Alarm Key)  
 Call History  
 Telephone/Radio Phone Book (max. 2000  
 entries)  
 9900 Talkgroups in TMO/DMO  
 255 Talkgroup Folders  
 Quick Groups  
 Transmit Inhibit with on/off Status messaging  
 Fixed & definable Scan Lists  
 Remaining Charge Time Indication  
 Missed Event Indicator

### VOICE SERVICES

Full Duplex Calls (to MS and PABX/PSTN)<sup>3</sup>  
 Half Duplex Calls (Individual and Group)<sup>3</sup>  
 Priority Call  
 Emergency Call (Pre-emptive Priority)  
 Talking Party Identity  
 Calling Line Identity Presentation  
 DTMF dialling (from address book)<sup>3</sup>  
 Dynamic Group Number Assignment  
 Background (hidden) Groups  
 DMO Individual Call<sup>3</sup>  
 DMO Group Call  
 DMO Emergency Call  
 DMO "Intelligent" Emergency Call  
 Ambience Listening  
 Privacy Mode  
 Whisper Mode  
 Group Focus

### DATA SERVICES AND APPLICATIONS

Status Messaging (in TMO & DMO)  
 SDS Messaging (in TMO & DMO)<sup>5</sup>  
 Concatenated SDS Messaging  
 Multi-slot Packet Data  
 Circuit Mode Data  
 TETRA Pager and Call Out  
 Short Data Applications<sup>5</sup>  
 Lone Worker Feature  
 Man-Down Feature

### SECURITY SERVICES

Authentication  
 Class 1, 2 and 3 TETRA Security  
 Air Interface Encryption  
 TEA1/2/3/4 Algorithm Supported<sup>2</sup>  
 SMART Card E2E Encryption Support<sup>2</sup>  
 Embedded E2E Encryption Support<sup>2</sup>

### LOCATION BASED SERVICES

GPS Integrated Option  
 -190dBw (-160dBm) Tracking Sensitivity  
 GPS Based Compass  
 Over the Air GPS reporting using the following  
 protocols:  
 • ETSI Location Standard Reporting (LIP)  
 • NMEA  
 • Sepura Compact Message

### DMO REPEATER SERVICES (LICENCE REQUIRED)

DMO Voice Repeated  
 DMO Tone Signalling Repeated  
 Group Status & SDS Repeated  
 Type 1A Efficient Operation over one  
 Frequency Channel  
 Presence Signal Support  
 Emergency Call  
 Monitoring & Participation in Calls

### CONNECTIVITY

TETRA V+D  
 PEI Data via RS232 and USB Data Cables  
 Audio Connections via Rugged  
 Accessory Connector  
 High Speed Interface for Feature-rich  
 Audio Accessories  
 Audio and Data Connection via  
 Facility Connector

### ACCESSORIES

Personal Charger  
 Vehicle DC Charger  
 1+1 Desktop Charger  
 6+6 Desktop Charger  
 12 and 24 Way Battery only Chargers  
 Wide Range of Antennas  
 Stud and Belt Attachments  
 Rugged Belt Clip  
 Rugged and Soft Leather Cases  
 Basic IP55 Remote Speaker Microphone  
 Advanced IP55 Remote Speaker Microphone  
 with Integral Antenna  
 Hands-Free Kit  
 Personal Ear Pieces  
 Public Order Accessories  
 Semi-Covert Accessories  
 Feature-rich Car Kit  
 Serial and USB Data Leads  
 4 & 8 Way Programming Pods

1 – as defined in ETSI EN300 019-2-1 and EN300 019-2-2

2 – availability is subject to export licence.

3 – selectable from phonebook and incoming call list.

4 – the Man-Down Alarm should in no way be regarded as a substitute for compliance with appropriate risk assessment and other safety procedures and practices. To enable Man-Down a Software License is also required.

5 – entering text is not possible on Chinese language variants.

6 – operating at temperature extremes may limit some aspects of operational performance

Sepura's policy is to continually improve its products and services. The features and facilities described in this document were correct at publication, but are subject to change without notice.