

Focused on the Future

Over 7 times faster and with 15 times more capacity than the previous models, these new NEXEDGE repeaters represent a breakthrough in performance. Extensive data storage means they can support everything from analogue/digital conventional systems up to a highly sophisticated NEXEDGE Generation2 (Gen2) multi-site digital trunked network. And further adding to their future-proof credentials is upcoming support for Digital Simulcast. Stay ahead of the curve, with cutting-edge communications.

GENERAL FEATURES

- Wideband Coverage
- 25/5/0.5 W RF Output Power (100% Duty Cycle)
- 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

DIGITAL – GENERAL

- NXDN Digital Air Interface
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Bandwidth
- Built-In 0.5 ppm TCXO
- OCXO Unit Option (KXX-3)
- UID & GID Validation
- NXR Over-the-Air Alias
- SNMP Protocol Ready
- FER (Frame Error Rate) / RSSI Output

DIGITAL – TRUNKING MODE

- NEXEDGE Gen2 Network
 - * NXDN Type-C Trunking (Gen1) will be supported later
- Transmission Trunked Mode
- Message Trunked Mode
- Busy Call Queuing
- Call Queue Pre-emption
- Late Entry (UID & GID)
- Control / Traffic Channel Switching
- Control Channel Rotation
- Cross-Busy

- Failsoft Mode
- NXDN Traffic Channel Sharing
- ESN Validation
- Auto-Roaming / Registration
- Wide Area All Group Call

DIGITAL – CONVENTIONAL MODE

- Mixed FM / Digital Operation
- Conventional IP Networks
- Site Roaming Capability
- Digital Simulcast
(To be supported in future)

FM ANALOGUE MODE

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



OPTIONAL ACCESSORIES

□ **KXK-3**
OCXO UNIT



□ **KMC-30**
MICROPHONE



□ **KMC-35**
MICROPHONE



□ **KTI-4**
TELEPHONE INTERCONNECT ADAPTER



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

SPECIFICATIONS

GENERAL	NXR-5700	NXR-5800
Frequency Range	136-174 MHz	400-470 MHz
Channel Spacing	Analogue	25/20/12.5 kHz
	Digital	12.5/6.25 kHz
PLL Channel Step	6.25/5/3.125/2.5 kHz	
Frequency Stability	Radio only	± 0.5 ppm
	With KXK-3 (M2)	± 1.0 ppm
Operating Voltage	13.2 V DC (10.8 - 15.6 V DC)	
Operating Temperature Range	-30 °C to +60 °C	
Antenna Impedance	50 Ω	
Dimensions (W x H x D), Projections not included	483 x 44 x 331 mm	
Weight (net)	5 kg	

Measurements made per CAI measurement procedures (digital) and TIA-603 (analog); specifications are typical. Details and timing of firmware and software updates are subject to change without notice. Specifications are subject to change without notice, due to advancements in technology.

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NXDN is a trademark of JVCKENWOOD Corporation and Icom Inc.

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RECEIVER	NXR-5700	NXR-5800
Sensitivity (Analogue)	EIA 12 dB SINAD	0.30 μV
	EN 20 dB SINAD	-2.5 dB μV (0.38 μV)
Sensitivity (Digital) (12.5 kHz/6.25 kHz)	3 % BER	0.33 μV/0.27 μV
	1 % BER	-2 dB μV (0.40 μV)/- 4 dB μV (0.32 μV)
Selectivity	Analogue 25 kHz	90 dB
	Analogue 20 kHz	87 dB
	Analogue 12.5 kHz	82 dB
Intermodulation Distortion (Analogue)	72 dB	
Spurious Response Rejection (Analogue)	95 dB	
Audio Distortion (Ext. SP)	Less than 2 % (at 0.3 W)	
Audio Output	3 W (at 4 Ω, less than 5 % distortion)	
TRANSMITTER	NXR-5700	NXR-5800
RF Power Output	25/5/0.5 W	
Max Duty Cycle	100 %	
Spurious & Emission	-36 dBm ≤ 1 GHz, -30 dBm > 1 GHz	
FM Noise (EIA)	Analogue 25 kHz	55 dB
	Analogue 20 kHz	53 dB
	Analogue 12.5 kHz	50 dB
Modulation Distortion	Less than 1 % at 1000 Hz	
Modulation	16K0F3E, 14K0F3E, 14K0F2D, 12K0F2D, 8K50F3E, 7K50F2D, 8K30F1E, 8K30F1D, 8K30F7W, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D	

APPLICABLE MIL-STD

MIL Standard	MIL 810C/D/E/F Methods/Procedures	MIL 810G Methods/Procedures
High Temperature	501.4/Procedure I, II	501.5/Procedure I, II
Low Temperature	502.4/Procedure I	502.5/Procedure II
Temperature Shock	503.4/Procedure I, II	503.5/Procedure I



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