# STP**9100 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

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°C4

Storage temperature: -40°C to +85°C1 Dust & water protection to both IP67 &

(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 water: submersion, rated at 1m depth for 30 minutes<sup>5</sup>

#### **PRODUCT OPTIONS**

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

#### **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 call8 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

#### **SECURITY SERVICES**

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



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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**)

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

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** 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

- 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 asoftware 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







