

NL900PRO RF Transceiver Specifications

The NL900PRO transceiver is a Frequency-Hopping Spread Spectrum (FHSS) radio designed for license-free operation in the 900 MHz ISM band. The radio sustains a standard asynchronous serial data stream between two or more radios out of the box. Housed in a compact and rugged die-cast enclosure, the radio is equipped to replace miles of serial cable using a selectable RS232, RS485, or RS422 interface.

INTERFACE		
Serial Interface Connector	DB-9 Female	
RF Connector	RPSMA Jack	
Impedance	50 ohms unbalanced	
Serial Interface Data Rate	Baud rates from 1200 bps to 115,200 bps	
Power Consumption (typical)	400 mA @ 12VDC	
Channels	52 (USA); 7 (Australia)	
Supported Network Topologies	Point-to-Point, Point-to-Multipoint	
Security	One byte System ID. 56-bit DES encryption key.	
Interface Buffer Size	Input/Output: 1600 bytes each	
OPERATIONAL		
Frequency Band	902 – 928 MHz (USA); 915-928 MHz (Australia)	
RF Data Rate	76.8 kbps fixed	
RF Technology	Frequency Hopping Spread Spectrum	
Output Power	NL900PRO: <u>Conducted (no antenna)</u> 743mW typical	<u>EIRP (3dBi gain antenna)</u> 1486mW typical
Supply Voltage	NL900PRO: 7-28VDC	
Sensitivity	-100dBm typical @ 76.8kbps RF Data Rate	
Range, Line of Site (based on 3dBi gain antenna)	NL900PRO: Up to 20 miles	
ENVIRONMENTAL		
Temperature (Operating)	-40°C to 80°C	
Temperature (Storage)	-50°C to +85°C	
PHYSICAL		
Dimensions	4.4 x 2.7 x 1.4 inches	
Weight	6 oz (170 g)	
CERTIFICATIONS		
FCC Part 15.247	NL900PRO: KQLAC4490	
Industry Canada (IC)	NL900PRO: 2268C-AC44901000	

Serial Interface

The NL900PRO supports RS232, RS485, and RS422 protocols. RF Neulink wireless solutions are not subject to the cabling restrictions for distance, and either interface is available when ordering.

NL900PRO Status LEDs

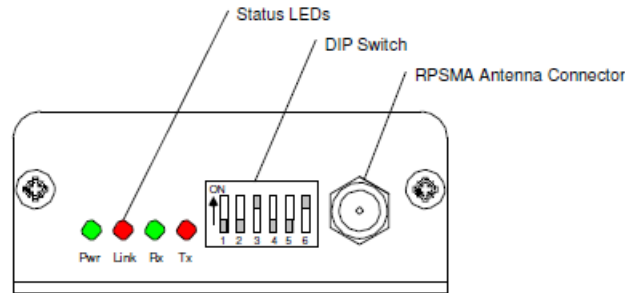


TABLE 2: STATUSLEDS

LED	COLOR	DESCRIPTION
Pwr	Green	On indicates that the unit is powered up.
Link	Red	On indicates that the Client unit(s) and Server unit are in range of each other. Client units activate the Link LED when in Range of the Server unit. Always lit on a Server unit.
RXD	Green	When flashing, indicates that the NL900PRO is receiving data.
TXD	Red	When flashing, indicates that the NL900PRO is transmitting data.

Figure 2: NL900PRO DIP Switch Settings

