



The NetWave® NWK11/M mini industrially hardened wireless kit is a low cost option for short range deployments that requires full featured radio performance. The wide range of channel spectrum widths available on the NWK11/M package of radios gives you the option of narrowing channel bandwidths as your network grows which will increase the number of non-overlapping channels and improve stability. The NWK11/M series radio kit comes standard with integrated antennas and IP67 rated impact resistant ABS enclosures designed to survive the most extreme conditions.

The NWK11/M is FCC certified for use in North America, NWK11IC/M is IC Certified for use in Canada, and the NWK11E/M is ETSI, DFS and TPC certified for use in the European Union.

## FEATURES

- › Complete wireless kit consisting of two radios, power supplies, and mounting hardware.
- › 20, 40, and 80 MHz Channel Bandwidth Support
- › Up to 100 Mbps Throughput
- › 802.11a/n/ac Compliant
- › Distances up to .5 mi(FCC) or .8km (ETSI and IC)
- › Passive PoE on Port 1
- › Environmentally Hardened -40° to +75°C
- › Meets class IP67 dust and water immersion protection standards
- › Secure transmission: WPA2 - AES or TKIP encryption
- › ComNet Antenna alignment feature eases installation and setup

- › RF Spectrum Survey Tools
- › LED array displays unit operational status along with received signal strength
- › Firmware Upgrades Included Free for the life of the product
- › Installation and Configuration Trainings Available
- › Radio Internal Components covered by Lifetime Warranty.
- › Enclosure covered by Three Year Warranty.

## APPLICATIONS

- › Short-Range Video Surveillance
- › Multipurpose Networks
- › ITS Applications

## SPECIFICATIONS

### Software Features

Addressing	Static IP / DHCP Client / DHCP Server
SNMP	V3
Telnet Server	Syslog
Dynamic DNS	802.1q VLAN support
Embedded Firewall	QoS support
Ability to Assign Static Routes	NTP Client
Spanning Tree Protocol support	
802.1x Port-Based Network Access Control	
User-Configurable Watchdog and Auto-Reboot Mechanism	
Multi-Level Configuration and Monitoring Login Accounts	
User Configurable Long Range Parameters	

### Wireless Radio

EIRP	NWK11/M (FCC): Up to +36 dBm for point to multipoint deployments, +46 dBm for point to point deployments with MAC-lock feature enabled NWK11C/M (IC): +30dBm NWK11E/M (ETSI): +30 dBm
RF Output	+30 dBm Rated Transmitter
Operational Frequency	5180 MHz - 5825 MHz, Region-dependent. Not all frequencies are supported in all regions. Contact ComNet for frequencies supported in your region.
Bandwidths	20, 40, and 80 MHz

### Standard Internal Antenna

Antenna	Internal 16 dBi Dual Polarized Directional
Gain	16 dBi
Azimuth	30° Horizontal/Vertical
Elevation	30° Horizontal/Vertical

### Connectors

10/100/1000 Ethernet	RJ-45, Sealed Cable Gland
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### Power

Operating Power	48 to 57 VDC @ 170 mA
Power Consumption	5 W Max
PD Power	Passive PoE

### Mechanical

Indicating LEDs	Power On Ethernet Link Signal Strength
Size (L x W x H)	7.4 x 7.4 x 2.2 in (18.5 x 18.5 x 5.6 cm)
Shipping Weight:	<7.8 lb / 3.5 kg

### Environmental

MTBF	>100,000 hours
Operating Temp	-40° C to +75° C
Storage Temp	-40° C to +85° C
Relative Humidity	5% to 95%, non-condensing <sup>1</sup>

### Warranty

Internal Components	Lifetime
Enclosure	3 Year



## ORDERING INFORMATION

Part Number	Description
NWK11/M	Mini Industrially Hardened Narrow Bandwidth Wireless Kit, Supports distances up to 0.5 mi/800 m, FCC certified for North America
NWK11C/M	Mini Industrially Hardened Narrow Bandwidth Wireless Kit, Supports distances up to 0.5 mi/800 m, IC certified for Canada
NWK11E/M	Mini Industrially Hardened Narrow Bandwidth Wireless Kit, Supports distances up to 0.5 mi/800 m, ETSI certified for European Union
Included Accessories	2 Pole Mounting Hardware Kits 2 Non Hardened Passive Power Injectors (1 for each radio) for use in benign 0-50° C environments only.
Options	[1] Add suffix 'C' for Conformally Coated Circuit Boards to extend to condensation conditions
(Extra charge, consult factory)	PIM1 - Hardened 100 Mbps Power Injection Module supporting 24-48 VDC and 24 VAC Input NWPM24PPI - Hardened Passive Power Inserter supporting 90-264VAC input and 48VDC @ .5A output. -10 - 60C Operating Temperature

NOTE: In a continuing effort to improve and advance technology, product specifications are subject to change without notice.

## TYPICAL APPLICATION

