

PR4G F@stnet

leverages field-proven
PR4G technology

• **PR4G F@stnet the worldwide reference in terms of ECCM protection thanks to more advanced radio procedures**

↳ A unique frequency-hopping waveform featuring automatic adaptation to the jamming environment using mixed frequency hopping/free channel search mode

↳ Consistent synchronisation quality within the network, independently of GPS, guaranteeing Quality of Service (QoS) in the event of jamming

↳ Sophisticated anti-jamming (FEC) and voice compression (Vocoder) for enhanced transmission quality (voice, data) at all times

• **PR4G F@stnet is interoperable with all radios of the PR4G family** and uses many of the same peripherals and accessories

• **PR4G F@stnet, a software programmable radio designed for a range of waveforms**

↳ PR4G F@stnet uses digital signal processing technologies to ensure re-programmability and multi-waveform operation

↳ The radio already incorporates 2 ECCM waveforms simultaneously:

- PR4G
- F@stnet

VHF frequency is still the most cost-effective communication solution in terms of range, transmission speeds and channel access time needed in combat



PR4G F@stnet

is available in 10 W manpack, 10 W vehicular, 50 W single fit & dual fit vehicular versions



Main Features

- ↳ VHF 30-88 MHz band coverage truly useable during combat
- ↳ Output power selectable up to 10 W
- ↳ Unique field proven 64 kbps ECCM waveform: frequency hopping > 300 hops/s
- ↳ High data rate transmission in frequency hopping
- ↳ Embedded IP coupler to support tactical Internet implementation
- ↳ Ethernet 10 base T & standardised serial interfaces RS 232 / TCP-IP & PPP protocol to support networking
- ↳ Internal GPS for GPS localisation and broadcasting: Position reports available for visualisation on standard PC display or terminals
- ↳ Remote management via a standard SNMP protocol
- ↳ High level of security thanks to Comsec & Transec encryption
- ↳ Possible customisation ensuring independent security control
- ↳ Cristal voice vocoder available @4,800 bps
- ↳ Available with STANAGs 4198 (2,400 bps) & 4479 (800 bps) vocoders
- ↳ 16 kbps CVSD voice coding mode
- ↳ Comprehensive Man Machine Interface (MMI) on 4 lines graphical display
- ↳ Possible onboard installation of several radios, thanks to high performance cositing protection in power amplifier station
- ↳ Autonomy: 24 hrs with Li-Ion rechargeable battery or disposable lithium cells
- ↳ Reduced size and weight : 264x183x84 mm with handles, 3 kg (manpack)
- ↳ Ruggedized design:
 - Operational between -40°C to +70°C
 - Compliant with MIL - STD - 810 E & MIL - STD - 461 D standards
- ↳ Comprehensive logistic tools for maintenance tasks (I-Level)
- ↳ Interactive maintenance documentation & training tools

LAND & JOINT SYSTEMS



PR4G F@stnet
Across the lines

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THALES

PR4G F@stnet

the only VHF over IP combat radio with a 64 kbps ECCM waveform

PR4G F@stnet provides a vital link for modern digital battlefield communications

A high speed ECCM frequency-hopping waveform guarantees effective radio operation under even the most stringent jamming

PR4G F@stnet provides an effective solution for combat requirements (CNR) and seamless communications with C3I command systems and weapon systems

- **New user-friendly Simultaneous Voice & Data (SIVD) transmission service for recurrent and time critical data exchange (Weapon systems, C3I command systems)**
 ◊ A major breakthrough compared to existing CSMA* techniques
- **Robust, reliable & rapid communications for weapon systems with its TDMA modes**
 ◊ Compatible with Simultaneous Voice & Data service
- **End-to-end radio to C3I command system communications, based on IP technology to support Tactical Internet**
 ◊ Packet mode over IP (PAS*) with radio channel access and IP routing optimisation
- **Wide range of Combat Net Radio services**
 ◊ Selective calling, automatic late network and traffic entry, break-in to send urgent orders, relays between combat networks
- **Simple radio to battlefield computer connection**
 ◊ Thanks to Ethernet TCP-IP interface & PPP* protocol
- **PR4G F@stnet positioning by GPS**
 ◊ On demand or programmed
- **Telephone subscriber connection to tactical area networks (ACNRi*)**

HIGH ECCM PROTECTION BY FAST FREQUENCY HOPPING & BUILT-IN ENCRYPTION

PR4G F@STNET ACROSS THE LINES



TDMA FOR TIME CRITICAL COMMUNICATIONS

SIMULTANEOUS VOICE-DATA COMMUNICATIONS

END-TO-END DATA TRANSMISSIONS OVER IP (PACKET ACCESS SERVICE-PAS)

ASYNCHRONOUS POINT-TO-POINT TRANSMISSION OVER-THE-AIR AT 64 KBPS

PR4G F@STNET
PR4G

*ACNRi: Advanced Combat Net Radio interface
 *CSMA: Carrier Sense Multiple Access
 *PAS: Packet Access Service
 *PPP: Point-to-Point Protocol
 *TDMA: Time Division Multiple Access