



KONGSBERG

RL424A Tactical Radio Relay (Band II)

The RL424A Radio Relay provides reliable and secure telecommunications links in hostile electronic warfare (EW) environments. It uses unique ECCM methods in a combination of automatic output power control and an intelligent frequency hopping techniques.

Features:

- Jamming Countermeasures
- Advanced Frequency Hopping algorithms
- Fast Deployment of Radio Equipment
- Efficient link establishment and planning
- Field proven equipment
- Reliable principles of operation



The RL424A is self-instructing with a high degree of automatic functions accommodating comfortable ease of operation. The radio can be configured and a connection established in a matter of seconds.

The RL 400 radio link family has been seasoned for tactical use over a number of years and today's version offers both basic- and double- rate frequency hopping for data rates up to and including 2,048 Mb/s.

The RL424A is designed to work in the most hostile of environments and complies in every respect with military tactical requirements and specifications

WORLD CLASS - through people, technology and dedication

Radio Relay RL424 (BandII) Technical Data.

General

Frequency Range: 610 – 810 MHz , 610 – 960 MHz

Duplex Space: Minimum 50 MHz

Channel Spacing: 100 / 125 kHz

Transmission Capacity:

- 256, 512, 1024, 2048 kbps (Version 1)
 - 512, 1024, 2048, 8448 kbps (Version 2)
- Order Wire: Digital 16 kbps ADPCM

Transmitter

Output Power: high 10 W

Output Power: low 1 W

Output Power: auto mode 0,05 –10 W

Spurious Attenuation: 80 dB

Harmonic Attenuation: 60 dB

Frequency Stability: ± 20 ppm

Receiver

Noise Figure: 7 dB

Spurious Attenuation: 80 dB

Frequency Stability: ± 20 ppm

Sensitivity@ BER = 10-3:

256 kbps: -100 dBm

512 kbps: -96 dBm

1024 kbps: -93 dBm

2048 kbps: -90 dBm

8448 kbps: -84 dBm

ECCM (RL424A)

Spreading Bandwidth 20 MHz

Jamming Protection

In Conventional FH Mode (256 – 2048 kbps) 13 – 7 dB

In Adaptive FH Mode (256 – 2048 kbps)

A fixed partial band jammer, blocking up to 70% of the spreading BW with jammer channel up to 20 dB stronger than wanted signal, is excluded within 2 seconds.

Management

MMI: Integrated Display / Function Keys

Interface: All keyboard and display functions available from external data terminal equipment.
ITU-T V.24 / ITU-T V.28.



Interfaces

Eurocom "B"

Physical Interface	4 balanced pairs
Level data	1 V p-p (AMI)
Level Clock	1 V p-p (NRZ)
Impedance	130 Ohm balanced

ITU G.703 HDB3 balanced (Option)

Physical Interface	2 balanced pairs
Level data	$\pm 2,37$ V ± 10 %
Impedance	120 Ohm balanced

ITU V.11 (Option)

Physical Interface	4 balanced pairs
Level data	$> = 2$ V NRZ
Level Clock	$> = 2$ V NRZ
Impedance	100 Ohm balanced

Power Supply

Input Voltage 21 - 32 VDC
Input Voltage mains 95 - 255 VAC @ 45 - 65 Hz
Power consumption, maximum 200W

Dimensions and Weight

Height 310 mm
Width (total) 482 mm
Depth (total) 385 mm
Width in 19 " rack 437 mm
Depth in 19 " rack 306 mm
Weight 38 kg

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