



KONGSBERG

RL434A

Radio Relay

The RL434A 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 RL434A 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 2048 kbps.

In addition, 8448 kbps radio connections at fixed frequency are available to accommodate modern

network structures and data transfer needs.

The RL434A 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

Technical data:

Radio Relay RL434A

General

Frequency Range	1,35 – 1,85 GHz
Duplex Space	Minimum 50 MHz
Channel Spacing	125 kHz
Transmission Capacity	256, 512, 1024 and 2048 kbps (version 4) 512, 1024, 2048 and 8448 kbps (version 3)
Order Wire	Digital 16 kbps CVSD

Transmitter

Output Power, high	7,5 W
Output Power, low	1 W
Output Power, auto mode	0,05 – 7 W
Spurious Attenuation	80 dB
Harmonic Attenuation	60 dB
Frequency Stability	± 20 ppm

Receiver

Noise Figure	6 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 (RL 434A)

Spreading Bandwidth	24 MHz
Jamming Protection	
In Conventional FH Mode (256 – 2048 kbps)	13 – 7 dB

In Adaptive FH Mode (256 – 2048 kbps)
A 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.

Power Supply

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

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

Interfaces

Eurocom "B"

Physical Interface	4 pairs
Level Data	1 V p-p (AMI)
Level Clock	1 V p-p (NRZ)
Impedance	130 ohm

ITU G.703

Physical Interface	2 pairs
Level Data	± 2,37 V (HDB3)
Impedance	120 ohm

ITU V.11

Physical Interface	4 pairs
Level Data	> 2V NRZ
Level Clock	> 2V NRZ
Impedance	100 ohm



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