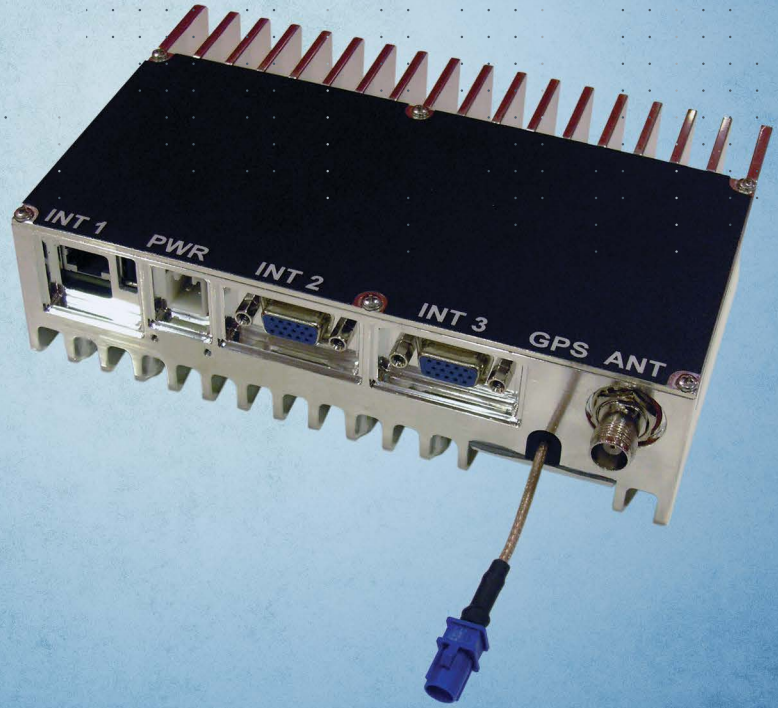


VS4000

TETRA MOBILE ECOSYSTEM



The ecosystem VS4000 combines the power and performance of the VS4000 TETRA radio unit with the new, flexible and user-friendly FPG3 series front panels.

A variety of interfaces (LAN, USB) is provided for flexibility and ease of installation and maintenance.

Additionally, DMO Repeater/Gateway, Air-Interface, End-to-End Encryption features and integrated GPS receiver make VS4000 fulfil the most demanding mobile communications requirements of mission critical users.

KEY FEATURES

- DMO Repeater/Gateway feature makes it possible to facilitate communications even outside the network coverage
- Air-Interface and End-to-End Encryption
- Embedded GPS positioning and TETRA standard LIP protocol support

- Richness of interfaces (LAN, USB)
- SD card support
- Bluetooth® audio and Wi-Fi hot spot connectivity (inside FPG3 Plus front panel).

ACCESSORIES

- Antennas for vehicle (TETRA, TETRA/GPS integrated, GPS)
- Remote microphone with PTT
- Handset with PTT and support (telephone like)
- Various brackets for radio and front panel installation
- Hands-free kit
- Data and connection cables.

MOBILE UNIT I/O INTERFACES

- RJ45 LAN connection (IEEE 802.3 protocol)
- Micro SD card slot
- USB-2
- Power supply connector
- HD female connectors 15 pins, for all audio and data signals
- GPS antenna connector
- TNC female connector for RF antenna.

TECHNICAL SPECIFICATIONS

RADIO UNIT

Frequency bands	380–470 MHz
Operational modes	Trunked, Direct, Repeater, Gateway
Channel bandwidths	25 kHz
Modulation schemes	π/4 D-QPSK
RF nominal power	10W (class 2 TETRA)
Receiver	ETSI EN 300 392-2 classes A+B compliant
Sensitivity	<ul style="list-style-type: none"> static: <-112 dBm dynamic: <-103 dBm
Power supply	Nominal +12Vdc (range +10.8 to 15.6Vdc)
Power consumption	Up to 65W with terminal active in multi-slot TX condition
AF power	8W @1 kHz into a 4 Ohm load
Dimensions (HxWxD)	47x176x130 mm [1,85 x 6,92 x 5.11 in]
Weight	1,29 kg [2,84 lb]

GPS

Antenna	FAKRA “C” male blue connector
Channels	20
Sensitivity	Acquisition -148 dBm Tracking -165 dBm
Position accuracy	5 m [16,40 ft]

Security

Algorithms supported	<ul style="list-style-type: none"> Air-Interface encryption End-to-End encryption (AES 128-bit). Customized on demand IDEA 128-bit
Tamper-proof	Integrated

Regulatory Directives and Standard

Directives and Regulations	<ul style="list-style-type: none"> Directive 2014/53/EU (Radio) Directive 2011/65/UE (RoHS) UNECE Regulation 10
Radio	<ul style="list-style-type: none"> ETSI EN 300 394-1 ETSI EN 301 561, ETSI EN 303 413
Safety	EN 62368-1, EN 62311
EMC	ETSI EN 301 489-1, 489-5, 489-19

Environmental Conditions

Shock and vibrations	<ul style="list-style-type: none"> MIL-STD-810G (514.5 Proc I; 516.5 Proc I, V) ETSI EN 300 019-2-5 (Class 5M3)
Operative temperature	<ul style="list-style-type: none"> -25°C to +55°C [-13°F to 131°F] (conformance tested) -30°C to +60°C [-22°F to 140°F] (operative use)
Humidity	+40°C [104°F] @ 93 % RH
Storage & Transport temperature	-40°C to +70°C [-40°F to 158°F]
Protection degree	IEC 60529 IP54 class
Salt Fog	MIL STD 810-G - Method 509.4

FPG3 PLUS (FRONT PANEL)

Power supply	+12 V (range +9 to +15.6 V)
Power consumption	Up to 4,5W
OS	Linux® based
Display	2.8" TFT LCD, 240x320, colour
Bluetooth and Wi-Fi	Module built-in
Dimensions (HxWxD)	57x185x68 mm [2,24 x 7,28 x 2,67 in]
Weight	400 g [0,88 lb]

Regulatory Directives and Standard

Directives and Regulations	<ul style="list-style-type: none"> Directive 2014/53/EU (Radio) Directive 2011/65/UE (RoHS)
Radio	ETSI EN 300 328
Safety	EN 62368-1, EN 62311
EMC	ETSI EN 301 489-1, 489-17

Environmental Conditions

Shock and vibrations	ETSI EN 300 019-2-5 (Class 5M3)
Operative temperature	-20°C to +60°C [-4°F to 140°F] (conformance tested)
Humidity	+40°C [104°F] @ 93 % RH
Storage & Transport temperature	-40°C to +85°C [-40°F to 185°F]
Protection degree	IEC 60529 IP54 class

Interfaces

User interface	<ul style="list-style-type: none"> Knob for group/channel selection and volume adjustment Functional keys for operations selection (near display) Keys for acceptance/close audio conversation Navigation pad to navigate inside the displayed menu Alphanumeric telephonic keys Functional keys (under telephonic keys) Two operational LED's
I/O interfaces (front)	12 pins connector for audio accessories mini-USB (under rubber protection cover)
I/O interfaces (rear)	<ul style="list-style-type: none"> 26 pins HD female for audio accessories 26 pins HD male for connection to VS4000 radio unit



Front panel (FPG3 Plus)



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