

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:

sepura

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.

0003_0419_V6_ENG
 Copyright ©2020 Sepura Limited. All rights reserved.
 For more information visit sepura.com

- 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

Bluetooth support for 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

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



sepura

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.

0003_0419_V6_ENG
Copyright ©2020 Sepura Limited. All rights reserved.
For more information visit sepura.com