VS3000 GTW
VERSATILE VEHICULAR TETRA EQUIPMENT

SELEX
Communications
A Finmeccanica Company

VS 3000's powerful and flexible architecture is specifically designed for installation in cars, on fast motorboat or for fixed configuration.

The easy to use interface and solid construction make it an ideal mobile solution for professional users.

VS 3000 GTW - Versatile Vehicular Equipment

OVERVIEW

Wireless Interface

VS3000 has a Wireless interface to communicate with wireless audio accessories and to transfer information to/from a Pc or external instruments.

Repeater and Gateway

VS3000 can operate both as a TETRA Repeater and a Gateway, to both communicate without the presence of the network and to extend the coverage of the network itself.

Security

Authentication, **"Air Interface Encryption" and "End-to-End Encryption (E2E)"** offer a high degree of communication security and protect critical speech and/or data communications from potential eavesdroppers. VS3000 can operate with a range of both standard and user defined E2E encryption algorithms. The VS radio body is sturdy and **waterproof (IP66-IP67)**. A special tamper proof version of the VS3000 is available.

Packet Data (4 slot)

VS3000 supports the highest possible data rate capability for the TETRA equipment, with **multi slot Circuit Data and IP Packet Data** which can be used to improve file transfer, messaging, database interrogation/update and image/video transfer applications.

Built-in GPS

VS3000 includes a high sensitivity **internal GPS** to fix the location of the vehicle with an accuracy of a few metres.

Analogue mode

VS3000 can also operate as a conventional FM radio, so that professional users can talk to both analogue and TETRA equipment.

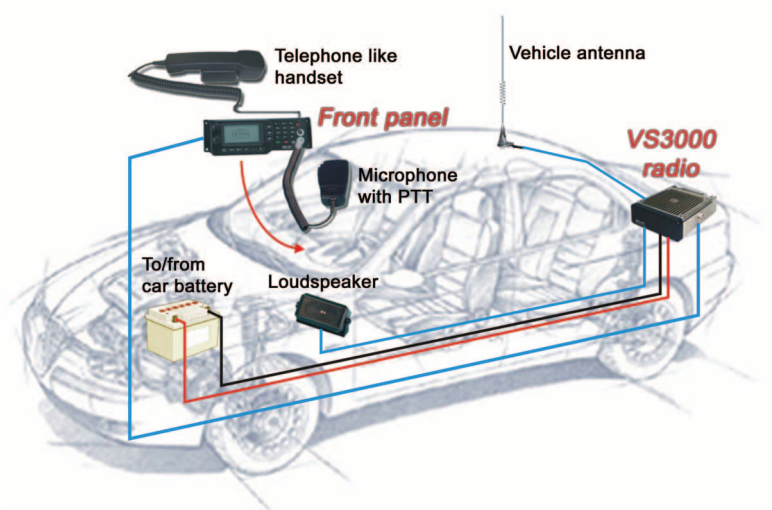
TMO/DMO FUNCTIONALITY

Voice services

- Individual Half and full duplex calls to TETRA and PABX / PSTN users
- Group calls (with Open Channel and Late entry)
- Emergency call (individual or group)
- Pre-emptive Priority calls (including freeing of resources)
- Short Number Addressing
- Calling Line Identity presentation
- Talking Party Identification
- DTMF Dialling

Data Services

- Status and SDS messaging
- Packet Data (single and multi-slot)
- Circuit Data (single and multi-slot)
- Concurrent services management capability for Voice calls and Packet Data Transmission



Security

- PIN code access
- MS Authentication
- Air Interface Encryption ETSI EN 300 392-7 TEA1/TEA2/TEA3
- E2E Encryption (IDEA and AES algorithm)
- Tamper protection option

Other Services

- DGNA (Dynamic Group Number Assignment)
- Phone book
- Call history
- Transmit Inhibit (TXI)
- Call authorised by dispatcher
- Priority group scanning
- Ambience listening (available soon)
- Chinese language (available soon)

REPEATER AND GATEWAY SERVICES

Repeater Services

- Individual voice calls (with or without presence checking)
- Group calls (also to open group - late entry)
- Emergency group call
- Call pre-emption
- SDS messaging
- Calling party identification

Gateway Services

- Individual and group calls (in either direction)
- Emergency group call (in either direction)
- Call pre-emption of existing call (in either direction) late entry
- Calling line identity presentation
- Talking party identification
- Monitoring of other Gateways




TECHNICAL DATA

Equipment type:	TETRA (TErrestrial Trunked RAdio) mobile radio with TEDS capabilities
Frequency bands:	• 380 to 430 MHz
(other on request)	• 410 to 470 MHz
Functional Modes:	Trunked Mode, Direct Mode, Direct Mode Repeater, Direct Mode Gateway
RF Power class:	• class 2 (10W 40dBm) ETSI EN 300 392-2 • class 3 (3W 35dBm) ETSI EN 300 392-2 • Adaptive Power control supported
RX Class:	Compliant ETSI ETS 300 392-2 / 396-2 Class A + B
Power supply:	+10.8 to 15.6 Vdc nominal, typical 13.2 Vdc
AF Power:	8 W @1 kHz into a 4 Ohm load
Dimensions:	48 x 172 x 188 mm (transceiver); 210 x 70.3 x 66.5 mm (front panel)
Weight:	1850 g (transceiver); 650 g (front panel)

Environmental specifications

Climatic condition:	ETSI EN 300 019-1-5 Class 5.1 (-25° to +70 °C)
Operation temperature:	ETSI EN 300 394-1 (-20° to +55°C)
Water and Dust protection:	• VS radio body: IEC 60529 class IP66 and IP67 • Control panel: IEC 60529 class IP54
Mechanical conditions:	• ETSI EN 300 019-1-5/6 classes 5/6 M3 & IEC 721 3-7 • MIL STD 810 D/E - Methods 516.4/5 procedures I/V • MIL STD 810 D/E - Methods 514.4/5 procedure I category 20
EMC	ETSI EN 300 489-18
Storage temperature:	-40°C to +70°C
Transportation temperature:	ETSI EN 300 019-1-2 class 2.3

EXTERNAL INTERFACES

- RS232 data terminal Interface (PEI) ETSI EN 300 392-5
- Extended AT command interface
- PEI on Bluetooth® (available soon)
- Remote front panel connector
- GPS antenna connector

Integrated GPS

- 12 Channel GPS receiver
- Acquisition sensitivity -142 dBm
- Time to first fix 30 sec
- Accuracy 5-8 metres

ACCESSORIES

- Microphone
- Loudspeaker
- Magnetic Hook Handset
- Handsfree

SELEX Communications

e-mail: info@selex-comms.com • www.selex-comms.com

Printed in Italy. e-P-IT-086/V1/06/Y