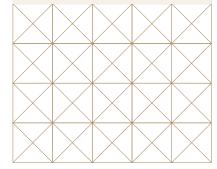


FEATURES

- Point-to-Point
- Point-to-Multipoint
- Light weight and small, easy handling
- Field proven equipment, ruggedized by design
- Frequency hopping
- Flexible data interface and SNMP based management
- Spectrally efficient modulation
- Communication carrier in IP based tactical system
- AES256 encryption (option)





SOFTWARE DEFINED BAND 4 TACTICAL RADIO LINK

RL542A Radio Link

The RL542A provides up to 100 Mbit/s (200 Mbit/s aggregated) full duplex, reliable and secure Point-to-Point communications in a hostile electronic warfare (EW) environment. IP and TDM-interfaces are available. Unique ECCM/EPM methods ensure communications in harsh environments. The RL542A can also operate in a Point-to-Multi Point configuration.

ECM/EPM

- Frequency Hopping Conventional and adaptive. Up to 1000 hop/s.
- · Automatic Power Control
- Automatic Frequency Evasion
- Pulse Jammer Protection Advanced jammer detection algorithms.
- FEC, channel coding and interleaving.

The RL542A is mounted on top of the mast close to the antenna and connects directly to an IP router. No indoor or base band unit is required. The RL542A can be remotely located using the optical fibre interface.

The radio is fully configured and managed remotely through the KONGSBERG Communication Management System (CMS).

RL542A is a software defined radio with additional analogue filtering for superior tactical performance, ensuring long range and good collocation capabilities.

Communication Carrier

RL542A is well suited as communication carrier for tactical wide area networks connecting command posts and advanced weapon systems like the NASAMS Air Defence system. Rapid link establishment combined with the robust waveforms ensures stable and reliable connections.

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Communication in field.



RL542A and typical antenna mounting in the rain-forest



TECHNICAL DATA

General Point-to-point and Point-to-Multi-point

Frequency range: 4,4 - 5,0 GHz
Duplex spacing: Minimum 60 MHz

Channel spacing: 125 kHz

Transmission capacity: up to 100 Mbit/s

FD

Modulation: PSK, 4 / 16 / 64

QAM

Transmitter Output power: +36 dBm CPM mode

APC dynamic range: 20 dB Spurious attenuation: 80 dB

Harmonic attenuation: 60 dBc (2nd and

3rd harmonics 80 dbc for higher

order)

G.703

Receiver Sensitivity

8448 kbit/s: -86 dBm (16 QAM) 34 Mbit/s: -76 dBm (64 QAM)

Port Interfaces Ethernet: 1 Gbit/s

1 Gbit/s optical

TDM interface:

IPv4 and IPv6

DLEP

ECCM Full-band FH Mode: 1000 hop/s, up to

8448 kbit/s

Adaptive FH mode: up to 8448 kbit/s

Automatic power

control: All modes

Frequency evasion: Fixed frequency

modes

Pulse jamming

protection: Fixed frequency

modes

AES256 encryption (option)

Power Supply 19 - 60 VDC MIL-STD 1275

100 W nominal power consumption

Environmental Operating temp: -40°C to $+60^{\circ}\text{C}$

Environmental: MIL-STD-810 army

ground

EMC: MIL-STD 461 army

ground

Dimensions Height 190 mm excluding handles

Weight 260 mm excluding handles Lenght 400 mm excluding handles

Weight 13 kg

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