

NL5000

The strongest link. *Wireless Modem*

TELEMETRY APPLICATIONS

- Data Terminals
- Water Management
- Remote Data Loggers
- Oil & 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
- Compact Size
- 3.6"L x 2.3"W x 1.0"H
- CRC and Forward Error Correction
- Configurable RS232 Serial Port
- Compact size 4.2" x 4.2" x 1.6"

Frequency Range

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.



Raveon Technologies Corp.

2461 Impala Drive, Carlsbad, CA 92010

Phone: (760) 444-5995
Email: sales@raveon.com
Website: www.rfneulink.com

Application Ideas



Oil and Gas Monitoring



Irrigation Control



Data Logging



Water Management

ORDERING INFORMATION

Contact Raveon Technologies for details
 Call toll-free (800) 233- 1728
 Or
 email: sales@raveon.com

NL5000 TECHNICAL SPECIFICATIONS General VHF UHF

General.....	VHF.....	UHF
Frequency Range.....	136–174	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
Humidity	90% at 40° C non-condensing	
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 .. 2,400 – 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.

For outside operation of radio modem products, a NEMA 4 enclosure is recommended