

NXR-5700/5800 5900/5901



NEXEDGE VHF/UHF DIGITAL & FM BASE-REPEATER

Over 7x faster processing speed and 15x more memory capacity than the previous models, these NEXEDGE repeaters represent a breakthrough in performance. Extensive data storage means they can support everything from analog/digital conventional systems up to sophisticated NEXEDGE Gen 1 and Gen 2 multi-site digital trunked networks.



Features

- NXR-5700/5800 25/5/0.5 W RF Output Power (100% Duty Cycle)
- NXR-5900/5901 100mW/360mW RF Output Power (100% Duty Cycle)
- Wideband Coverage
- Two-Digit Numeric Display
- LED Status Indicators
- USB 2.0 Type-B Interface
- IP LAN/WAN Connectivity
- Ethernet Network Interface
- 6 Programmable Function Keys
- 0.3 W Front Panel Speaker
- 3 W External Speaker Audio
- Volume Control
- Program / Modem Interface
- Remote Termination Interface
- Programmable AUX I/O's
- DTMF Remote Control
- Flash Firmware Upgrading
- Remote System Firmware Updates
- Telephone Interconnect Option (KTI-4M)

Digital – General

- | | |
|----------------------------|--------------------------------------|
| NXDN Digital Air Interface | UID & GID Validation |
| AMBE+2™ VOCODER | NXDN Over-the-Air Alias |
| 6.25 & 12.5 kHz Bandwidth | SNMP Protocol Ready |
| Built-In 0.5 ppm TCXO | FER (Frame Error Rate) / RSSI Output |

Digital – Trunking

- | | |
|---|------------------------------|
| Type-C NXDN Trunking Gen1/Gen2 Networks | Control Channel Rotation |
| Transmission Trunked Mode | Cross-Busy |
| Message Trunked Mode | Failsoft Mode |
| Busy Call Queuing | NXDN Traffic Channel Sharing |
| Call Queue Pre-emption | ESN Validation |
| Late Entry (UID & GID) | Auto-Roaming / Registration |
| Control / Traffic Channel Switching | Wide Area All Group Call |

Digital – Conventional Mode

- | | |
|------------------------------|----------------|
| Mixed FM / Digital Operation | Digital Voting |
| Conventional IP Networks | RF Link |
| Site Roaming Capability | |

FM Analog Mode

- | | |
|--------------------------------------|---------------------------------------|
| 16 QT/DQTs Repeater Control Built-in | EIA Voter Tone Generation |
| Hang Timer / Time Out Timer / CW ID | External LTR® Controller Interface |
| External FM Controller Interface | External MPT1327 Controller Interface |



NXDN Protocol
An open international standard for digital land mobile radio.



Mixed Mode Operation
Digital & Analog Mixed Mode operation allows flexible phased migration.



2yr Warranty
Protected by a comprehensive 2 year warranty.

Accessories

All accessories may not be available in all markets.
Contact an authorized Kenwood dealer for details and complete list of all accessories.

KMC-66M
Keypad
Microphone



KMC-65M
Microphone



KTI-4M
Telephone
Interconnect
Adapter



KPG-149RM
Remote Repeater
Monitoring Software

Specifications

General	NXR-5700	NXR-5800	NXR-5900	NXR-5901
Frequency Range				
Type 1	136-174 MHz		806-825 MHz	896-902 MHz
Type 2		380-470 MHz	851-870 MHz	935-941 MHz
Channel Spacing				
Analog	12.5/15/25/30 KHz		12.5/25 kHz	12.5 kHz
Digital			6.25 / 12.5 kHz	
PLL Channel Step	6.25/5/3125/2.5 kHz	6.25/5/3125 kHz		6.25/5/3125 kHz
Operating Voltage	13.6 V DC (10.8 - 15.6 V DC)		10.8-15.9 V DC	
Operating Temperature Range	-22°F to +140°F (-30°C to +60°C)			
Frequency Stability	± 0.5 ppm			
Antenna Impedance	50 Ω			
Dimensions	(W x H x D) Projections Not Included 19.02 x 1.73 x 13.03 in (483 x 44 x 331 mm)			
Weight (net)	11 lb (5 kg)			
IC Certification				
Type 1	282F-474500		282F-474700	282F-474701
Type 2		282F-474601		

* Applies only NXR-5900/5901

Analog measurements made per TIA603. Specifications are measured according to applicable standards. Specifications are subject change without notice, due to advancements in technology.

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Receiver	NXR-5700	NXR-5800	NXR-5900	NXR-5901
Sensitivity				
Digital @ 6.25kHz (3% BER)			0.27 μV	
Digital @ 12.5kHz (3% BER)			0.33 μV	
Analog (12 dB SINAD)			0.30 μV	
Selectivity				
Analog @ 25/30 KHz	92 dB	86 dB	81 dB	
Analog @ 12.5 kHz	84 dB	80 dB		73 dB
FM Hum & Noise				
Analog @ 25/30 KHz		55 dB	55 dB	
Analog @ 12.5 kHz			50 dB	
Intermodulation Distortion		85 dB		84 dB
				82 dB
Spurious Rejection	100 dB			93 dB
Audio Distortion (Ext. SP)	Less than 2% (at 0.3 W)			
Audio Output Power (Ext. SP)	3 W (at 4 Ω, less than 5% distortion)			

Transmitter	NXR-5700	NXR-5800	NXR-5900	NXR-5901
RF Power Output	25 / 5 / 0.5 W		360 mW to 100 mW	
Spurious Emission	73 dB			
FM Hum & Noise				
Analog @ 25/30 KHz		55 dB	50 dB	
Analog @ 12.5 kHz		50 dB		45 dB
Audio Distortion	Less than 1% at 1000 Hz			
Emission Designator	16K0F3E, 14K0F3E*, 11K0F3E, 8K30F1E, 8K30F1D, 8K30F7W, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D			

MIL-STD & IP

MIL Standard	MIL 810C Methods/Procedures	MIL 810D Methods/Procedures	MIL 810E Methods/Procedures	MIL 810F Methods/Procedures	MIL 810G Methods/Procedures
High Temperature	5011/Procedure I, II	5012/Procedure I, II	5013/Procedure I, II	5014/Procedure I, II	5015/Procedure I, II
Low Temperature	5021/Procedure I	5022/Procedure I, II	5023/Procedure I, II	5024/Procedure I, II	5025/Procedure I, II
Temperature Shock	5031/Procedure I	5032/Procedure I	5033/Procedure I	5034/Procedure I, II	5035/Procedure I

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