

# STP9100

## SERIES

### 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 – STP9138  
407-473MHz – STP9140  
806-870MHz – STP9180

#### POWER SUPPLY

7.4V (nominal) lithium polymer battery packs  
Intelligent reporting batteries  
1160mAh standard 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 & 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 +65°C<sup>4</sup>  
Storage temperature: -40°C to +85°C<sup>1</sup>  
Dust & water protection to both IP67 & IP65  
(waterproof, submersible, sprayproof & dustproof), plus tested for complete 8hr shifts  
'in the pouring rain'  
Shock, drop & vibration ETSI 300 019  
Salt fog: MIL810E 509.4(I); duration 24hr salt<sup>5</sup>  
Salt water: submersion, rated at 1m depth for 30 minutes<sup>5</sup>

#### PRODUCT OPTIONS

GPS  
Man-Down alarm<sup>3</sup>  
DMO repeater type1A  
Air Interface encryption options  
End-to-End encryption options  
Wide range of languages supported  
MicroSD card  
Coloured bezels  
Smart card support

#### RFID performance

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

#### 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  
Four configurable feature activation keys  
Vibrate call/message  
Two context keys  
Call history  
Phonebook (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, grid & list mode)  
Haptic technology  
Twist and zoom portrait image viewer  
Wake-on-Alarm feature  
Sepura Picture Message  
Smart menu  
(compatibility, list and grid)  
Wake-on-Alarm function  
Sepura Picture Message  
Smart menu

#### 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  
MSISDN dialing  
DTMF dialling from address book<sup>8</sup>  
Dynamic group number assignment  
Background (hidden) groups  
DMO individual call<sup>8</sup>  
DMO group call  
DMO emergency call  
DMO intelligent emergency call  
Independent volume control  
Enhanced full duplex ear sealing  
Ambience listening  
Privacy mode  
Whisper mode  
Group focus

#### DATA SERVICES AND APPLICATIONS

Status messaging (in TMO & DMO)  
SDS Messaging (in TMO & DMO)<sup>7</sup>  
Concatenated SDS messaging<sup>7</sup>  
Battery status advised immediately on start-up  
User expandable up to 4GB via MicroSD card  
Multi-slot packet data  
Circuit mode data  
TETRA pager & call out  
Short Data Applications (SDAs)  
Image & map storage on memory card  
Lone Worker feature  
Missed event application  
Up to 30 quick status messages

#### 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 & acquire through  
'predictive ephemeris'  
RFID tag equipped

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## Going further in critical communications

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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## SECURITY SERVICES

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Authentication  
Class 1, 2, 3 & 3G TETRA security  
Air interface encryption  
TEA1/2/3/4 Supported<sup>2</sup>  
Smartcard 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)

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DMO voice repeated  
DMO tone signaling repeated  
Group status & SDS repeated  
Type 1A efficient operation over one RF channel  
Presence signal support  
Emergency call  
Monitoring & participation in calls

## CONNECTIVITY

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TETRA voice & data  
PEI Data via RS232 and USB data cables  
Accessory connections via rugged accessory connector (RAC)  
High speed interface for feature-rich audio accessories  
Audio & data connection via facility connector  
MicroSD card slot (4GB max)  
Passive 125KHz RFID tag

## ACCESSORIES

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Personal charger  
Vehicle DC charger  
1+1 desktop charger  
6+6 desktop charger  
12- and 24-way battery-only chargers  
Two-way, battery-only charger for vehicles  
Wide range of antennas  
Stud & belt attachments  
Rugged belt clip  
Rugged & 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-covert accessories  
Feature-rich and basic car kit  
Serial & USB data leads  
Four- & eight-way programming pods

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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 licence 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 STP9100 series RAC cover must be fitted. Lightly rinse in fresh water after salt exposure to prevent salt crystal build-up

7 – Through use of Sepura pseudo-keypad. Chinese text entry not supported

8 – Selectable from phonebook or incoming call list



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