

WLg-ABOARD

WiFi access point, Ethernet bridge & repeater (WDS) for railways & heavy duty applications



C-KEY READY



Top «C-KEY» for quick configuration, save & restore

- 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, alarm contact
- 2-port auto-sensing 10/100 Base TX network interface
- Dual DC insulated power supply input (+9VDC to +140VDC), POE IEEE 802.3af
- Shockproof rugged IP 66 aluminum enclosure



Introduction

WLg-ABOARD/N is a rugged equipment designed for applications in railways (CBTC architectures), on-road, 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 (extended -40°C to +80°C), shock and vibration proof, IP66 seal rating for protection against dust and water projections.

WLg-ABOARD/N is certified for railway applications (EN 50155 [IEC 60571] / EN 50121-3-2 / EN 50121-4); it 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.

Technical characteristics overview

Ethernet link	2-port Ethernet 10/100 auto-sensing, waterproof Ultra-Lock® M12 connectors (D-coding), plug & play mode & auto MDI/MDIX cross-over
WiFi network	Compliant to the IEEE 802.11a/b/g/h 2.4 / 5 / 5.4 GHz standards, IEEE 802.11d support, dynamic Frequency Selection (DFS), «ClearVoice» band, transmission Power Control (TPC).
Data rate	Up to 108 Mbps (Super AG mode)
Channels	2.4 GHz (802.11b/g): 14 channels / 5 GHz (801.11a/h): 24 channels
Output power	Transmitter +20 dBm (TPC), +26 dBm with the [H4] 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 antennas, 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 & 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, MAIN & AUX power supply, C-Key
Alarms	Relay output warning: power failure, WLAN connection failure, Watchdog or user defined (SNMP) 1 FORM B solid state relay, 60V 0.15A (M12 power supply connector)
Power supply	9-72VDC, insulated 9-36VDC or 36-140VDC, dual input (M12 connector) or POE (IEEE 802.3af)
Consumption	8W typical power consumption, 10W with the 400mW radio
Dimensions & weight	Shockproof rugged aluminum enclosure, (L: 80 x l: 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, E-marked (2004/104), EN 50155 (IEC 60571) / EN 50121-3-2, EN 50121-4 (railways)
Environment	Operating temperature : -25°C to +70°C, extended -40°C to +80°C with [H4] option (HR 0-99%), storage : -40°C to +100°C

Ordering references

WLg-ABOARD/N [H4]	WiFi Access Point, 2-port Ethernet Bridge & WDS Repeater (a/b/g/h) for automotive applications, dual DC power input from +9VDC to +72VDC, 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 [H4]	Same as /N with POE IEEE 802.3af (without power cable)
WLg-ABOARD/NI [H4]	Same as /N with a dual DC insulated power input from +9VDC to +36VDC and alarm contact (relay)
WLg-ABOARD/NPI [H4]	Same as /N with a dual DC insulated power input from +36VDC to +140VDC, POE IEEE 802.3af, alarm contact (relay)
C-Key_M1	Save / Restore configuration key for the WLg-ABOARD
[H4] option	H4 means high power version (400mW) and extended temperature range (-40°C to +75°C)
WLg-ANT-LSP-N	Lightning Surge Protector 50 Ohms N-Type antenna 5 KA (0-6 GHz)
WL-PLT-1	4-point fixing plate with ground lug

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