

## TACTICAL LAND RADIO NODE MASTER NETWORK CENTRIC TRANSFORMATION

- Simultaneous 2-channel networking radio for mobile Command Posts
- Accelerating collaborative combat
- Coalition and national missions
- Multi-service, open interfaces
- ESSOR, PR4G interoperable



RADIOCOMMUNICATION PRODUCTS AND SOLUTIONS

## SYNAPS-V 2-channel V/UHF SDR





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## SYNAPS-V

### 2-channel V/UHF SDR

SYNAPS-V is the Land member of the SYNAPS Networking Software Defined Radio family providing an easy and adaptable radio solution for network centric transformation of all Forces.

SYNAPS-V displays unique extended operational range and connectivity on the battlefield based on advanced radio protocols and RF performances with SIMO feature.

It is the lowest Size, Weight and Power integrated dual channel tactical radio node. It allows easy mechanical and electromagnetic integration, with its embedded amplifiers and agile co-site filters, in the format of the current TRC 9310 50 W PR4G single channel.

#### MULTI-MISSION

SYNAPS-V is multi-mission ready, both in national or international coalition operations.

It is dedicated to Ground-Ground, Ground-Air or Border surveillance missions.

SYNAPS-V can operate a comprehensive set of interoperability waveforms for Legacy, Coalition and US radios.

**MANOEUVER and AIRPOWER** unique waveforms are designed to support collaborative engagement with integrated seamless and secure end-to-end services. These MANET waveforms allow automatic join/leave, split/merge, ad hoc relaying networking, with extended range and frequency spectrum savings mechanisms.

#### MULTI-SERVICE

SYNAPS-V is part of a unified SYNAPS SDR network that allows seamless end-to-end connectivity with a wide variety of differentiated user services such as combat voice, messaging with reliable forwarding, Communities of Interest, chat, SMS, geographical BFT (Blue Force Tracking) and warnings.

#### EASY SETUP

SYNAPS-V is integrated in the SYNAPS network using the simple and automated SYNAPS network planning and mission management tool.

## Main Features

### General Characteristics

**ESSOR SCA architecture** – SCA 2.2.2 compliant, SCA 4.1 ready

**Frequency range:** VHF 30-108 MHz - UHF 225-512 MHz, L-Band IF

**RF output power:** 50 W per channel

**Channelization:** 25 kHz, 50 kHz, 75 kHz, 250 kHz, 500 kHz, 1.25 MHz (others on demand)

**SIMO UHF feature**

**Built-in GPS receiver**

**Embedded agile co-site filters**

**NATO Restricted**

**Embedded programmable crypto**

### SYNAPS-WAVE (Waveform Library)

**Advanced national networking waveforms**

- MANOEUVER Command-Combat, Geo
- ESSOR HDR
- AIRPOWER-I (Ground to Air) (future)

**PR4G and NextW@ve native interoperability**

- Including GeoMux and GeoMux HD

**International and NATO waveforms**

- Tactical VHF and UHF, Stanag 4204 and 4205
- EPM HQI/II
- ESSOR HDR
- NBWF (future), COALWNW (future)

### Interfaces

**Control:** keypad, screen, SNMP v3

**Voice:** standard analog and digital (VoIP)

**Data:** USB Host device and ethernet/IP

**GPS:** external MIL GPS connection

**Power supply:** 28 V DC (18-33 V DC) - Stanag 1275D

### Physical and Environmental

**Weight:** 20 kg

**Size (WxHxD):** 300 x 138 x 390 mm

**Environmental and EMC:** MIL-Std-810G, MIL-Std-461F

### Ancillaries

**Mounting tray**

**Dual band V/UHF antennas**

**Remote control software application**