



The NetWave® NWK7[E]/M environmentally hardened High Throughput (HT) wireless Ethernet transmission kit includes a Client and an Access Point. This single radio model is pre-configured for high throughput point-to-point applications and comes with an integrated 16dBi, 30° beamwidth antenna. The NW7[E]/M supports up to 240Mbps throughput using MIMO technology. The units can be powered by an 802.3af PoE compliant device or through a sold separately PoE injector. The NWK7/M is FCC certified for use in North America and the NWK7E/M is ETSI, DFS and TPC certified for use in the European Union. The NWK7[E]/M is an ultra-small form factor addition to the ComNet NetWave product family.

FEATURES

- › High throughput:
 - Up to 180 Mbps in one direction
 - Up to 240 Mbps total full duplex
- › Lifetime Warranty
- › IEEE802.3af PoE Compliant PD
- › 802.11a/n Compliant
- › Distances up to 2 mi (FCC) or 2km (ETSI)
- › Environmentally Hardened -40° to +70°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

APPLICATIONS

- › High Throughput Back Haul Link for installations that require connecting to more than one Ethernet device
- › 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)
- › Multicast traffic-based video systems
- › 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

5GHz Wireless Radio

| | |
|-----------------------|---|
| EIRP | NWK7/M (FCC): Up to +36dBm for point to multipoint deployments, +46dBm for point to point deployments with MAC-lock feature enabled NWK7E/M (ETSI): +30dBm |
| RF Output | 30dBm 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 |

Internal Antenna

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

Connectors

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|------------------|---------------------------|
| Gigabit Ethernet | 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 Power | 42 to 57 VDC |
| Power Consumption | 8W Max |
| PD Power | IEEE802.3af PD compliant |

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: | <7.7 lb / 3.5 kg |

Environmental

| | |
|-------------------|--|
| MTBF | >100,000 hours |
| Operating Temp | -40° C to +70° C |
| Storage Temp | -40° C to +85° C |
| Relative Humidity | 5% to 95%, non-condensing ¹ |

ORDERING INFORMATION

| Part Number | Description |
|----------------------|---|
| NWK7/M | Hardened Mini Point-to-point kit, Gb Ethernet Port, internal 16dBi 30° beamwidth directional antenna, includes pole mounting assembly, Supports 802.3af PD PoE Power, FCC certified for use in NA Region |
| NWK7E/M | Hardened Mini Point-to-point kit, Gb Ethernet Port, internal 16dBi 30° beamwidth directional antenna, includes pole mounting assembly, Supports 802.3af PD PoE Power, ETSI certified for use in EU Region |
| Included Accessories | Mounting Hardware Kit (For Pole Mounting Only) |
| Options | CNGE1IPS - 35W PoE Injector (sold separately) [1] Add suffix 'C' for Conformally Coated Circuit Boards to extend to condensation conditions (Extra charge, consult factory) |

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

High Throughput Point-to-Point Topology (Shown with PoE Cameras)

