

# STP9000

## 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

380-430MHz – STP9038  
 407-473MHz – STP9040

### POWER SUPPLY

7.4V (nominal) Lithium Polymer Battery Packs  
 Intelligent Reporting Batteries  
 1260mAh Standard Battery  
 1400mAh Mid Capacity Battery  
 1880mAh High Capacity Battery

### RF PERFORMANCE

RF Power – MS Power Class 3L (1.8 Watts)  
 RF Power – customisable for:  
 TMO/DMO/Repeater  
 Adaptive Power Control Supported  
 Receiver Class – A and B  
 Receiver Static Sensitivity - 112dBm  
 (-115dBm typical)  
 Receiver Dynamic Sensitivity - 103dBm  
 (-106dBm typical)

### 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>4</sup>  
 Storage Temperature -40°C to +85°C<sup>1</sup>  
 Dust & Water Protection IP67  
 (waterproof, submersible and dustproof)  
 Shock, drop & vibration ETS 300 019  
 Salt fog: MIL810E 509.4<sup>4</sup>; duration 24hr salt<sup>5</sup>  
 Salt water: submersion, rated at 1m depth for  
 30 minutes<sup>5</sup>

### RFID PERFORMANCE

Internal tag – HITAG S2048, short range,  
 125KHz, ISO11784 and ISO11785 compliant  
 Range: 1 cm from back of individual radio  
 box pack  
 Passive technology user accessible storage –  
 512 bits, pre programmed (user can overwrite)  
 32 bit unique identifier  
 Serial number  
 Hardware code  
 TEI

### PRODUCT OPTIONS

GPS  
 Bluetooth<sup>6</sup>  
 Man-Down Alarm<sup>3</sup>  
 DMO Repeater Type 1A  
 Air Interface Encryption Options  
 End to End Encryption Options  
 Wide Range of Languages and keymats supported  
 STProtect – in-building tracking solution<sup>6</sup>  
 Smart Card Support

### DISPLAY AND USER INTERFACE

Large 30x38mm Active LCD Area  
 Hi-Resolution display (176 x 220 pixels)  
 Transflective TFT Display, 262K colours  
 Normal, Large & Very Large Mode Text  
 17 Configurable Feature Activation Keys  
 Vibrate Call/message  
 2 Context keys  
 Call History  
 Phone Book (2000 entries)  
 9900 Talkgroups in TMO/DMO  
 5000 Multi-Level Talkgroup Folders  
 Intelligent Search Facility  
 Quick Groups  
 Transmit Inhibit with on/off Status Messaging  
 Fixed & definable Scan Lists  
 Remaining Charge Time Indication  
 Missed Call Indicator  
 Intuitively-enhanced user interface  
 Choice of three user interface presentation styles  
 (Compatibility mode, Grid mode and List mode)  
 Haptic technology to enhance key tactility when  
 used with heavy gloves  
 Twist and zoom portrait image viewer  
 Auto-capitalisation during SDS text entry  
 Wake-on-alarm function  
 Ambiance Listening  
 Privacy Mode  
 Whisper Mode  
 Group Focus

### VOICE SERVICES

Full Duplex Calls (to MS and PABX/PSTN)  
 Half Duplex Calls (Individual and Group)  
 Priority Call  
 Emergency Call (Pre-emptive Priority)  
 Intelligent Alarm Reporting  
 Talking Party Identity  
 Calling Line Identity Presentation  
 DTMF Dialling and Post-Dial Tone Entry  
 MSISDN Dialling  
 Abbreviated Dialling  
 Dynamic Group Number Assignment  
 Background (hidden) Groups  
 DMO Individual Call  
 DMO Group Call  
 DMO Emergency Call  
 DMO Intelligent Emergency Call  
 Independent Volume Control

### DATA SERVICES AND APPLICATIONS

Status messaging (in TMO & DMO)  
 SDS Messaging (in TMO & DMO)  
 Auto – capitalisation on SDS text entry  
 Concatenated SDS messaging  
 Multi-slot packet data  
 Circuit mode data  
 TETRA paging and call out  
 WAP browsing  
 Short Data Applications (SDAs)  
 Image & map storage on memory card  
 Lone-Worker feature  
 Missed event application

### LOCATION BASED SERVICES

GPS integrated option -192dBw (-162dBm)  
 tracking sensitivity  
 Over-The-Air GPS reporting using the following  
 protocols:  
 • ETSI location standard reporting (LIP)  
 • NMEA & Sepura compact messaging  
 GPS-based compass  
 Enhanced indoor start-up and acquire through  
 'predicted ephemeris'  
 Bluetooth Location System compliant  
 STProtect  
 RFID tag equipped

### SECURITY SERVICES

Authentication  
 Class 1, 2 and 3 and 3G Security  
 Air Interface Encryption  
 TEA1/2/3/4 Supported<sup>2</sup>  
 Smart Card E2E Encryption Support<sup>2</sup>  
 Embedded E2E Encryption Support<sup>2</sup>  
 In-Country E2E Encryption Algorithm Support<sup>2</sup>  
 Multiple E2E Algorithm Support<sup>2</sup>

### DMO REPEATER SERVICES (LICENCE REQUIRED)

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

### CONNECTIVITY

TETRA voice and data  
 Bluetooth support for voice and data (PEI)  
 PEI Data via RS232 and USB data cables  
 Accessory connections via Rugged Accessory  
 Connector (RAC)  
 High speed interface for feature-rich audio  
 accessories  
 Data connection via Facility Connector  
 MicroSD card slot (4GB max)  
 Passive 125KHz RFID tag  
 STProtect

### 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/without RF Antenna)  
 Hands-Free Kit  
 Personal Ear Pieces  
 Public Order Accessories  
 Semi-Cover Accessories  
 Feature-rich Car Kit  
 Basic 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. 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.

4. Operating at temperature extremes may limit some aspects of operational performance

5. 'Connector protector' must be enabled in customisation. An antenna, a battery and either an accessory or the STP9000 series RAC cover must be fitted

6. Bluetooth and STProtect hardware options cannot both be fitted at the same time.

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.

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# STP9000

## HAND-PORTABLE



The STP9000 is the flagship of a **truly innovative** series of TETRA hand-portable radios, designed for users who want the best. It features a large colour screen and full keypad, offers **superb functionality** coupled with **extremely robust hardware** and meets the ever-increasing demands and requirements of sophisticated users worldwide.

### ROBUST

**Waterproof, submersible, dust-proof and marine-hardened**, the STP9000 has the design and construction values that enable it to withstand the most harsh and challenging environments. Its **IP67 environmental protection rating** and Connector Protector technology, to counter the potential corrosive damage from salt water and salt fog, mean that the STP9000 can be used in a huge range of wet, salt-laden and dusty environments.

### EASY TO USE

The STP9000 provides an **enhanced user interface**, uniquely offering **three different presentation styles**, which users can select according to their personal preference, thus reducing training costs and improving choice.

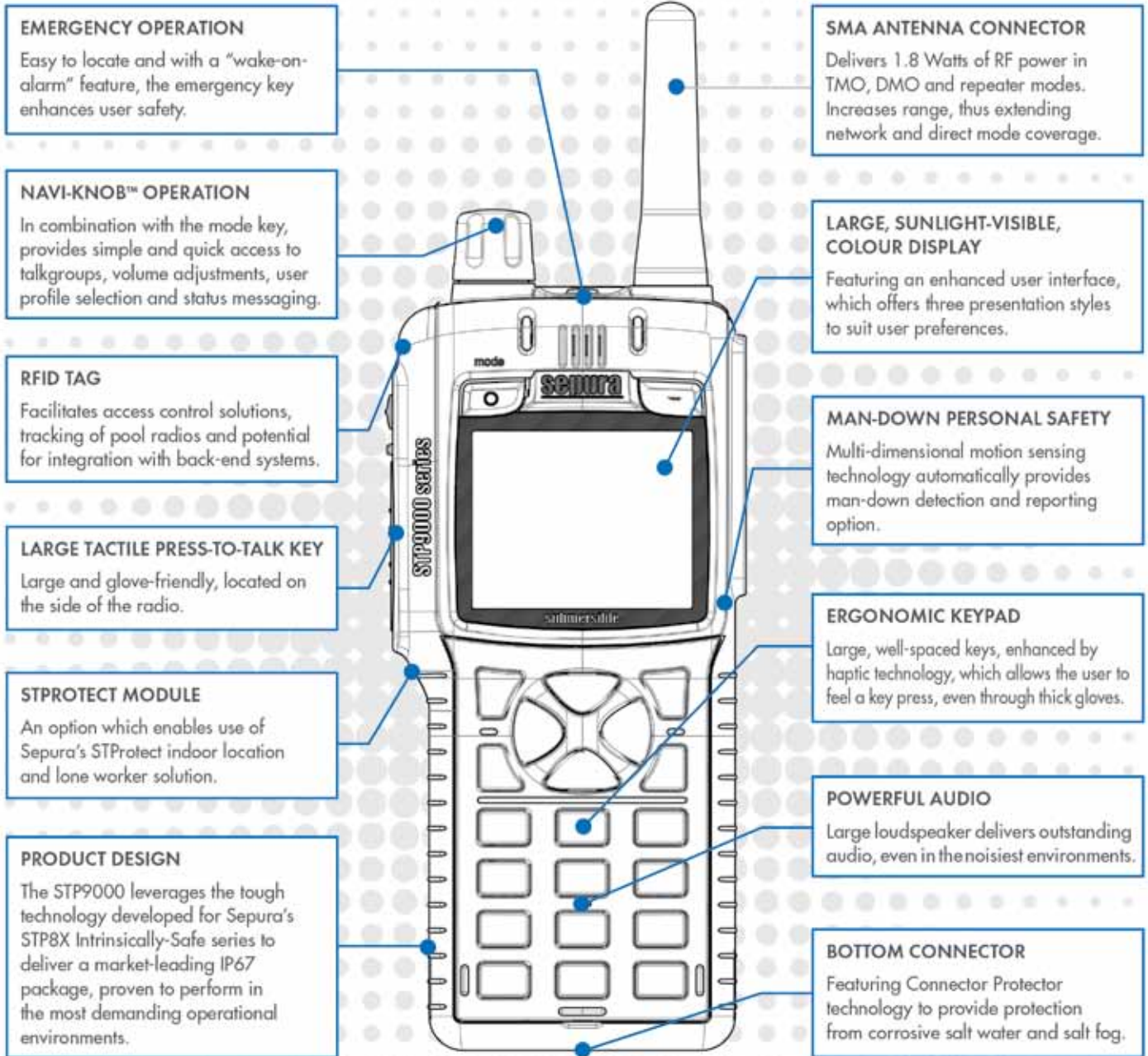
### SMART TECHNOLOGY

Sepura has brought a variety of "smart" keypad and display technologies to the STP9000, including both **"haptics"**, for improved tactility when used with gloved hands, and a **"Twist and Zoom"** feature, for improved image display. The addition of a **built-in RFID tag** will also be of considerable benefit to many users who wish to automate the logistics of issuing and tracking pool radios.

### USER SAFETY AND EFFICIENCY

The innovative hardware design of the STP9000 blocks out background noise, whilst its advanced audio equalisation technology provides a radically **enhanced full-duplex** telephony audio experience. With **extended GPS** capabilities, Man-Down and the STProtect indoor location solution as options, Sepura has put user safety at the heart of the STP9000's design.

# The **STP9000** is a rugged TETRA hand-portable



TOUGH • HIGH PERFORMANCE • FEATURE-RICH



Product is not actual size

## STP9000 HAND-PORTABLE:

- Robust, 'tough technology' inherited from state-of-the-art development for the STP8X ATEX/IECEX
- **Market-leading IP67** (submersible, waterproof and dustproof) rating
- High power RF and audio, with **improved full-duplex audio** experience
- Intuitive, enhanced UI, with **3 presentation styles** (Grid, List and Compatibility modes)
- **Integral RFID tag** allows rapid asset tracking of pool-issued radios
- **Fully integrated Bluetooth™** option
- Enhanced key tactility through haptic-based technology
- Automatic Man-Down reporting option
- Wake-On-Alarm activation
- Micro-SD memory card slot
- End-to-End encryption option
- 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 2.

Focused on offering new functional possibilities and removing obstacles to efficient and effective operation, the STP9000 offers a range of benefits that make it **more Reliable, Robust and Secure:**

**Robustness** – The STP9000 boasts an IP67 (submersible, waterproof and dustproof) environmental protection rating, which means that it will still function after having been submerged in up to 1m of water for up to 30 minutes. In addition, new Connector Protector technology provides **marine-hardened protection** against the corrosive damage that salt water and salt fog can cause to exposed connectors.

**Improved ease of use** – The STP9000 provides an enhanced user interface, which offers three different presentation styles, which users can select according to their personal preference:

- Compatibility mode allows existing Sepura users to be immediately familiar with on the STP9000.
- Grid and List modes will appear familiar to new users who may be accustomed to user interfaces on smartphones or other GSM devices, rather than a radio.

These new presentation styles lower training costs for both new and existing Sepura users

**Smart keypad and display technology** – Following detailed user feedback, Sepura has added "haptic" technology to the STP9000. Haptics produce a physical movement of the radio, felt through the hand, which confirms to gloved users that the key press has been successful. In addition, the "Twist and Zoom" feature uses smartphone technology to allow a portrait image to be zoomed to full-screen size, enabling the user to see full detail of an image, such as a missing person, as they rotate the radio. The feature also enables access to details concerning the image.

**Resource and information management** – Tracking radios, particularly in a pooled system, can be difficult, so the STP9000's **built-in RFID tag** will be of considerable benefit to many users. In addition, the micro SD card slot makes it easy to store and manage data, such as photos, maps, missing person information and hazardous chemical data.

**Enhanced user safety** – In addition to Man-Down, enhanced GPS and STProtect Capability, the **Wake-On-Alarm** feature, which enables the STP9000 to be switched on and make an emergency call by pressing the emergency button, also helps to protect users.

**Reduced cost of ownership** – The STP9000 is compatible **not only with all audio accessories**, batteries and chargers from Sepura's STP8000 hand-portable range, but also with its market-leading Radio Manager 2 fleet management tool and CMC encryption management suite - all factors which help organisations to maximise the value of existing investments.

**Indoor location capability** – An **STProtect module** can be optionally fitted within the radio. This is a key element of the STProtect complete indoor location and lone-worker protection solution. It allows organisations such as prisons, airports and industrial sites to track and protect lone workers, locate employees, control access to restricted areas and ensure the pre-defined security patrol routes are being adhered to.

