

# Mini Industrially Hardened High Performance Outdoor Wireless Bridge

NWK(1,2)[IC]/M





The NetWave® NWK(1,2)[IC]/M industrially hardened wireless Ethernet transmission kit includes a Client and an Access Point. The NWK1[IC]/M and NWK2/M support up to 500 Mbps throughput using MIMO technology. The units can be powered by an IEEE 802.3af PoE compliant device or through an optional power injection module. The NWK1/M is FCC certified for use in North America, the NWK1IC/M is IC certified for use in Canada, and the NWK2/M is ETSI, DFS, and TPC certified for use in the European Union. This mini unit come in an ultra-small form factor that is a new addition to the ComNet NetWave product family.

### **FEATURES**

- > New and improved impact resistant polycarbonate enclosure
- > 20, 40, and 80 MHz Channel Bandwidth Support
- > Up to 500 Mbps Throughput (subject to environmental conditions)
- > 802.11a/n/ac Compliant
- > Distances up to 2 mi (FCC, IC) or 2km (ETSI)
- > IEEE802.3at PoE Compliant PD on port 1
- > 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
- › 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 outof-plant environments
- > Electrical substation video and perimeter surveillance

# **Mini Industrially Hardened High Performance Outdoor Wireless Bridge**

## **SPECIFICATIONS**

### **Wireless Radio**

	EIRP	NWK1[IC]/M (FCC, IC): Up to +36dBm for point to		
		multipoint deployments, +42dBm for point to point		
		deployments with MAC-lock feature enabled		
		NWK2/M (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, 40, and 80 MHz		
itandard Internal Antenna				

30° Horizontal/Vertical

30° Horizontal/Vertical

RJ-45, Sealed Cable Gland

16dBi

Internal 16dBi Dual Polarized Directional

Power On, Ethernet Link, Signal Strength

#### Antenna Gain Azimuth Elevation

#### **Connectors**

S

10/100/1000 Ethernet Indicating LEDs



#### **Software Features**

Addressing	Static IP / DHCP Client / DHCP Server	
SNMP	V3	
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		

#### Power

Operating Power	48 to 57 VDC @ 170 mA
Power Consumption	5 W Max
PD Power	IEEE802.3af PD compliant
Mechanical	
Indicating LEDs	Power On Ethernet Link Signal Strength
Size (L $\times$ W $\times$ H)	7.4 × 7.4 × 2.2 in (18.5 × 18.5 × 5.6 cm)

# Shipping Weight

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

>100,000 hours -40° C to  $+75^{\circ}$  C  $-40^{\circ}$  C to  $+85^{\circ}$  C 5% to 95%, non-condensing<sup>1</sup> 62N(Front) at 200 km/h

<7.7 lb / 3.5 kg

#### Warranty

Internal Components Enclosure

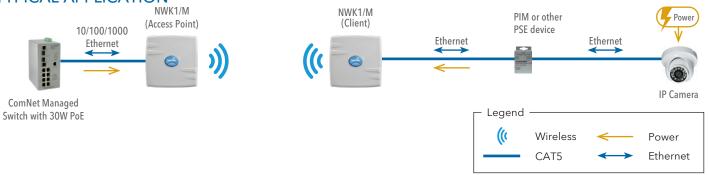
Lifetime 3 Year

## **ORDERING INFORMATION**

Part Number	Description
NWK1/M	Industrially Hardened Mini Point-to-Point Wireless Ethernet Kit, Supports distances up to 2 mi/3.2 km, FCC certified for North America
NWK2/M	Industrially Hardened Mini Point-to-Point Wireless Ethernet Kit, Supports distances up to 2 km/1.25 mi, ETSI certified for European Union
NWK1IC/M	Industrially Hardened Mini 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 (Extra charge, consult factory)	[1] Add suffix '/C' for Conformally Coated Circuit Boards to extend to condensation conditions CNGE1IPS - Hardened 35 W Midspan 1 Gbps Power Injection Module for Passthrough PoE Applications supporting 90-264 VAC Input and 56 VDC Output

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

## **TYPICAL APPLICATION**



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Construction

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