WLg-xROAD/N

WiFi Access Point, Ethernet Bridge & Repeater (WDS) for automotive applications

- WiFi IEEE 802.11 a/b/g/h & super AG, up to 108 Mbps

- Security : WEP, WPA-PSK, WPA2-PSK & IEEE 802.1x RADIUS

- Web based configuration, SNMP administration

- Auto-sensing 10/100 Base TX network interface

- DC power supply input (+9VDC to +50VDC), POE IEEE 802.3af for /NP

- Shock & vibration proof rugged aluminum enclosure, IP65 seal rating

Introduction

WLg-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, for material handling, real-time information transmission, and inventory management.

It fulfills the most severe requirements in terms of operating environment: from -25°C to +70°C, shockproof and vibration proof, protection against dust and water projections (IP65).

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

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Technical characteristics overview

Ethernet Link	10/100 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/h 2.4 / 5 GHz standards, multi-country Roaming support (IEEE 802.11d); Dynamic Frequency Selection (DFS) support provides flexible selection of best frequency to allow mobility among existing networks; «ClearVoice» band provides non-overlapping channels for fast data transmission; Transmission Power Control (TPC) offers flexibility to adjust RF output power, based on ATHEROS's AR5414 (AR5006XS) chip set.
Data rate	Up to 108 Mbps (Super AG mode)
Channels	13 channels (b/g modes), 8 channels (a mode), 11 channels (h mode)
Output power	Transmitter +20 dBm (TPC)
Sensitivity	Receiver –92 dBm for IEEE 802.11 a/g and -95 dBm for IEEE 802.11b
Antenna	One 2dBi 2.4 / 5 GHz antenna, RP-SMA connector
Modulation	OFDM: BPSK, QPSK, 16QAM, 64QAM and DSSS: DBPSK, DQPSK, CCK
Security	64/128 bits WEP, WPA-PSK, WPA2-PSK, IEEE 802.1x (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 and MODBUS/TCP wireless gateway, repeater (WDS), infrastructure, AD-HOC, bridge router & fast roaming (less than 50 ms) modes are supported
Administration	Thanks to its built-in WEB interface, the setup of the device is achieved using any web browser installed on your computer (Internet Explorer, Netscape, Mozilla ...), SNMP agent, ACKSYS NDM
Operating systems	Windows, Linux, UNIX as well as any operating system supporting TCP/IP
Signaling	LEDs signaling for LAN, WLAN network activity, 10/100 mode, power supply
Power supply	DC power supply (+9VDC to +50VDC) or PoE IEEE 802.3af (for the /NP model)
Consumption	3.6W typical power consumption, 4W for the /NP model
Dimensions & weight	Shockproof rugged aluminum enclosure, (L: 115 x W: 64 x H: 35 mm), 370 g with the cable and without the antenna
Standards	MIL-STD-810F method 514.5 & 516.5 (shocks & vibrations), IP65 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 +80°C

Ordering references

WLg-xROAD/N	WiFi Access Point, Ethernet Bridge & WDS Repeater (a/b/g/h) for automotive applications, power input from +9VDC to +50VDC, shipped with 1 dual band 2 dBi omnidirectional (2.4 / 5 GHz) antenna and 2 meters of Ethernet RJ45 cable
WLg-xROAD/NP	Same as above with the power over Ethernet option (IEEE 802.3af)