comnet
Communication Networks

netwave®

POWER SUPPLY	75° -40°	PD		10/100 ETHERNET
INCLUDED	HARDENED	802.3af/at	IP67	1

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 95Mbps 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/at 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

› Lifetime Warranty

› Up to 95Mbps 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

› Pre-configured Access Point and Client units for quick setup

› 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

› RF Spectrum Survey Tools

› Antenna Alignment Tools

› LED array displays unit operational status along with received signal strength

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

SPECIFICATIONS

Wireless Radio

EIRP	NWK1 (FCC): +45dBm
	NWK2 (ETSI): +30dBm
RF Output	+26dBm Rated Transmitter
Operational Frequency	NWK1: FCC UNII3 5745-5825MHz
	NWK2: 5500-5700MHz supporting 802.11h ETSI DFS and TPC
Bandwidths	10, 20, and 40MHz

Wireless Antenna

Antenna	Internal 19dBi Dual Polarized Directional
Gain	19dBi
Azimuth	17° Horizontal/Vertical
Elevation	17° Horizontal/Vertical

Connectors

10/100 Ethernet	RJ-45, Sealed Cable Gland

LEDs

	Power On, Ethernet Link, Signal Strength, LAN port, Reset

AGENCY COMPLIANCE

FC PART 15 COMPLIANT   CE   RoHS COMPLIANT

Low Power Consumption

Software Features

Addressing	Static IP / DHCP Client / DHCP Server
SNMP	V2c

Spanning Tree Protocol support
Telnet Server
Syslog
802.1x Port-Based Network Access Control
NTP Client
User-Configurable Watchdog and Auto-Reboot Mechanism
Multi-Level Configuration and Monitoring Login Accounts
User Configurable Long Range Parameters

Power

Operating Voltage	24VDC @ 140mA
	48VDC @ 70mA
Power Consumption	3.5 W
PD Power	IEEE802.3af PD compliant

Mechanical

Size (L × W × H)	10.0 × 10.0 × 3.4 in (25.7 × 25.7 × 8.6 cm)
Shipping Weight:	< 4lbs/1.8kg

Environmental

MTBF	>100,000 hours
Operating Temp	-40° C to +75° C
Storage Temp	-40° C to +85° C
Relative Humidity	5% to 95%

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, 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 × Mounting Hardware Kit
Options	NWBKT - Articulating Wall Mount Bracket (Sold Separately)

TYPICAL APPLICATION

LEGEND
WIRELESS   POWER
CAT5   ETHERNET

PC — DVR — ComNet Gigabit Managed Switch with 30W PoE+ — 10/100 Ethernet / PoE — NW1 (Access Point)))) (((NW1 (Client) — Ethernet / PoE — PIM or other PSE device — Ethernet — IP Camera — Power

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