

# **Industrially Hardened High Performance Wireless Kit for High Density Environments**

NWK(1,2)[IC]

















The NetWave® NWK(1,2)[IC] Industrial Grade high performance wireless transmission kit includes a Client and an Access Point. These radios kits are 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 NWK(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 NWK(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 NWK1 is FCC certified for use in the United States. The NWK2 is ETSI, DFS and TPC certified for use in the European Union. The NWK1IC is certified for use in Canada.

# **FEATURES**

- > Narrow Channel Spectrum Widths for large and noisy deployments
- > 5, 10, 20 and 40 Mhz Channel Bandwidth Support
- > Up to 240 Mbps Throughput
- > 802.11a/n 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
- > Scalable Narrow Channel 5 and 10 MHz Bandwidths will allow you to expand your WLAN without losing reliability by increasing the total number of non-overlapping channels
- > 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

# **Industrially Hardened High Performance Wireless Kit for High Density Environments**

# **SPECIFICATIONS**

# **Software Features**

Addressing Static IP / DHCP Client / DHCP Server

SNMP

**Dynamic DNS** 802.1q VLAN support

**Embedded Firewall** QoS support

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

FIRP NWK1 (FCC, IC): Up to +36 dBm for point to

> multipoint deployments, +49 dBm for point to point deployments with MAC-lock feature enabled

NWK2 (ETSI): +30 dBm

**RF Output** +30 dBm Rated Transmitter

5180 MHz - 5825 MHz, Region-dependent. **Operational Frequency** 

> Not all frequencies are supported in all regions. Contact ComNet for frequencies supported in your

**Bandwidths** 5, 10, 20 and 40 MHz

## Standard Internal Antenna

Antenna Internal 20 dBi Dual Polarized Directional

Gain

Azimuth 17° Horizontal/Vertical 17º Horizontal/Vertical Elevation

# **Connectors**

**Gigabit Ethernet** Port 1 RJ-45, Sealed Cable Gland 10/100 Ethernet Port 2 RJ-45, Sealed Cable Gland

Operating Voltage 24 to 56 VDC **Power Consumption** 5 W Max

PD Power IEEE802.3af/at pass-through PD compliant **PSE Power** IEEE802.3af PSE compliant uplink

### Mechanical

Indicating LEDs Power On Ethernet Link Signal Strength Size  $(L \times W \times H)$  $10.6 \times 10.6 \times 2.9 \text{ in } (27 \times 27 \times 7.5 \text{ cm})$ 

Shipping Weight: < 4.4 lb / 2 kg

#### **Environmental**

**MTBF** >100,000 hours **Operating Temp** -40° C to +75° C -40° C to +85° C Storage Temp

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

#### Warranty

Internal Components Lifetime Enclosure 3 Year

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





# ORDERING INFORMATION

#### **Part Number** Description NWK1 Industrially Hardened Point-to-Point Wireless Ethernet Kit, Supports distances up to 2 mi/3.2 km, FCC certified for North America NWK2 Industrially Hardened Point-to-Point Wireless Ethernet Kit, Supports distances up to 2 km/1.25 mi, ETSI certified for European Union NWK1IC Industrially Hardened Point-to-Point Wireless Ethernet Kit, Supports distances up to 2 km/1.25 mi, 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) (Extra charge, PIM1 - Hardened 100 Mbps Power Injection Module supporting 24-48V DC and 24VAC Input (Includes 24V 12W power supply, North America only) consult factory) CWPOEIPS-15 - Commercial 15.4W Midspan 100Mb Power Injection Module supporting 100-240V AC input and 48V DC output 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





