





A market-leading package...

Taking the core benefits and philosophy of its hand-portable range and applying them to meet the expectations and requirements of Intrinsically-Safe (IS) users worldwide has enabled Sepura to assemble a market-leading package.

Extensive and detailed market research have driven the development of the STP8X, which not only meets the latest ATEX/IECEx standards, but also gives users in markets as diverse as fire, oil and gas exploration, heavy manufacturing, chemicals, airports and the military, the features, functionality and benefits that they are looking for.

The new STP8X can be used in potentially explosive gas and dust environments, providing workers with critical communication in hazardous workplaces as varied as petrochemical plants, firegrounds and remote gas pipelines.



DELIVERING UNRIVALLED USER SAFETY

The STP8X actively improves the safety of workers through its combination of features. The highly-sensitive, integrated GPS receiver provides the ability to very accurately locate and monitor the movements of personnel via the radio, thereby improving user safety and resource management. Safety is further enhanced by the automatic "Man-Down" alarm, which is integrated into the Sepura GPS solution. It provides an immediate alarm to the control room and, audibly, to anyone in the immediate vicinity if the user falls or becomes immobile/trapped.

RUGGED DESIGN

Strong rugged design provides optimum reliability in harsh conditions. Sepura is known worldwide for its robust product design and it has taken this to a new level for its IS solution, complying with the newly clarified, highly-demanding, ATEX/IECEx tests for ruggedness.

AUDIO QUALITY

Loud, clear audio is fundamental to effective communication, but environments that necessitate the use of IS products are often noisy due to heavy machinery or plant. These hostile surroundings require workers to wear heavy protective clothing, including helmets, which can make it harder to hear clearly. Sepura has worked closely with IS users to design a radio and a range of accessories that deliver outstanding full- and half-duplex audio quality.

EASY TO USE

The simplified, highly-tactile, keypad with large button surfaces makes the STP8X the only TETRA IS radio designed to be easily used whilst wearing heavy gloves.

LONG BATTERY LIFE

With users frequently working long shifts and making significant numbers of calls, long battery life is crucial. Sepura's innovative design has ensured that long battery life has become a key benefit of the STP8X.

SCREEN LEGIBILITY

Crystal-clear clarity is fundamental when operating in demanding environments and the STP8X's large, hi-resolution colour display with 3 font sizes, including Very Large mode, ensures operation in difficult environments with reduced visibility. The large, clear display uses 'dual illumination' technology to ensure screen clarity under all light conditions.

ACCESS TO RADIO APPLICATIONS

There is a rapidly growing range of applications available to Sepura customers. These enable mission-relevant data to be rapidly sent to and from the STP8X in a format which enables it to interact automatically with back-end dispatcher systems or another radio. Radio Apps for job allocation by utilities, requesting Hazardous/Chemical data by emergency services or for fire service call-outs are already in use, but the potential for further developments is extensive.

INFORMATION SECURITY

Air Interface and additional "End to End" encryption options protect against eavesdropping and ensure the confidentiality of sensitive operational information.

FLEET INTEGRATION

The STP8X is compatible with Sepura's Radio Manager and other Sepura tools, reducing the total cost of ownership, allowing users to manage their fleets efficiently and carry out upgrades in a cost-effective manner.

UNRIVALLED USER SAFETY . AUDIO QUALITY . EASY TO USE



ACCESSORIES RANGE

The STP8X is supported by a comprehensive range of approved IS accessories which are designed to ensure safe and reliable operation and the loud, clear audio that is so vital in hazardous environments. The range allows users to tailor their solution to meet their own specific requirements.

A COMPLETE PACKAGE

The STP8X offers a complete package, with radio, accessories, enhanced functionality and the potential for a wide range of Radio Applications. Sepura has worked closely with ATEX users to design a radio that is not just Intrinsically-Safe but is also dependable and suitable for use in some of the harshest working conditions anywhere. Through the STP8X, Sepura has set the new standard for the TETRA IS market.

STP8X ACCESSORIES



Heavy Duty Helmet Headset



Heavy Duty Headset



Lightweight Boom Headset



Skull Mic Headset



Remote Speaker Mic



PL











STP8X

INTRINSICALLY SAFE HAND-PORTABLE

INTERNATIONAL IECEX SPECIFICATIONS

Gas Environment:

Protection by Intrinsic Safety: ib (one countable fault) Gas Group: IIC (and all lower groups IIB and IIA)
Temperature: T4 (135 °C and all lower groups T3, T2 and T1)
Equipment Protection Level: Gb (Gas Zone 1 and 2)

Dust Environment:

Protection by Intrinsic Safety: ib (one countable fault)

Dust Group: IIIC (conductive dust and all lower groups IIIB and IIIA) Equipment Protection Level: Db (Dust Zone 21 and 22) Enclosure rated to:IP6x (Dust tight enclosure)

EUROPEAN ATEX SPECIFICATIONS

Gas Environment:

ATEX directive 94/9/EC

Equipment Group: II

Equipment Group: II Equipment Group: I and 2)
Protection by Intrinsic Safety: ib (one countable fault)
Gas Group: IIC (Hydrogen and the lower classes including; IIB – Ethylene; and IIA – Propane)
Temperature: T4 (135 °C and all lower groups T3, T2 and T1)
Equipment Protection Level: Gb (Gas Zones 1 and 2)

Dust Environment: Equipment Group: II

Equipment Category: 2 (suitable for use in Zone 21 and 22)
Protection by Intrinsic Safety: ib (one countable fault)
Dust Group: IIIC (conductive dust and all lower groups IIIB and IIIA)

Equipment Protection Level: Db

Enclosure rated to:IP6x (Dust tight enclosure)

DIMENSIONS

Depth: 44mm

Height: 139mm Width: 61mm/54mm

FREQUENCY BANDS

380-430MHz - STP8X138 407-473MHz - STP8X140

POWER SUPPLY

7.4V (nominal) Lithium Polymer Battery Pack Intelligent Reporting Battery 1400mAh Battery

RF PERFORMANCE

RF Power - MS Power Class 4 (1W) RF Power – customisable for TMO/DMO/REP Adaptive Power Control Supported Receiver Class – A and B Receiver Static Sensitivity -112dBm Receiver Dynamic Sensitivity -103dBm

PRODUCT PERFORMANCE

Audio Power 1 Watt⁵ Operational Temperature -20°C to +55°C Storage Temperature -40° to +85°C¹ Dust & Water Protection IP67 Shock, Drop & Vibration ETS 300 019

PRODUCT OPTIONS

Micro SD Card (Up to 32Gb supported) Man-Down Alarm³

DMO Repeater Type 1A Air Interface Encryption Options
End to End Encryption Options Wide Range of Languages supported

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 8 Configurable Soft Keys 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 Large tactile keypad, capable of operation with thick 'Fire-ground' gloves

VOICE SERVICES

Full Duplex Calls (to MS and PABX/PSTN) Half Duplex Calls (Individual and Group) Priority Call Priority Call
Emergency Call (Pre-emptive Priority)
Intelligent Alarm Reporting
Talking Party Identity
Calling Line Identity Presentation
DTMF Dialling⁴
MSISDN Dialling⁴ Dynamic Group Number Assignment Background (hidden) Groups DMO Individual Call DMO Group Call DMO Emergency Call
DMO Intelligent Emergency Call
TMO/DMO Independent Volume Control

DATA SERVICES AND APPLICATIONS

Status Messaging (in TMO & DMO) SDS Messaging (in TMO & DMO)⁴ Concatenated SDS Messaging⁴ Multi-slot Packet Data TETRA Pager and Call Out WAP Browsing Radio Applications Image & Map Storage on Memory Card Lone Worker Feature Missed Event Application, indicator and soft key

LOCATION BASED SERVICES

GPS Integrated Option GPS Based Compass

Over The Air GPS reporting using the following protocols

•ETSI Location Standard Reporting (LIP)

•NMEA &

Sepura Compact Messaging

SECURITY SERVICES

Authentication Class 1, 2 and 3 TETRA Security Air Interface Encryption
TEA1/2/3/4 Supported²
SMART Card E2E Encryption Support²
BOS and Sectra smart card support² E2E Encryption Support²

DMO REPEATER SERVICES (LICENCE REQUIRED)

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

ACCESSORIES

USB Data Lead

Stud & Belt Attachments Leather Case Rugged Cases Rugged RSM Rugged 80mm Chest-Mounted PTT Rugged Throat Mic Rugged Skull Mic Rugged Overhead Dual Ear Defender-Style Headset & Boom Mic Single-Sided Ear Defender-Style Helmet-Attached Earphone & Boom Mic Lightweight Behind-The-Head, Single-Sided Headset & Boom Mic Hurricane-Style, Lightweight Direct-Connect

Headset & Boom Mic Plus In-Line PTT

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 – Through use of Sepura pseudo keyboard text entry

5 - Using internal STP8X speaker

Sepura's policy is to continually improve its products and services. The specifications, features and facilities described in this document are preliminary, they were correct at publication, but are subject to change without notice.

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