KENWOOD

NEXEDGE®

Digital Two-Way Radio

NX-205G/305G

NEXEDGE® VHF/UHF Digital & Analog Portable Radios

NXDN® Gen2 FleetSync® MPT1327 GPS

NEXEDGE is KENWOOD's innovative digital conventional and trunked radio solution, designed to meet the highest demands of today's communications environment and to provide users with a multitude of NEXEDGE-abilities to transform their operations. This versatile compact radio supports both NXDN digital and analog modes via a common transceiver technology, which creating a self-paced migration path to accommodate budgetary, administrative, organization and timeline requirements.

Features

- 5 W (136-174 MHz) Models
- 5 W (400-470, 450-520 MHz) Models
- 512 CH-GID / 128 Zones
- 12-Key Keypad Models
- 14 Character Alphanumeric Aliases
- Backlit Dot Matrix LCD
- Function/Status LCD Icons
- Multi-Language Display
- Date & 12/24 Hour Time Clock
- Transmit/Busy/Call Alert/Warn LED
- On/Off Volume Knob
- 16-Position Mechanical Selector
- 6 Front PF & Menu Keys
- 2 Side PF Keys
- 500 mW Speaker Audio
- Emergency Call Features
- Built-In GPS Unit
- KPG-111D Windows® FPU
- Flash Firmware Upgrading
- MIL-STD-810 C/D/E/F/G
- IP54/55 Water & Dust Intrusion
- Immersion (IP67) Option
- PC Serial Interface
- SDM Manual Input[1]
- Transparent Data Mode[1]
- Color Housing Option

Digital – General

- NXDN® Digital Air Interface
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Channels
- Over-the-Air Alias
- Over-the-Air Programming
- Paging Call
- Emergency Call
- All Group Call
- Status Messaging[1]
- Remote Stun/Kill[1]
- Remote Check[1]
- Short & Long Data Messages[1]
- GPS Location with Voice[1]
- NXDN® Scrambler Included
- AES & DES Encryption Module Option
- AES/DES Software Key Loader Option

Digital – Conventional Mode

- 64 Radio Access Numbers (RAN)
- Individual & Group Selective Call
- Mixed FM/Digital Operation
- Conventional IP Networks
- Site Roaming

Digital – Trunking Mode

- Individual Private Call
- Group Call & Broadcast Call
- Telephone Interconnect
- Transmission Trunked Mode[2]
- Message Trunked Mode[2]
- Call Queuing with Priority[2]
- Late Entry (UID & GID)[2]
- 4 Priority Monitor ID's[2]
- Remote Group Add[1]
- Failsoft Mode
- Gen2 Upgrade Option

Multi-Site IP Networks Compatible

- 60,000 GIDs / UIDs
- Wide Area Group Call
- Auto Roaming Registration
- Group Registration
- Gen2 Advanced GPS Reporting
- Gen2 Direct Frequency Assignment

Multi-System Compatible

- 8 Trunked Networks[3]
- UID Lists for each network
- Multi-System Roaming

Scan

- Single Zone / Multi-Zone / List Scan
- Dual Priority Scan (Conventional)

Analog Mode - General

- 12.5 & 25 kHz Channels
- Conventional & LTR® or MPT Zones
- FleetSync®/II, MDC-1200, DTMF
- Voice Inversion Scrambler
- QT / DQT & Two-Tone
- Analog Scrambler Board Capability

MPT Zones

- Single-Site Trunking
- Multi-Site Network Trunking
- 8 Network Capacity
- Network Roaming / Registration

FleetSync®/II (FM)

- PTT ID ANI / Caller ID
- Selective / Group Call
- Emergency Status / Text Messages[1]

MDC-1200

- PTT ID ANI / Caller ID
- Emergency / Radio Check & Inhibit

Accessories

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

KNB-47LAM
Li-ion Battery Pack
(1950mAh)

KNB-48LAM
Li-ion Battery Pack
(2550mAh)

KSC-32
Rapid Charger

KSC-326AK
Rapid Charger
(6-unit Rapid Rate)

KRA-22
VHF Helical Antenna
(Low Profile)

KRA-23
UHF Helical Antenna
(Low Profile)

KRA-25
VHF High-Gain
Antenna

KRA-26
VHF Helical Antenna
(Standard Length)

KRA-27
UHF Whip Antenna
(Standard Length)

KRA-28
VHF Broad Band
Antenna

KRA-29
UHF Broad Band
Antenna

KRA-43G
VHF GPS
Helical Antenna

KRA-44G
UHF GPS
Helical Antenna

KHS-11BL
Heavy-Duty
Earphone

KEP-1
Heavy-Duty
Earphone

KMC-72W
Speaker Microphone
(IP54/55/67)

KBH-11
Belt Clip (2.5")

KPG-150AP
OTAP Manager

Specifications

General	NX-205G	NX-305G
Frequency Range	136-174 MHz	Type 1: 450-520 MHz Type 2: 400-470 MHz
Channels Per Radio	512	
Number of Zones	128	
Max. Channels per Zone	250	
Channel Spacing		
Analog	12.5/15/25/30 kHz	12.5/25 kHz
Digital	6.25 kHz/12.5 kHz	6.25 kHz/12.5 kHz
Power Supply	7.5V DC ± 20%	
Battery Life		
KNB-48LAM 5-5-90	Approx. 14.5 hours	
10-10-80	Approx. 9.0 hours	
Operating Temperature	-22ºF to +140ºF (-30ºC to +60ºC)	
Frequency Stability	±2.0 ppm	±1.0 ppm
Antenna Impedance	50 Ω	
Dimensions/Weight	(W x H x D) Projections Not Included	
Radio Only	2.28 x 5.02 x 1.63 in. (58.0 x 127.5 x 41.3 mm)	9.17 oz (260g)
KNB-47LAM	2.28 x 5.02 x 1.63 in. (58.0 x 127.5 x 41.3 mm)	13.23 oz (375g)
KNB-48LAM	2.28 x 5.02 x 1.91 in. (58.0 x 127.5 x 48.5 mm)	14.29 oz (405g)
FCC ID		
Type 1	ALH378400	ALH378500
Type 2		ALH378501

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

Footnotes from Front:
1. Requires compatible PC software application or console.
2. These trunked features are primarily system programming and operational dependent. Priority Monitor also requires NX subscriber settings.
3. Up to 8 different Trunked networks can be configured per radio (each in a zone)

Receiver	NX-205G	NX-305G
Sensitivity		
NXDN® 6.25 kHz Digital (3% BER)	0.20 µV	
NXDN®12.5 kHz Digital (3% BER)	0.25 µV	
Analog (12dB SINAD)	0.25 µV	
Selectivity		
Analog @ 12.5kHz	65 dB	
Analog @ 25kHz	72 dB	
Intermodulation	70 dB	
Spurious Rejection	70 dB	
Audio Distortion	Less than 3%	
Audio Output Power	500 mW/8Ω (3% Distortion)	

Transmitter	NX-205G	NX-305G
RF Power Output	5 W to 1 W	
Spurious Emission	70 dB	
FM Hum & Noise		
Analog @ 12.5kHz	40 dB	
Analog @ 25kHz	45 dB	
Audio Distortion	Less than3%	
Emission Designator	16K0F3E, 11K0F3E, 8K30F1E, 8K30F1D, 8K30F7W, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D	

GPS*	NX-205G	NX-305G
Time to First Fix		
Cold Start	<60 Seconds	
Hot Start	<10 Seconds	
Horizontal Accuracy	<10 Meters	
Channels	50 Channels	
Tracking Sensitivity	-162 dBm	

*Accuracy specs are for long-term tracking (95th percentile values > 5 satellites visible at a nominal -130 dBM signal strength)

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/Procedure 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
Immersion (Optional)				512.4/Procedure I	512.5/Procedure I
International Protection Standard					
Dust & Water Protection	IP54/55, IP67 (Optional)				

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