

STP9000

SERIES

HAND-PORTABLES



DIMENSIONS

Height: 133mm (excluding antenna and rotary)
 Width: 61mm (54mm)
 Depth – standard battery: 32mm
 Depth – high-capacity battery: 37.5mm

WEIGHT

With standard battery: 250g (excluding antenna)
 With high-capacity battery: 275g (excluding antenna)

TETRA FREQUENCY BANDS

344-400MHz – STP9035
 380-430MHz – STP9038
 407-473MHz – STP9040
 806-870MHz – STP9080

POWER SUPPLY

7.4V (nominal) lithium polymer battery packs
 Intelligent reporting batteries
 1160mAh standard battery¹
 1880mAh high-capacity battery¹

TETRA RF PERFORMANCE

RF power:
 MS power Class 3L (1.8W)
 MSPD power Class 3L (1.8W)
 DMO repeater power Class 3L (1.8W)
 RF power customisable for:

- TMO/DMO/DM-repeater
- Adaptive power control
- Receiver class A & B
- Receiver static sensitivity -112dBm (-115dBm typical)
- Receiver dynamic sensitivity -103dBm (-106dBm typical)

AUDIO PERFORMANCE

Speaker audio power: >1W
 Rugged accessory connector (RAC)²

ENVIRONMENTAL PERFORMANCE

Operational temperature (conformance tested) -20°C to +60°C

Operational temperature (min./max.) -30°C to +65°C³
 Storage temperature -40°C to +85°C⁴
 Dust & water protection to IP65 & IP67

- IPx5 (weatherproof)
- IP6x (dustproof)
- IPx7 (waterproof – submersible, 1m depth for 30mins)

Shock, drop & vibration: ETS 300 019 5M3
 Salt fog: MIL810E 509.4(l); duration 24hr salt⁵
 Salt water: submersion, rated at 1m depth for 30 mins⁵

RFID PERFORMANCE

Internal tag: HITAG S2048, short range, 125 KHz, ISO11784 & ISO11785 compliant
 Range: 1 cm from back of individual radio box pack
 User accessible storage: 2048 bits, passive technology pre-programmed (user editable):

- 32-bit unique identifier
- Serial number
- Hardware code
- TEI

PRODUCT OPTIONS

GPS
 Man-Down alarm⁷
 DM-Repeater Type-1A
 Air Interface encryption
 End-to-end encryption
 End-to-end encryption smart card support
 Wide range of languages supported
 Micro SDHC card up to 32GB
 User-changeable coloured bezels for easy identification

DISPLAY & USER INTERFACE

Screen:

- 30 x 38mm active LCD area
- High-resolution display (176 x 220 pixels)
- Sunlight-visible Transflective TFT display, 262K colours

Menu:

- Intuitively-enhanced user interface
- 'Favourite feature' shortcut & event notification bar, with missed call indicator LED
- Choice of three user interface presentation styles (compatibility, grid & list modes)
- Customisable top-level screen content
- Customisable SmartMenus supporting 100s of intuitively arranged soft keys
- Quick change menu for rapid & intuitive selection of talkgroups, status & user profile
- Custom zoom/normal, large & very large mode text
- 'Twist & zoom' portrait image viewer
- Night mode to reduce low-light glare in vehicles
- Invert display for easy viewing whilst lapel- or belt-mounted
- Customisable lock screen image
- Customisable user profiles e.g. 'covert', 'quiet', 'in a meeting' & 'loud'

Controls:

- Dual-language alpha-numeric keypad option
- Four-way navigation keys
- Three context keys for intuitive menu interaction
- Three configurable feature-activation side keys: blind-find & glove-friendly
- 12 configurable keypad feature activation keys
- Manual & automatic keypad lock
- Hard-capped keys
- Large, easy reach, blind find, glove-friendly PTT
- Blind-find emergency key

- Single rotary
- Haptics:
- Vibrate on call/message
- Haptic technology for enhanced key tactility when used with gloves

TALKGROUP MANAGEMENT

- 9900 talkgroups including TMO & DMO
 - 50 DGNA
 - 5000 folders
 - Five multi-level structure
 - Quick groups/quick folder
 - Home group
 - Group toggle
 - Talkgroup stack toggle
- Talkgroup selection:
- Single or user-defined scan list (UDSL)
 - 20 UDSL each with 10 talkgroups
- Folder selection:
- 4987 folder scan list of 22 scanned talkgroups each
 - Each folder scan list with 75 talkgroups
 - 10 editable folder scan lists
 - Background talkgroups in folder scan list

NETWORK

Multiple home networks
 Up to 30 configurable networks
 Simple & mutual authentication
 Aliasing with Radio User Assignment (RUA)

- Radio user-initiated log-on/log-off process
- Dispatcher-initiated log-on/log-off process

Preferred location area
 Fixed location area

PHONEBOOK

- 2000 contact names
- Up to six numbers per contact (to a max. of 6000 stored numbers)
- 64 contact folders including favourite folder

VOICE SERVICES

Individual/group/broadcast call
 Half-duplex (individual & group)
 Route pre-emptive half-duplex call to internal loudspeaker
 Half-duplex audio toggle
 Full-duplex calls (to MS & PABX/PSTN)
 Full-duplex auto-answer
 Independent volume control
 Speed, one-touch & direct dialling
 Call priority
 Calling/talking party identification
 DTMF/MSISDN/abbreviated dialling
 Ambience listening
 Privacy & whisper modes
 Group focus
 Transmit inhibit with on/off status messaging
 Call history
 Multiple alert tones

DMO SERVICES

DMO individual & group call
 DMO emergency & intelligent emergency call
 DM-repeater inter-working call
 DM-gateway inter-working call
 Channel-only talkgroup
 DM-Gateway talkgroup pair

DATA SERVICES & APPLICATIONS

Single- & multi-slot packet data
 WAP support:

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- WAP 2.0
 - WAP browsing via TETRA
 - WAP shortcuts embedded in SDS for instant data access
 - WAP access OTA via TETRA or second data bearer
- WAP onboard:
- Micro SDHC-based WAP sites for instant access to intelligence, images, maps & text
 - Data maintained by Radio Manager2
- PEI access
- High-speed programming

Messaging:

- SDS messaging (in TMO & DMO)
- Picture Messaging via SDS or packet data
- Concatenated SDS messaging
- Auto-capitalisation in SDS text entry
- Status messaging (in TMO & DMO)
- 350 predefined status messages (up to 140 Unicode characters)
- Up to 30 quick status messages

Callout & paging:

- TETRA simple callout/full callout/paging alert

AT commands:

- ETSI & enhanced commands
- via PEI serial port profile over Bluetooth & USB
- Voice call control supported

Over the air control & programming:

- Status-triggered functions
- Group management via Sepura Public Profile (SPP)
- Reprogramming over Wi-Fi with Radio Manager2

Battery status at start-up

Missed event application

Major radio status change notification application

User-expandable up to 32GB via Micro SDHC card

SAFETY FEATURES & APPLICATIONS

Emergency call:

- Pre-emptive priority
- Hands-free live mic operation
- Emergency voice call & alerting to current or defined talkgroup
- Emergency status/SDS/location report to defined control user/group
- Full-duplex or half-duplex emergency calls
- Manual activation via red emergency key
- Automatic activation via Man-Down⁷ option
- Automatic TMO/DMO selection
- Emergency through DM-repeater/DM-gateway
- Loud, distinct audio & visual indication
- Silent alarm call

Man-Down⁷:

- Immobility detection
- Unusual inclination detection
- Customisable alerting (see Emergency Call Capability)

Lone-Worker feature

Blind-find emergency button

Wake-on-Alarm allows user to switch on radio & signal an emergency in one action

LOCATION-BASED SERVICES

GPS integrated option -192dBw (-162dBm) tracking sensitivity

Over-The-Air GPS reporting:

- ETSI location standard reporting (LIP)
 - NMEA & Sepura compact messaging
- Integral antenna plus active external antenna input option for use in sky obscured vehicles

GPS-based compass

On-board mapping capable⁶

Enhanced start-up & acquire through 'predictive ephemeris'

RFID tag equipped

- Glonass and BeiDou2 support⁶

SECURITY SERVICES

TETRA:

- Authentication
- Class 1, 2,3 & 3G TETRA security
- Air Interface encryption TEA 1/2/3/4⁹
- Smart card E2E encryption⁹
- Embedded E2E encryption⁹
- Enhanced security module (ESM)
- In-country E2E Encryption algorithm⁹
- Multiple E2E algorithm⁹
- Temporary disable (stun)
- Permanent disable (kill)
- 600KEK crypto groups

DM-REPEATER SERVICES (LICENCE REQUIRED)

DMO voice repeated

Status & SDS 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 & data

USB support for data

Accessory connections via rugged accessory connector (RAC)²

Audio & data connection via bottom connector (sDAC)

MicroSDHC card slot (32GB max.)

Passive 125KHz RFID tag

RAC – rugged side connector²:

- Rapid tool-less fitting & removal
- Unique anti-overtighten design
- Salt-resistant seal

sDAC – bottom connector:

- Rapid tool-less quarter-turn twist-lock fitting & removal
- Connector Protector salt protection

PROGRAMMING CAPABILITY

High-speed programming

Radio Manager2 compatible

Micro SDHC contents manageable via Radio

Manager2 On-screen programming progress bar

ACCESSORIES

Chargers:

- Personal rapid charger
- Vehicle rapid charger
- 1+1 charger
- 6+6 desktop charger
- 12 way battery only charger
- 24 way battery only charger
- Two way in-vehicle charger

Batteries:

- Standard capacity battery¹
- High capacity battery¹

Carrying accessories:

- Stud & belt attachments¹¹
- Carry cases & holsters

Car kits:

- Basic car kit
- Complete car kit
- STP/SC Series Basic Car Kit

Programming Leads:

- Serial + USB

1 – New standard (300-01174) & high-capacity (300-01175) batteries, along with the high power Class 3 feature licence, are required to operate the SC20 in high power RF Class 3 mode. Use of older STP batteries will limit SC20 operation to RF Class 3L

2 – Compatible with Sepura STP9000 & STP8000 RAC-based accessories

3 – Operating at temperature extremes may limit some aspects of operational performance

4 – As defined in ETSI EN300 019-2-1 & EN300 019-2-2

5 – Connector Protector must be enabled in customisation. An antenna, a battery & a Sepura accessory or sRAC cover must be fitted. Rinse in fresh water to prevent salt crystal build-up

6 – Future: please contact Sepura Product Management to discuss your requirements

7 – The Man-Down alarm should in no way be regarded as a substitute for compliance with appropriate risk assessment & other safety procedures & practices. To enable Man-Down a software licence is required

8 – SDAs must be reformatted for use with an SC20

9 – Availability is subject to export licence

10 – STP 1+1 chargers shipped since mid-2013 are compatible

11 – Existing STP belt clips may adversely affect broadband performance. SC20 belt clips are recommended



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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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