

# NX-GEN-S 900



## Licensed Point to Point 900 Mhz Microwave Radio

High quality Digital Radios with a common Control/Mux Indoor Unit offering multiple configurable Data Interfaces, that can be paired with interchangeable, separate RF Units from 400Mhz to 38Ghz allowing data rates of 64Kb/s up to 150Mb/s

### FEATURES

- 2 x T1/E1 Standard
- Ethernet with VLAN and OoS
- XPIC Doubles Capacity
- Data Rate Configured to Customer Requirements
- Frequency-agile within each band
- Flexible Bandwidth
- SNMP-NMS with constellation display
- Modulation Schemes 4QAM to 128 QAM



The NX-GEN ODU option allows installation of RF electronics outdoors closer to the antenna, reducing RF cable losses.

**Moseley**

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## SPECIFICATIONS

### SYSTEM

<b>FREQUENCY</b>	932-944 MHz; 953-960 MHz (fully synthesized) For all other frequencies, consult factory.
<b>STEP SIZE</b>	1 kHz
<b>CHANNEL BANDWIDTH</b>	100 KHz / 200 KHz Mode and modem option
<b>DATA RATES</b>	100 - 1000 Kbps (depending on Modulation and Bandwidth)
<b>MODULATION</b>	QPSK 7/8, 16 QAM, 32 QAM, 64 QAM, 128 QAM
<b>TEMPERATURE RANGE</b>	Full Performance: 0° to + 50° C.
<b>POWER SOURCE</b>	24/48 VDC standard, 80W nominal (optional 115/230 VAC)
<b>DIAGNOSTICS</b>	Local and remote status and control, Monitoring of BER, RSL, Alarms, and Status via Web Server and SNMP
<b>INTERFACES</b>	2 x E1/T1, 10/100/1000BaseT Electrical
<b>UNFADED BER</b>	1 x 10 <sup>-12</sup>
<b>ERROR CORRECTION</b>	Trellis-Coded Modulation, Concatenated with Reed-Solomon Coding + Trellis-Coded Correction
<b>PROTECTION</b>	Space, Frequency, or Cold/Hot Standby
<b>STANDARDS</b>	FCC part 101

### TRANSMITTER

<b>TYPE</b>	Superheterodyne Conversion
<b>POWER OUT</b>	29 dBm for TR Spacing of 9 MHz 27 dBm for TR Spacing of 3.6 MHz
<b>FREQUENCY STABILITY</b>	± 1.5 ppm

### RECEIVER

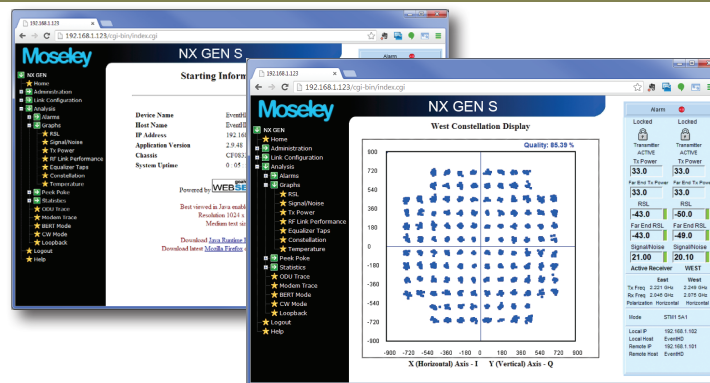
<b>TYPE</b>	Superheterodyne Conversion
<b>RECEIVE SENSITIVITY</b>	-100 dBm (typical, depending on data rate/modulation/FEC)

### PACKAGE

<b>TYPE</b>	Rack Mount
<b>RF Dimensions</b>	2RU - 17 x 11.5 x 3.5 inches Weight 8.2 lbs
<b>IDU Dimensions</b>	1RU - 17.5 x 10 x 1.75 inches Weight 6.8 lbs.
<b>ODU Dimensions</b>	8.5 x 14 x 4 inches Weight 16 lbs.
<b>Shipping Dimensions</b>	22 x 22 x 10 inch 30lb

### NETWORK MANAGEMENT

- SNMP VERSION 4.5
- BUILT-IN WEB SERVER
- REMOTE MONITORING
- MULTILEVEL ACCESS AND PERMISSIONS
- NETWORK DATA ENCRYPTION
- CONSTELLATION DISPLAY



### SYSTEM PERFORMANCE

	100 kHz CHANNEL	QPSK 7/8	16 QAM 15/16	32 QAM 19/20	64 QAM 23/24	128 QAM 20/21
<b>100 kHz CHANNEL</b>						
CAPACITY		130 kbit/s	290 kbit/s	380 kbit/s	460 kbit/s	530 kbit/s
RECEIVER SENSITIVITY		-108 dBm	-101 dBm	-97 dBm	-93 dBm	-89 dBm
SYSTEM GAIN		137 dB	130 dB	126 dB	122 dB	118 dB
<b>200 kHz CHANNEL</b>						
CAPACITY		260 kbit/s	570 kbit/s	730 kbit/s	890 kbit/s	1030 kbit/s
RECEIVER SENSITIVITY		-105 dBm	-98 dBm	-94 dBm	-90 dBm	-87 dBm
SYSTEM GAIN		134 dB	127 dB	123 dB	119 dB	116 dB

*As a dominant innovator in the wireless industry since 1959,  
you can be assured Moseley will be with you every step of the way.*

