

WiFi Access Point, Ethernet Bridge & Repeater (WDS) for railways and heavy duty applications



Rapid roaming:
Less than 50 mS

- 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
- 2-port auto-sensing 10/100 Base TX network interface
- Dual DC power supply input (+9VDC to +75VDC), POE IEEE 802.3af for /NP
- Shockproof rugged IP 66 aluminum enclosure

WLg-ABOARD/N [P]

IEEE 802.11a/b/g/h
WiFi 2.4 / 5 GHz

RF Module
certified



5-YEAR WARRANTY



WLg-ABOARD/N is a rugged equipment designed for applications in road, railways, marine transportation, depots, warehouses, agriculture, manufacturing floors, docks, distribution centers, shipyards and lumberyards ... it can be mounted in trucks, trains, tramways, freighter ships, 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, IP66 seal rating for protection against dust and water projections.

The product is UTAC E2 certified (CE standard for electronic equipments installed aboard vehicle), and can thus be installed in full safety aboard of all on-road equipments.

TECHNICAL CHARACTERISTICS OVERVIEW

Ethernet link	2-port Ethernet 10/100 auto-sensing, waterproof M12 4-point connectors (D-code), 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), +26 dBm with the WLg-RF400MW option
Sensitivity	Receiver -92 dBm for IEEE 802.11 a/g and -95 dBm for IEEE 802.11b
Antennas	Two 2dBi 2.4 / 5 GHz antenna, N-type connectors, optional lightning surge protection
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 & rapid 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, MAIN & AUX power supply
Power supply	Dual input DC power supply (+9VDC to +75VDC), waterproof M12 connector
Consumption	7W typical power consumption
Dimensions & weight	Shockproof rugged aluminum enclosure, (L: 80 x W: 175 x H: 57 mm), 820 g with antennas
Standards	MIL-STD-810F method 514.5 & 516.5 (shocks & vibrations) EN 301489-17 & EN 61000-6-2 (CEM), IP66 seal rating, UTAC E2 (2004/104), EN 50155 (railways), EN 60945 (marine)
Environment	Operating temperature : -25°C to +70°C (HR 0-99%), storage : -40°C to +80°C

References to order

WLg-ABOARD/N	WiFi Access Point, 2-port Ethernet Bridge & WDS Repeater (a/b/g/h) for automotive applications, dual DC power input from +9VDC to +75VDC, shipped with 2 dual band 2 dBi omni-directional (2.4 / 5 GHz), one set of 2 meters cables (M12 to RJ45 and M12 to stripped cables)
WLg-ABOARD/NP	Same as above with the power over Ethernet option (IEEE 802.3af), shipped without power cable
WLg-RF400MW	High power radio option (26 dBm, 400 mW)
WLg-ANT-LSP-N	Lightning Surge Protector 50 Ohms N-Type antenna 5 KA (0-6 GHz)

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