

## 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 (KXK-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 Digital	25/20/12.5 kHz 12.5/6.25 kHz
PLL Channel Step		6.25/5/3.125/2.5 kHz
Frequency Stability	Radio only With KXK-3 (M2)	± 0.5 ppm ± 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.

LTR is a registered trademark of EFJohnson Technologies.

AMBE+2 is a trademark of Digital Voice Systems Inc.

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 EN 20 dB SINAD	0.30 μV -2.5 dB μV (0.38 μV)
Sensitivity (Digital)	3 % BER 1 % BER	0.33 μV/0.27 μV -2 dB μV (0.40 μV)/- 4 dB μV (0.32 μV)
Selectivity	Analogue 25 kHz Analogue 20 kHz Analogue 12.5 kHz	90 dB 87 dB 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 Analogue 20 kHz Analogue 12.5 kHz	55 dB 53 dB 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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