



The NetWave® industrially hardened wireless Ethernet transmission link can be configured through the embedded User Interface as a Client or as an Access Point. This point-to-multipoint model allows multiple Ethernet endpoints to be connected to a central Access Point. Up to 15 endpoints can be linked to a central access point. The NW1 and NW2 support up to 95Mbps throughput using MIMO technology. The units can be powered by an IEEE 802.3af PoE compliant device or through the supplied power injection module. The NW1 is FCC certified for use in North America and the NW2 is ETSI, DFS and TPC certified for use in the European Union.

FEATURES

- › Up to 95Mbps Throughput
- › 802.11a/n Compliant
- › Distances up to 2 mi (FCC) or 2km (ETSI)
- › Powered by the included power injection module or by an IEEE802.3af PoE compliant device
- › Environmentally Hardened -40° to +75°C
- › Meets class IP67 dust and water immersion protection standards
- › ETSI Standards (EU Region only):
 - DFS Dynamic Frequency Selection
 - TPC Transmit Power Control
- › Secure transmission: WPA2 - AES or TKIP encryption
- › ComNet Antenna alignment feature eases installation and setup
- › RF Spectrum Survey Tools
- › Antenna Alignment Tools
- › LED array displays unit operational status along with received signal strength
- › Radio Internal Components covered by Lifetime Warranty.
- › Enclosure covered by Three Year Warranty.

APPLICATIONS

- › Point to Multi-Point topologies whereby several Clients connect to one Access Point
- › Simple to deploy and cost-effective alternative to physical connections to Ethernet edge equipment
- › Integration of Ethernet where right-of-way issues mandate wireless communications
- › ITS traffic signalization networks and Video Detection Systems (VDS)
- › ITS roadside and city center CCTV surveillance, and surveillance of high-value or mission-critical assets
- › Wireless communications in manufacturing, petrochemical refineries, wastewater treatment facilities, and other industrial automation and control applications operating in harsh or out-of-plant environments
- › Electrical substation video and perimeter surveillance

SPECIFICATIONS

Wireless Radio

EIRP	NW1 (FCC): Up to +36dBm for point to multipoint deployments, +45dBm for point to point deployments with MAC-lock feature enabled NW2 (ETSI): +30dBm
RF Output	+26dBm Rated Transmitter
Operational Frequency	5180MHz – 5825MHz, Region-dependent. Not all frequencies are supported in all regions. Contact ComNet for frequencies supported in your region.
Bandwidths	20 and 40MHz

Standard Internal Antenna

Antenna	Internal 19dBi Dual Polarized Directional
Gain	19dBi
Azimuth	17° Horizontal/Vertical
Elevation	17° Horizontal/Vertical

Connectors

10/100 Ethernet	2 × RJ-45, Sealed Cable Gland
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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	

Power

Operating Voltage	42 to 57 VDC
Power Consumption	5.5W Max
PD Power	IEEE802.3af PD compliant

Mechanical

Indicating LEDs	Power On Ethernet Link Signal Strength
Size (L × W × H)	10.6 × 10.6 × 2.9 in (27 × 27 × 7.5 cm)
Shipping Weight:	< 4.4 lb / 2 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 ¹

Warranty

Internal Components	Lifetime
Enclosure	3 Year

AGENCY COMPLIANCE

FCC

PART 15 COMPLIANT

CE

RoHS

Low Power Consumption

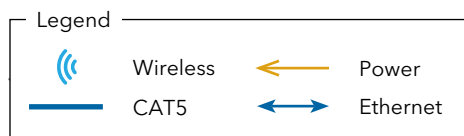
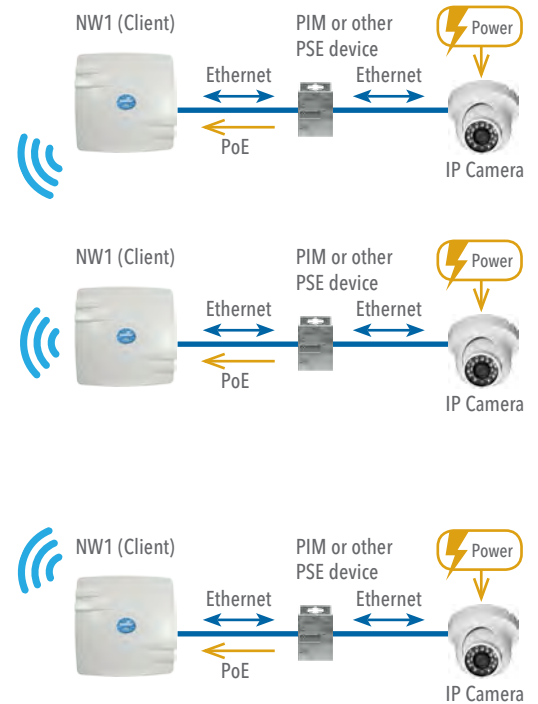
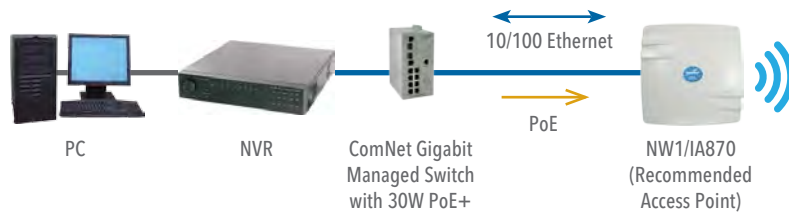
ORDERING INFORMATION

Part Number	Description
NW1	Industrially Hardened Point-to-Multipoint Wireless Ethernet Unit, Supports distances up to 2 mi/3.2 km, FCC certified for North America
NW2	Industrially Hardened Point-to-Multipoint Wireless Ethernet Unit, Supports distances up to 2 km/1.25 mi, ETSI certified for European Union
Included Accessories	Power Kit with Power Supply and Passive Power Injector Pole Mounting Hardware Kit
Options	NWBKT - Articulating Wall or Pole Mounting Kit. Supports up to 3in/76mm diameter poles. (Sold Separately) [1] Add suffix 'C' for Conformally Coated Circuit Boards to extend to condensation conditions (Extra charge, consult factory)

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

TYPICAL APPLICATION

Point-to-Multipoint Topology



Point-to-Point Topology Utilizing Dual Ports

