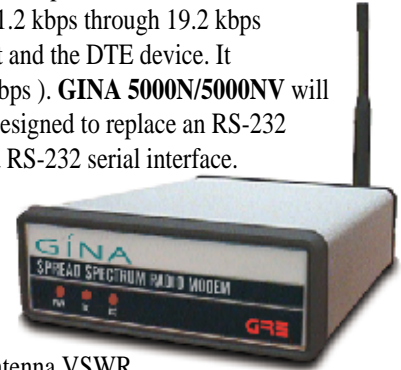


# GINA™ MODEL 5000N/5000NV RADIO MODEM



GINA 5000N/5000NV receives and transmits data in the ISM band of 902 to 928 MHz in half-duplex mode. GINA 5000N/5000NV uses a standard RS-232 serial data interface that can be driven asynchronously at rates from 1.2 kbps through 19.2 kbps (options 38.4 kbps ). GINA 5000N/5000NV does not require any synchronization between it and the DTE device. It automatically synchronizes on any speed up to 19.2 kbps without any setting (options 38.4 kbps ). GINA 5000N/5000NV will transmit at the same speed as your asynchronous RS-232 device. GINA 5000N/5000NV is designed to replace an RS-232 cable connected to a distant device. It is a plug and play transparent link to any device with a RS-232 serial interface. There are no special setups required. GINA 5000N/5000NV is a highly secure spread spectrum radio, and adds no protocol. It does not packetize nor perform error correction, which allows it to be completely transparent. GINA 5000N/5000NV being completely transparent allows any custom communication protocol to be used. GINA 5000NV is equipped with an option of Voice communication RJ22 jack to aid in testing and setting up between Radios that are far apart. It is also convenient feature to test the Output power or Antenna VSWR.



## GINA 5000N/5000NV SPECIFICATIONS

Adjacent Channel Rejection	-40dB = 4 MHz		
Baud Rate Asynchronous	1.2 to 19.2 Kbps Half Duplex TDD RS-232 (DB9F)		
Baud Rate Asynchronous Option.	38.4 Kbps, Half Duplex TDD RS-232 (DB9F)		
Channels	21 Selectable by dip switch		
Control	CTS		
Data Format	Any Data Format		
Dimensions	(1.52"H) x (4.17"W) x (5.0"D) (38.6mm H) x (105.9mm W) x (127mm D)		
Dynamic Range	-100 dBm ~ -30 dBm		
Frequency Range	902 - 928 MHz		
Indicators	PWR, TxD, RxD		
Modulation	Bi-Phase Shift Keying (BPSK)		
PN	7 Stage (127 Chip)		
PN Rate	2 MHz		
Operating Mode	Point - to - Multipoint		
Operation Temperature	-20 to 60+ Degrees C (Option -34 to 74+ Degrees C)		
PN Codes	4 PN Codes Sequence Varies within ea. channel		
Power Consumption	10 Watt Maximum		
Power Requirements	10.5 to 13.8 VDC		
Radio Technique	Spread Spectrum Direct Sequence		
Range Nominal	800+ feet		
Range Indoor	500 to 1500+ feet		
Range Outdoor	12 + Miles - Direct Line-of-Sight FCC Compliant		
Relative Humidity	0-90% Non-Condensing		
Systems Gain	120 dB		
Transmission Delay	20 mSec.		
Voice Option Interface	RJ22 (5000NV Model only)		
Weight	16 oz.		
<b>TRANSMITTER PERFORMANCE</b>		<b>RECEIVER PERFORMANCE</b>	
Carrier Frequency Stability	15 KHz	BER (Bit Error Rate )	10-6 @ -92 dBm
Power Consumption	800 mA @ 12 VDC	Local Oscillator Stability	15 KHz
Spurious Output	FCC Part 15, meets 15.245 & 15.247	Receiver Sensitivity Threshold	-100 dBm
Output Power	725 mW ( 28.6 dBm )	Stand-by Power Consumption	325 mA @ 12VDC
		Signal Acquisition Time	8 mSec.
		Spurious Rejection	-50 dB

\* Specifications subject to change without notice.  
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FCC Acceptance : DE8-915003N  
DOC Acceptance : 2185 101 144  
ETSI Acceptance : Pending  
Patents : Pending  
Made in USA.

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GRE America , Inc. 425 Harbor Blvd. Belmont, California 94002 USA Phone: (650) 591-1400 Fax: (650) 591-2001

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