WLn-xROAD

11n WiFi access point, Ethernet bridge, repeater & MESH point for automotive & heavy duty applications

- WiFi IEEE 802.11a/b/g/n radio (MIMO 3T3R), up to 450 Mbps radio bit rate
- MESH, WMM QoS, multiple SSID and centralized RADIUS security support
- Web based configuration, SNMP administration
- Auto-sensing Gigabit 10/100/1000 Base TX auto MDI/MDIX network interface
- DC power supply input (+9VDC to +36VDC)
- Shock & vibration proof rugged aluminum enclosure, IP66 seal rating

FAST ROAMING

abgn WiFi

RoHS WEEE COMPLIANT

5 YEAR WARRANTY

Introduction

WLn-xROAD/N is a rugged equipment designed for applications in road transportation, depots, warehouses, agriculture, manufacturing floors, docks, distribution centers, shipyards and lumberyards ... it can be mounted in trucks, city buses, forklifts, trailers, tractors or cranes or in any rotating machinery, for material handling, real-time information transmission, and inventory management.

The device relies on the multi-streams MIMO technology that contributes to an expanded coverage, higher data throughput and increased radio link reliability.

It fulfills the most severe requirements in terms of operating environment: from -25°C to +70°C, shock and vibration proof, protection against dust and water projections (IP66).

WLn-xROAD is E-marked (CE standard for electronic equipments installed aboard vehicle), and can thus be installed in full safety aboard of all on-road equipments.

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Technical characteristics overview

Ethernet link	Gigabit 10/100/1000 auto-sensing Ethernet port (terminal block inside the enclosure), plug & play mode & auto MDI/MDIX cross-over
WiFi network	Compliant to the IEEE 802.11a/b/g/n MIMO 3T3R, 2.4 / 5 / 5.4 GHz standards
Radio data rate	450 Mbps
Radio channels	2.4 GHz (802.11b/g/n): 14 channels / 5 GHz (801.11a/h/n): 24 channels
Output power	Transmitter +20 dBm (TPC)
Sensitivity	Receiver -92 dBm for IEEE 802.11 a/g/n and -95 dBm for IEEE 802.11b
Antennas connections	Up to three 2.4 / 5 GHz MIMO antennas, RP-SMA type connectors
Modulation	OFDM: BPSK, QPSK, 16QAM, 64QAM / DSSS: DBPSK, DQPSK, CCK
Security	64/128 bits WEP, WPA-PSK, WPA2-PSK, IEEE 802.1x (centralized RADIUS authenticator & supplicant), MAC addresses filtering, SSID broadcast control
Modes	Access point to build a WiFi network infrastructure, bridge to connect any Ethernet equipments to this network, MODBUS/TCP wireless gateway, repeater, MESH point (IEEE 802.11s), infrastructure, AD-HOC, bridge router, fast roaming (less than 30 ms single channel), redundancy (VRRP), WMM QoS, multicast and IGMP-Snooping modes are fully supported.
Administration	Built-in WEB interface, the setup of the device is achieved using any web browser, SNMP agent, ACKSYS NDM
Operating systems	Windows, Linux, UNIX as well as any operating system supporting TCP/IP
Signaling	LEDs signaling for radio quality, activity and status, Link 10/100/1000 and activity for the LAN port
Power supply	DC power supply (+9VDC to +36VDC), terminal block inside the enclosure
Consumption	10W typical power consumption
Dimensions & weight	Shockproof rugged aluminum enclosure, (L: 185 x W: 64 x H: 35 mm), 450 g with the cable and without the antennas
Standards	MIL-STD-810F method 514.5 & 516.5 (shocks & vibrations), IP66 seal rating EN 301489-17 & EN 61000-6-2 (CEM), E-marked (2004/104)
Environment	Operating temperature: -25°C to +70°C (HR 0-99%), storage: -40°C to +85°C

Ordering references

WLn-xROAD	WiFi Access Point, Ethernet Bridge, Repeater & MESH point (IEEE 802.11n a/b/g) for automotive applications, power input from +9VDC to +36VDC, shipped with 3 dual band 2 dBi omnidirectional (2.4 / 5 GHz) antenna and 2 meters of Ethernet RJ45 cable & power cable

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