

# Rockwell Collins FlexNet™-One



Our FlexNet™-One compact vehicular wideband V/UHF Software Defined Radio (SDR) is a tailored and affordable solution that offers enhanced capacities to significantly improve the connectivity, mobility, flexibility, interoperability and exchange of information on the battlefield.

**Connectivity and Mobility:** By integrating FlexNet-Waveform, our FlexNet-One V/UHF SDR equipment offers transverse communications, high data rate transmission on the move, and mobility management that greatly improve the connection between the users from HQ to small action units. FlexNet-One brings to the users an increased level of service such as voice (digital or VoIP), data (short messages, formatted messages, file transfer), image and video transmission.

**Flexibility:** Based on an open architecture, compliant with Software Communications Architecture (SCA 2.2) international standard, and a powerful programmable

hardware platform, FlexNet-One ensures enhanced functionality, expandability and waveform portability, accommodating future technology or requirement upgrades with ease.

**Interoperability:** The radio can be immediately reconfigured to provide interoperability with the PR4G standard and is open to host other standard waveforms (MIL-STD, STANAG) and national waveforms with their national specificities.

The FlexNet products are joint developments of Rockwell Collins and Thales.

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## KEY BENEFITS

- V/UHF narrowband and wideband SDR
- Supporting the FlexNet-Waveform, a high data rate ad hoc networking waveform
- Supporting standard legacy waveforms, notably PR4G and F@stnet waveforms
- Multimedia services, up to 6 Mbps
- SCA 2.2 compliant
- Compact PR4G vehicular format

## FEATURES

- SCA 2.2 compliant to ensure waveform portability and accommodate customized requirements and upgraded functionality
- Hosts the Rockwell Collins FlexNet-Waveform, IP-capable waveform for broadband wireless, ad hoc network supporting simultaneous voice, data and video communications, for more than 150 participants, managing QoS and data rates up to 6 Mbps
- Hosts the Thales 64 Kbps PR4G and F@stnet ECCM waveforms supporting simultaneous and independent voice and data
- Open to host standard waveforms (MIL-STD, STANAG) and national waveforms
- Automatic power output and duty cycle adaptation to optimize spectrum occupancy and power consumption
- Internal or external GPS
- Embedded or external high grade encryption including customer specific encryption
- High performance VHF and UHF co-site filters
- Uses and combines IP compliant protocols, and therefore greatly improves the system integration in local area networks or other tactical networks and easily interfaces with standard applications such as Information System and Battlefield Management System, Command Information System or other IP standard applications
- Form/fit compatible of the worldwide operated Thales PR4G vehicular tactical radio

## PERFORMANCE

Frequency range	30 - 512 MHz
Bandwidth	25 kHz (V/UHF), 300 kHz, 1.25 MHz and 5 MHz (UHF)
Power output	50 watts VHF and UHF
Data rate	Up to 64 Kbps (VHF) Up to 6 Mbps (UHF)

## ENVIRONMENTAL

Operating temperature	-40°C to 70°C
Shock and vibration	IAW MIL-STD-810E

## INTERFACES

Audio for Combat Net mode
Ethernet 10/100 Mbps
V24/V28 RS232 - PPP
SNMP remote control

## PHYSICAL CHARACTERISTICS

Width	11.18 in (284 mm)
Height	5.39 in (137 mm)
Depth	13.27 in (337 mm) (with handles)

## INSTALLATION

Power supply	24 VDC nominal
Accessories	Compatible with PR4G accessories (mount, antennas, handsets, power supply, cables)

## SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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Rockwell Collins delivers smart communication and aviation electronics solutions to customers worldwide. Backed by a global network of service and support, we stand committed to putting technology and practical innovation to work for you whenever and wherever you need us. In this way, working together, we build trust. Every day.

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