# Industrially Hardened High Performance Outdoor Wireless Bridge



## NW(1,2)[IC]





The NetWave<sup>®</sup> NW(1,2)[IC] Industrial Grade high performance wireless radio is ideal for high capacity and scalable deployments where channel overlapping and interference typically cause our discounted competitors radios to become unstable. The wide range of channel spectrum widths available on the NW(1,2)[IC] series 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 NW(1,2)[IC] comes standard with an integrated antenna and an IP67 rated impact resistant polycarbonate enclosure that is designed to survive the most extreme conditions.

The NW1 is FCC certified for use in the United States. The NW2 is ETSI, DFS and TPC certified for use in the European Union. The NW1IC is certified for use in Canada.

### **FEATURES**

- > New and improved impact resistant polycarbonate enclosure
- > Up to 500 Mbps Throughput (subject to environmental conditions)
- > 20, 40, and 80 Mhz Channel Bandwidth Support
- > 802.11a/n/ac Compliant
- > Distances up to 2 mi (FCC, IC) or 2km (ETSI)
- > IEEE802.3at PoE Compliant PD on port 1
- > IEEE802.3af power source (PSE) available on port 2
- > 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
- › Antenna Alignment 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**

- › High-Bandwidth Video Surveillance
- › Multipurpose Networks
- > ITS Applications

# SPECIFICATIONS

#### **Software Features**

Static IP / DHCP Client / DHCP Server Addressing SNMP V3 **Dynamic DNS** 802.1q VLAN support QoS support **Embedded Firewall** Ability to Assign Static Routes 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 NW1 (FCC, IC): Up to +36 dBm for point to multipoint deployments, +49 dBm for point to point deployments with MAC-lock feature enabled NW2 (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 20 dBi Dual Polarized Directional |
|-----------|--|
| Gain      | 20 dBi                                     |
| Azimuth   | 17° Horizontal/Vertical                    |
| Elevation | 17° Horizontal/Vertical                    |

#### **Connectors**

Gigabit Ethernet 10/100 Ethernet

Power

# **Power Consumption**

PD Power **PSE** Power

#### **Mechanical**

Indicating LEDs Size  $(L \times W \times H)$ Shipping Weight:

#### Environmental

MTBF **Operating Temp** Storage Temp **Relative Humidity** Wind load

Warranty

Enclosure

Internal Components Lifetime 3 Year

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

Port 1 RJ-45, Sealed Cable Gland

Port 2 RJ-45, Sealed Cable Gland

IEEE802.3af PSE compliant uplink

IEEE802.3af/at pass-through PD compliant

Power On Ethernet Link Signal Strength

10.6 × 10.6 × 2.9 in (27 × 27 × 7.5 cm)

5 W Max

< 4.4 lb / 2 kg

>100,000 hours

-40° C to +75° C

-40° C to +85° C

5% to 95%, non-condensing<sup>1</sup>

132N(Front) at 200 km/h

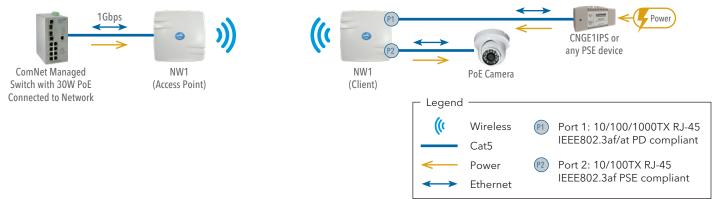




## **ORDERING INFORMATION**

| Part Number          | Description   |
|----------------------|---|
| NW1                  | Industrially Hardened Narrow Bandwidth Wireless Radio, Supports distances up to 2 mi/3.2 km, FCC certified for North America                  |
| NW2                  | Industrially Hardened Narrow Bandwidth Wireless Radio, Supports distances up to 2 km/1.25 mi, ETSI certified for European Union               |
| NW1IC                | Industrially Hardened Narrow Bandwidth Wireless Radio, Supports distances up to 2 mi/3.2 km, IC certified for Canada                          |
| Included Accessories | Pole Mounting Hardware Kit  |
| Options              | NWBKT - Articulating Wall or Pole Mounting Kit. Supports up to 3in/76mm diameter poles. (Sold Separately)                                     |
|                      | CNGE1IPS - Hardened 35 W Midspan 1 Gbps Power Injection Module for Passthrough PoE Applications supporting 90-264V AC Input and 56V DC Output |
|                      | [1] Add suffix '/C' for Conformally Coated Circuit Boards to extend to condensation conditions (Extra charge, consult factory)                |

## **TYPICAL APPLICATION**



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