

# NEXEDGE

One Radio with Multi-Protocol Support

# NX-3200/3300/3400

## NXDN° DMR

















### MULTI-PROTOCOL DIGITAL & ANALOG **PORTABLE RADIOS**

This versatile handheld radio supports both NXDN® and DMR digital protocols as well as mixed digital & FM analog operation, enabling it to serve with distinction in a wide range of enterprise and operation-critical applications. Compact yet designed with durability in mind, it's packed with convenient features like Bluetooth® for hands-free operation and built-in GPS. Three different models with 14-pin Universal connector are available: Full Keypad model with LCD, Standard Keypad model with LCD and a large 4-way D-pad, and the Basic Model without LCD or keypad. Additionally, for expansion capability a software license certification system facilitates extensive customization.

#### **Features**

Multi-protocol digital radio: Designed to operate under NXDN® or DMR digital, and FM analog protocols

NXDN Conventional and Type-C & Gen2 Trunking

DMR Tier 2 Conventional & Site Roaming

DMR Auto Slot Select

DMR Tier 3 Trunking

Mixed Digital & FM Analog Operation allows gradual migration at your own pace 4-Line Basic Frame (2-Line Main/Sub-LCD, icon & key guide) / 14 Characters

5-Line Text Message Frame (3 Lines of Text, icon & key guide)

7-color Light Bar Indicator on the top panel. Individual color can be set for each channel

4-way Directional-pad (D-pad) for intuitive control and operation

Built-In GPS Receiver/Antenna for effective fleet and incident management

Built-in Bluetooth® for hands-free operation for IoT applications - Applicable Bluetooth profiles: HSP (Headset Profile) and SPP (Serial Port Profile)

Renowned KENWOOD Audio Quality achieved with Active Noise Reduction (ANR) that utilizes built-in DSP

Optional DES and AES Encryption

Built-in Motion Sensor (Man-down, Stationary and Motion Detection)

IP67 and MIL-STD-810 C/D/E/F/G

1 Watt Audio Output Power

Available models: Full Keypad (w/ LCD and full keypad), Standard Keypad (w/ LCD and 4-way large D-pad/4 key), and Basic (w/o LCD and keypad)

512 CH/128 Zones (64 CH/4 Zones for Basic model)

Maximum of 1,000 CH/Radio with option

CSA Intrinsically Safe Option:

Class I, II, III, Division 1, Groups A,B,C,D,E,F,G. Division 2 Groups A,B,C,D

Paging Call

Emergency Call

Status/Text Message

Remote Stun/Kill/Check







7-color Light Bar Indicator



14-pin Universal Connector offers reliable connectivity even in harsh environment with a wide-range of accessories.

#### Digital - NXDN® Mode

NXDN Conventional NXDN Type-C & Gen2 Trunking 6.25 & 12.5 kHz Channels Advanced GPS

Remote Monitor All Group Call Over-the-Air Alias (OAA) Over-the-Air Programming (OTAP)

#### Digital - DMR Mode

Two-slot TDMA in 12.5 kHz channels DMR Tier 2 Conventional / Site Roaming DMR Auto Slot Select DMR Tier 3 Trunking Call Interruption

Dual-slot Direct Mode Optional ARC4 Encryption **Energy Efficient** Over-the-Air Programming (OTAP)

#### Analog - FM Mode

Conventional & LTR Trunking FleetSync/II: PTT ID ANI / Caller ID Display, Selective Group Call, Emergency Status Text Messages

MDC-1200: PTT ID ANI / Caller ID Display, Emergency, Radio Check /Inhibit QT / DQT, DTMF, 2-Tone Built-in Voice Inversion Scrambler







KNB-55LA/57LA/78L

Li-ion Battery Pack 7.4V/2000mAh, 7.4V/2860mAh)



KNB-56N (7.2 V/1400 mAh)









KMB-30A Mounting Bracket (for KSC-256AK)





KRA-25 Whip Antenna

KRA-26/27 VHF Helical Antenna UHF Whip Antenna



KRA-29P (406-470MHz)

KRA-32K 700/800MHz Whip Anten

KRA-36 700/800MHz Stubby Antenna

KRA-38K 800/900MHz Whip Antenna NX-3400/NX-3420)

KRA-39 900MHz Stubby Antenna

KMC-70 IP68 Immersion, ANR feature, NXDN/ DMR Speaker Microphone with 3.5mm Ear jack & 3 Function

KMC-72W

NXDN/DMR Speaker

Microphone with

3.5mm Ear jack & 2

KMC-70GR Compatible with ANR feature, NXDN/DMR Speaker Microphone with 3.5mm Ear jack & 3 KMC-70/70GR/72W KBH-11 Belt Clip (2.5")

Earphone Kit for

KAS-20 AVL & Dispatch Software

KPG-180AP OTAP Manager

### **Specifications**

General	NX-3200	NX-3300	NX-3400		
Frequency Range	138-174 MHz	406.1-470 MHz	TX/RX: 851-870, 935-941 MHz TX:806-825, 896-902 MHz		
Max. Channels Per Radio		Up to 1000 CH with option			
Number of Channels	512 (64 for no LCD models)				
Number of Zones	128 (4 for no LCD models)				
Channel Spacing Analog Digital	12.5/15/25/30 kHz 6.25 kHz/12.5 kHz	12.5/25 kHz 6.25 kHz/12.5 kHz	12.5/25 kHz 6.25 kHz/12.5 kHz		
Power Supply		7.5V DC ± 20%			
Battery Life 5-5-90 KNB-55LA (1,480 mAh) KNB-56N (1,400 mAh KNB-57LA (2,000 mAh) KNB-78L (2,860 mAh) KNB-79LC (2,860 mAh)	(FDMA conventional / Trunking. TDMA Conv 8.5 / 6.5 hours, 12.5 / 9 hours 75 / 6 hours, 11/8 hours 12 / 9.5 hours, 175 / 13 hours 175 / 13.5 hours, 25 / 18.5 hours 15 / 11.5 hours, 21.5 / 16 hours		ntional / Trunking) 9 / 7 hours, 12 / 9 hours 8 / 6 hours, 10.5 / 8 hours 13 / 10 hours, 17 / 13 hours 18.5 / 14 hours, 24 / 18.5 hours 15.5 / 12 hours, 20.5 / 16 hours		
Operating Temperature		22°F to +140°F (-30°C to +60°	°C)		
Frequency Stability	±0.5	5 ppm (-30°C to +60°C; +25°C	C Ref.)		
Dimensions Radio Only KNB-55L (1,480 mAh) KNB-56N (1,400 mAh) KNB-57L (2,000 mAh) KNB-78L, KNB-79LC	2.20 2.20 2.20 2.20 2.20	/ x H x D) Projections Not Incl x 4.71 x 1.43 in (56 x 119.6 x 36. x 4.71 x 1.43 in (56 x 119.6 x 36. x 4.71 x 1.68 in (56 x 119.6 x 42. x 4.71 x 1.53 in (56 x 119.6 x 38 x 4.71 x 1.77 in (56 x 119.6 x 44.	4 mm) 4 mm) 7 mm) 9 mm)		
Weight Radio Only KNB-55L (1,480 mAh) KNB-56N (1,400 mAh) KNB-57L (2,000 mAh) KNB-78L, KNB-79LC	1:	78 oz (220 g) 11.1 oz (315 g) 14.5 oz (410 g) 12.0 oz (340 g) 3.6 oz (385 g) / 13.9 oz (395 g)			
IC Certification	282F-479000	282F-479100	282F-502500		

Receiver			
Sensitivity			
NXDN* 6.25 kHz Digital (3% BER)		0.20 µV	
NXDN*12.5 kHz Digital (3% BER)		0.25 µV	
DMR 12.5 KHz Digital (5% BER)		0.30 µV	
DMR 12.5 KHz Digital (1% BER)		0.45 μV	
Analog (12dB SINAD)		0.25 μV	
Selectivity			
Analog @ 12.5kHz	65 df	3	60 dB
Analog @ 25kHz	72 dB		70 dB
Intermodulation		70 dB	
Spurious Rejection		70 dB	
Audio Distortion		3%	
Audio Output Power	500 mW/8Ω (3% Distortion) / 1,000 mW/8Ω (5% Distortion)		

Transmitter	NX-3200	NX-3300	NX-3400	
RF Power Output (High / Mid / Low)	5 W / 4 W / 1 W		3W/1W	
Spurious Emission	-70 dB			
FM Hum & Noise Analog @ 12.5kHz Analog @ 25kHz		40 dB 45 dB		
Audio Distortion	Less than 3%			
Digital Protocol	ETSI TS 102 361-1, -2, -3, -4			
Emission Designator		16K0F3E, 14K0F3E, 11K0F3E, 8K30F1E, 8K30F1D, 8K30F7W, 7K60FXD, 7K60FXE, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D		

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#### 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
Low Pressure	500.1/Procedure I	500.2/Procedure I, II	500.3/Procedure I, II	500.4/Procedure I, II	500.5/Procedure I, II
High Temperature	501.1/Procedure I, II	501.2/Procedure I, II	501.3/Procedure I, II	501.4/Procedure I, II	501.5/Procedure I, II
Low Temperature	502:1/Procedure I	502.2/Procedure I, II	502.3/Procedure I, II	502.4/Procedure I, II	502.5/Procedure I, II
Temperature Shock	503.1/Procedure I	503.2/Procedure I	503.3/Procedure I	503.4/Procedure I, II	503.5/Procedure I
Solar Radiation	505.1/Procedure I	505.2/Procedure I	505.3/Procedure I	505.4/Procedure I	505.5/Procedure I
Rain	506.1/Procedure I, II	506.2/Procedure I, II	506.3/Procedure I, II	506.4/Procedure I, III	506.5/Procedure I, III
Humidity	507:1/Procedure I, II	507.2/Procedure II, III	507.3/Procedure II, III	507.4	507.5/Proedure II
Salt Fog	509.1/Procedure I	509.2/Procedure I	509.3/Procedure I	509.4	509.5
Dust	510.1/Procedure I	510.2/Procedure I	510.3/Procedure I	510.4/Procedure I, III	510.5/Procedure I
Vibration	514.2/Procedure VIII, X	514.3/Procedure I	514.4/Procedure I	514.5/Procedure I	514.6/Procedure I
Shock	516.2/Procedure I, II, V	516.3/Procedure I, IV	516.4/Procedure I, IV	516.5/Procedure I, IV	516.6/Procedure I, IV

CSA Intrinsically Safe Class I, II, III, Division 1, Groups A,B,C,D,E,F,G. Division 2 Groups A,B,C,D

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