

# WLg-4LAN

## WiFi access point and bridge with 4-port Ethernet switch



- IEEE 802.11 a/b/g & super AG standards, up to 108 Mbps data rate
- Security: WEP, WPA-PSK, WPA2-PSK and IEEE 802.1x (RADIUS)
- Easy to use web based configuration
- 4-port Ethernet switch 10/100 Base TX RJ45 auto-sensing network interface
- +9VDC to +48VDC power supply
- Small sized enclosure (L: 91 x W: 122 x H: 24 mm)



## Introduction

When used in access point mode, WLg-4LAN is the root element of an industrial WiFi Ethernet network. When used as bridge, it allows connecting up to 4 Ethernet 10/100 devices to this network.

WLg-4LAN device is also designed to work as a wireless bridge between the wired MODBUS/TCP protocol and the radio network. This feature allows connecting any MODBUS/TCP equipment to this network.

Integrators and manufacturers (point of sales, medical instrumentation, industrial automation, security systems, video surveillance, automotive, building automation ...) can now rely on this new technology to build safety wireless network applications while freeing themselves from wiring constraints.

## Technical characteristics overview

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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| <b>Ethernet link</b>           | 4-port 10/100 Base TX interface, RJ45 connectors                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>WiFi network</b>            | Compliant to the IEEE 802.11a/b/g 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 all existing IEEE 802.11a/b/g networks; «ClearVoice» band provides non-overlapping channels for fast-speed data transmission; Transmission Power Control (TPC) offers flexibility to adjust RF output power, based on the Atheros's AR5414 (AR5006XS) chip set. |
| <b>Data rate</b>               | Up to 108 Mbps (Super AG mode)                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Channels</b>                | 13 channels (b/g modes), 8 channels (a mode), 11 channels (h mode)                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Output power</b>            | Transmitter +20 dBm (TPC)                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Sensitivity</b>             | Receiver -92 dBm for IEEE 802.11 a/g and -95 dBm for IEEE 802.11b                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Antennas</b>                | Two 2dBi 2.4 / 5 GHz antennas (RP-SMA connectors)                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Modulation</b>              | OFDM: BPSK, QPSK, 16QAM, 64QAM<br>DSSS: DBPSK, DQPSK, CCK                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Security</b>                | 64/128 bits WEP, WPA-PSK, WPA2-PSK, IEEE 802.1x (RADIUS authenticator & supplicant), MAC addresses filtering, SSID broadcast control                                                                                                                                                                                                                                                                                                                                                   |
| <b>Modes</b>                   | 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                                                                                                                                                                                                                             |
| <b>Administration</b>          | 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                                                                                                                                                                                                                                                                                          |
| <b>Operating systems</b>       | Windows, Linux, UNIX as well as any operating system supporting TCP/IP                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Signaling</b>               | LAN & WLAN activity on LEDs                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Power supply</b>            | +9VDC to +48VDC power source, 3-pin Phoenix terminal block                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Consumption</b>             | 3.5 Watts typical, 5 Watts maximum                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Dimensions &amp; weight</b> | Compact size enclosure L: 91 x W: 122 x H: 24 mm, weight 243 g                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Environment</b>             | Operating temperature: -20°C to +70°C, storage: -65 to +100°C<br>Humidity: 5% to 95% (non-condensing)                                                                                                                                                                                                                                                                                                                                                                                  |

## Ordering references

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|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| WLg-4LAN             | Access Point, 4-port Ethernet Bridge, repeater (WDS) module for wireless WiFi IEEE 802.11a/b/g & super AG, shipped with two 2dBi 2.4 / 5 GHz antennas |
| <b>Accessories :</b> |                                                                                                                                                       |
| PWS12-UNI-PH3        | AC (110V / 220V) to 12VDC power adapter with cable terminated by a 3-pin Phoenix terminal block                                                       |
| WL-FIX-RD1           | Optional Din rail fixing kit                                                                                                                          |

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