COMMANDER HANDHELD
MASTER NETWORK CENTRIC TRANSFORMATION

- Multi-band V/UHF
- Accelerating collaborative combat
- Coalition and national missions
- Multi-service, open interfaces
- ESSOR, PR4G interoperable

SYNAPS-H
Lightweight V/UHF SDR
SYNAPS-H is the V/UHF Handheld terminal of the SYNAPS Networking Software Defined Radio family providing an easy and adaptable radio solution for network centric transformation of all Forces.

SYNAPS-H radio frequency module performance delivers an extended communication range. Its backside mission module capability will allow an ad hoc extra band/channel (ISR, soldier…).

**MULTI-MISSION**

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

It is dedicated to mounted/dismounted platoon and squad leaders, for their Ground-Ground, Ground-Air, Special Forces or Border surveillance missions.

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

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

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**Main Features**

**General Characteristics**

- ESSOR SCA architecture – SCA 2.2.2 compliant, SCA 4.1 ready
- **Frequency range**: V/UHF 30-512 MHz
- **RF output power**: 5 W
- **Channelization**: 8.33 kHz, 12.5 kHz, 25 kHz, 50 kHz, 75 kHz, 250 kHz, 500 kHz, 1.25 MHz (others on demand)
- **Built-in GPS receiver**
- **NATO Restricted**
- Embedded programmable crypto

**SYNAPS-WAVE (Waveform Library)**

- Advanced national networking waveforms
- • MANOEUVRE Command-Combat, Geo
- • ESSOR HDR
- • AIRPOWER-1 (Ground to Air) (future)
- • PR4G and NextWave 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**: dual Ptt, keypad, screen, SNMP v3
- **Voice**: standard analog and digital (VoIP)
- **Data**: USB Host device and ethernet/IP
- **GPS**: external MIL GPS connection
- **2nd channel mission module** for ISR, Soldier…

**Physical and Environmental**

- **Weight**: 1.2 kg with battery
- **Volume**: 0.8 litre with battery
- **Environmental and EMC**: MIL-Std-810G, MIL-Std-461F

**Ancillaries**

- **Headset**: standard or lightweight
- **Antennas**: short/long
- **Windows/Android remote control unit** (smartphone, tablet…)
- **Battery chargers**
- **Vehicular docking station and 50 W Booster with embedded co-site filters**