

# **NEXEDGE®**

# NXR-700/800

**NEXEDGE® VHF/UHF Digital & FM Base Units** 

# NXDN®

#### GENERAL FEATURES

- 136-154, 146-174 MHz
- 400-430, 450-480, 480-512 MHz
- 5 W Exciter Output
- Repeater Operation
- Duplex / Simplex Base Operation
- 30 CH Scanning Base (Conventional)
- Two-Digit LED Display
- LED Status Indicators
- 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 Front Panel PF Key Control
- DTMF AUX Output Control
- DTMF AUX Input Monitoring
- KPG-109D Windows® FPU
- Flash Firmware Upgrading

#### DIGITAL – GENERAL

- NXDN® Digital Air Interface
- NXDN® Scrambler Included
- AMBE+2<sup>™</sup> VOCODER
- 6.25 & 12.5 kHz Channels
- UID & GID Validation
- NXR Over-the-Air Alias
- KXK-3 OCXO Option

#### DIGITAL – CONVENTIONAL MODE

- 16 RAN Repeater Controller Built-in
- 1,000 GIDs Per Site
- 1,000 UIDs Per Site
- Mixed FM/Digital Operation
- Conventional IP Networks
- Site Roaming Capability

#### DIGITAL TRUNKING OPTION

- 3,000 GIDs Per Site
- 3,000 UIDs Per Site
- 30 Channels Per Site
- Telephone Interconnect Option
- Transmission Trunked Mode
- Message Trunked Mode
- Busy Call Queuing
- Call Oue Pre-emption
- Late Entry (UID & GID)
- Control / Traffic Channel Switching
- Control Channel Rotation
- Cross-Busy
- Failsoft Mode
- NXDN® Traffic Channel Sharing
- 2 MB Call/Activity Memory
- Compact Flash Memory Expansion
- ESN Validation

#### MULTI-SITE IP NETWORK OPTION

- 48 Site Trunked IP Network
- 60,000 GIDs Per Network
- 60,000 UIDs Per Network
- NEXEDGE® Trunked Features
- Ethernet Network Interface
- IP LAN/WAN Connectivity
- Auto-Roaming / Registration
- Wide Area All Group Call
- Virtual Private Network
- Group Registration
- Use of Off-the-Shelf 10 Base-T/100
   Base-TX Ethernet Switching & Routers

#### KPG-110SM SYSTEM MANAGER

- Trunked Sites & IP Network Systems Only
- Windows® 2000/XP/Vista®/7Compatible
- USB Secure Key Access
- Direct, Dial-Up & IP Connectivity
- Subscriber Privileging
- 127 UID/GID Class-of-Service Entries
- 5000 Fleets (UID/GID User Lists)
- Telephone Call Limits
- Group Call Inter-Site Limits
- Remote Site Programming
- Real-Time Activity Monitoring
- NXR/Network Interface Diagnostics
- Call Logging / Event Download
- Remote System Firmware Updates

#### FM MODES – GENERAL

- 25 & 12.5 kHz Channels
- Encryption/ANI Board Control

#### FM CONVENTIONAL MODE

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

#### FM TRUNKED MODE

- External LTR® Controller Interface
- External MPT Controller Interface



### Options



 $<sup>\</sup>ensuremath{^\star}$  Required for 6.25 kHz trunking or frequency stability to observe the regulations.

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.

### Main Specifications

		NXR-700	NXR-800	
GENERAL				
Frequency Range	К Туре	146-174 MHz	450-480 MHz	
	K2 Type	136-154 MHz	480-512 MHz (RX) / 477-512 MHz (TX)	
	K3 Type		400-430 MHz	
Channel Spacing	Analog	12.5 / 15 / 25 / 30 kHz	12.5 / 25 kHz	
	Digital	6.25 / 12.5 kHz	6.25 / 12.5 kHz	
PLL Channel Step		2.5 / 3.125 / 5 / 6.25 kHz	3.125 / 5 / 6.25 kHz	
Frequency Stability		± 1.5 ppm		
	With KXK-3 (M)	± 0.5 ppm		
	With KXK-3 (M2)	±	1.0 ppm	
Operating Voltage		10.8 - 15.9 V DC		
Operating Temperature Range		-30° C to +60°	-30° C to +60° C (-22° F to + 140° F)	
Antenna Impedance		50 Ω		
Dimensions (W x H x D) Projections not included		483 x 44 x 331 mm		
Weight (net)		5 kg		
RECEIVER				
Sensitivity				
	Digital @ 6.25kHz (3% BER)	0	0.27 μV	
	Digital @ 12.5kHz (3% BER)	0.33 μV		
	Analog (12 dB SINAD)	0.30 μV		
Selectivity				
	Analog @ 25/30 kHz	93 dB (± 30 kHz)	87 dB (± 25 kHz)	
F14 11 0 11 '	Analog @ 12.5 kHz	85 dB (± 12.5 kHz)	81 dB (± 12.5 kHz)	
FM Hum & Noise	Analog @ 25/30 kHz		60 dB	
	Analog @ 12.5 kHz		55 dB	
Intermodulation Distortion		85 dB (± 50 / 100 kHz)		
Spurious Response		100 dB		
Audio Distortion (Ext.	SP)	Less than 2% (at 0.3 W)		
Audio Output (Ext. SP)		3 W (at 4 $\Omega$ , less than 5% distortion)		
TRANSMITTER			·	
RF Power Output		5 W	5 W to 0.5 W	
Spurious & Harmonics		73 dB		
FM Hum & Noise				
	Analog @ 25/30 kHz		55 dB	
Analog @ 12.5 kHz			50 dB	
Audio Distortion			Less than 1% at 1000 Hz	
Modulation			16K0F3E, 11K0F3E, 8K30F1E,	
			8K30F1D, 8K30F7W, 4K00F1E,	
		4K00F1D, 4F	(00F7W, 4K00F2D	

Analog measurements made per TIA/EIA 603 and specifications shown are typical. Specifications are subject to change without notice, due to advancements in technology.

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