The NetWave® pre-configured point-to-point industrially hardened wireless Ethernet Transmission kit that allows Ethernet data to be transmitted between a Client remote location and the Access Point or head end. The NWK1 and NWK2 support up to 95 Mbps throughput due to MIMO technology. An easy to read LED array displays unit operational status along with received signal strength ensuring optimal installation and operation. The units can be powered by an IEEE 802.3af PoE compliant device or through the supplied power injection module. The NWK1 is FCC certified for use in North America and the NWK2 is ETSI, DFS and TPC certified for use in the European Union. Each kit contains two passive power injectors, power supplies and mounting hardware.

**FEATURES**

- Pre-configured Access Point and Client units for quick setup
- Up to 95 Mbps 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 -40º to +75ºC
- 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**

- 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
NWK1/NWK2

Industrially Hardened Point-to-Point Wireless Ethernet Kit

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 (ETS): +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: 17º Horizontal/Vertical
- Elevation: 17º Horizontal/Vertical

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

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: <8.8 lb / 4 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-condensing¹

Warranty
- Internal Components: Lifetime
- Enclosure: 3 Year

ORDERING INFORMATION

Part Number Description
- NWK1: Industrially Hardened Point-to-Point Wireless Ethernet Kit, distances up to 2 mi/3.2 km.
  - Consult ComNet tech support for system designs beyond 2 mi/3.2 km. FCC certified for North America
- NWK2: Industrially Hardened Point-to-Point Wireless Ethernet Kit, distances up to 2 km/1.25 mi, ETSI certified for European Union
- Included Accessories: 2 × Power Kit with Power Supply and Passive Power Injector
  - 2 × Pole Mounting Hardware Kit
- Options: NWBKT - Articulating Wall Mount Bracket (Sold Separately)
  - 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

Legend
- Wireless
- Power
- Ethernet
- IP Camera
- CAT5

Client
- Ethernet
- PoE

PIM or other PSE device
- Ethernet
- PoE

Access Point
- Ethernet
- PoE

PC
- 10/100 Ethernet

NVR
- PoE

*Conformally Coated Circuit Boards to extend to condensation conditions (Extra charge, consult factory)