

making **RF** the strongest link

NL5000

Wireless Modem

TELEMETRY APPLICATIONS

- Data Terminals
- Water Management
- Remote Data Loggers
- Oil and Gas Monitoring
- Irrigation Control

MOBILE APPLICATIONS

- Database Access
- Computer Aided Dispatch
- Vehicle Tracking
- Asset Tracking
- Fleet Management

FEATURES

- Modem and Transceiver
- Synthesized VHF and UHF
- Narrow Band or Wideband
- Complete Programmable Features
- Compact Size
- 3.6" L x 2.3" W x 1.0" H
- CRC and Forward Error Correction
- Configurable RS232 Serial Port

FREQUENCY RANGES

- 136-162 MHz VHF
- 148-174 MHz VHF
- 216-235 MHz VHF
- 400-420 MHz UHF
- 450-470 MHz UHF



PRODUCT OVERVIEW

For over two decades RF Neulink has been providing wireless data networking solutions with applications in SCADA, telemetry, telecommunications, and water management.

The NL5000 Transceiver Series is a price/performance leader in licensed conventional radios in both the VHF and UHF frequency range. They provide increased throughput, and longer range for multiple address systems. Transparent and direct asynchronous communication offers real-time communication. No extra software or programming is needed to implement communications using standard asynchronous protocols.

The NL5000 Transceiver Series is field configurable as a master station or remote radio. They can operate as a half-duplex or simplex radios. The simplex mode facilitates peer-to-peer radio communications while using a carrier sense (CSMA) channel collision avoidance technique.

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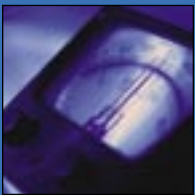
APPLICATION IDEAS



Oil and Gas Monitoring



Irrigation Control



Data Logging



Water Management

TECHNICAL SPECIFICATIONS

General	VHF	UHF
Frequency Range.....	136-174 MHz	400-470 MHz
Channel Spacing.....	12.5 or 25 kHz	12.5 or 25 kHz
Channel Increment	2.5 kHz	5/6.25 kHz
Operating Temperature	-30° to +60° C	-30° to +60° C
Frequency Stability (-30°to+60°C).....	1.5 PPM	1.5 PPM
12.5 kHz Channel Data Rate	9600 bps	9600 bps
25 kHz Channel Data Rate	19.2 kbps	19.2 kbps
6.25 kHz Channel Data Rate	4800 bps	4800 bps

User Interface

Data Rate of RS-232 Serial Port	300 – 38,400 bps configurable
Connectors	15 pin D type as DCE
Addressing.....	Selective ID, Group & Broadcast

Supply Voltage

Input Voltage Range	11 – 16 VDC with internal regulator
NL6000 Max Current Drain	≤2.5 A..... ≤2.5 A

Transmitter

Operating Bandwidth	26 MHz	20 MHz
RF Output Power	1-6 watts	1-6 Watts
Duty Cycle	5 to 100% depending on power and temperature	
RF Load Impedance.....	50 ohms	50 Ohms
Transmitter Attack Time	≤15 ms	≤15 ms
Spurious & Harmonics	≤-20 dbm	≤-20 dbm
FM Hum & Noise		
12.5 kHz channel operation	≥40 db	≥40 db
25 kHz channel operation	≥45 db	≥45 db
Current Drain		
1 watt	≤1.0 A	≤1.0 A
6 watt	≤2.4 A	≤2.4 A

Receiver

Operating Bandwidth	26 MHz	20 MHz
Sensitivity		
(12 db SINAD w de-emphasis).....	≤0.28 uV	≤0.28 uV
Adjacent Channel Selectivity		
+/- 12.5 w/narrow IF	≥60 db	≥60 db
+/- 25 w/wide IF	≥70 db	≥70 db
Spurious & Image Rejection	≥70 db	≥70 db
Intermodulation Rejection.....	≥70 db	≥70 db
FM Hum & Noise		
12.5 kHz channel operation	≥40 db	≥40 db
25 kHz channel operation	≥45 db	≥45 db
Conducted Spurious	≤-57 dbm	≤-57 dbm
Receive Attack Time.....	≤15 ms	≤15 ms
RSSI Squelch Attack Time.....	≤15 ms	≤15 ms
Receive Current Drain	≤80 mA	≤75 mA

RF Neulink reserves the right to change specifications of this product at any time without notice and without obligation to notify any person of such changes.

WHO IS RF NEULINK?



RF Neulink has been manufacturing radio link equipment for over 25 years. Our line of transmitter and receiver units for point-to-point communications, paging excitors, radio data and control products reflect our experience in this marketplace.

Our publicly held parent company, RF Industries (NASDAQ symbol RFIL), provides a well capitalized base for continued future growth and product development. RF Neulink's customers include Fortune 500 companies, municipalities, government agencies, educational and health institutions, utilities, small companies, casinos, irrigation companies, armed forces here and abroad, and many others that need or want reliable, state-of-the-art, cost-effective communications links.

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