CNHF Evolve

Turn-key solution to enhance you existing HF and VHF radios



CNHF Evolve is a turn-key solution to enhance your existing HF and VHF radios performance and make radios from different vendors interoperable between each other. CNHF Evolve is a secure, small form factor and low power consumption device which contains all necessary hardware and software to upgrade legacy radios to secure, digital radios capable of using secure voice and data. For legacy digital radios CNHF Evolve offers improved performance and easier integration to other systems.

Bringing unparalled performance to other systems

CNHF Evolve turns any radio to digital radio with data capabilities

Over the air interoperability with CNHF1 and CNHF Manpack

Small form factor, low weight, low power consumption

Powered from radio, USB-C or internal batteries.

Extremely flexible, secure Linux platform enables fielding of new features and keeping platform secure

Built-in GNSS enables with automatic position reporting

Number of interfaces to connect to other systems: USB-C, Ethernet, WIFI and LTE

Built-in UI and webUI with email and instant messaging clients

Standard SMTP, IMAP and XMPP interfaces enables the use of existing messaging and email software and easy integration to other systems and user terminals



Technical specifications	
Radio Freqyency Band	HF, VHF, UHF
Software platform	Linux
Platform Security	Secure boot, signed software, encrypted at rest, zeroize function, webUI: TLS
Radio Interface	RS-232, Audio IN & OUT, PTT output
Interfaces	Ethernet, USB-C, Audio handset
WLAN	Built in with antenna. AP & client modes
LTE	Built in with antenna
GNSS	Commercial built-in GNSS w/ spoofing detection and AJ features
Powering	Powering from radio, USB-C or internal batteries
Power Consumption	< 4 W
Size	~200mm (W), ~110mm (H), ~30mm (L)
Weight	~550g (with batteries)
Waveforms	CNHF Robust Mode. STANAG & MIL-STD waveforms per request.
WAVEFORM: CNHF ROBUST MODE	
Data Rate	Up to 19.2 kbit/s (depending on radio capabilities)
FEC	Yes
Security	AES256, static and automatically changing keys
ALE	Asynchronous, synchronous
Linking Time	Depending on number of configured calling channels
Linking Channels	Unlimited
Services	Unicast and broadcast data, email w/attachments, instant messaging, digital encrypted voice (unicast, multicast, broadcast), blue force tracking
Service Interfaces	Email: POP3, IMAP, SMTP. Instant messaging: XMPP
User Interface	Device UI: 320 x 480 colour display, arrow keys. Web UI: Web-based user interface with access control.

