

# WLg-LINK-OEM

Compact Access Point, Ethernet Bridge & repeater (WDS) for embedded applications



- IEEE 802.11 a/b/g/h & 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
- Auto-sensing 10/100 Base TX network interface (TTL or RJ45)
- +3.3VDC or +5VDC power supply
- Small sized PCB (L:89 x W:51 x H:20mm)



## Introduction

When used in Access Point mode, the WLg-LINK-OEM is the root element of an industrial WiFi Ethernet network.

When used as a Bridge, it makes it possible to connect any Ethernet 10/100 industrial equipment to this network.

The WLg-LINK-OEM 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 right now rely on this new technology to safely build wireless network applications while freeing themselves from wiring constraints.

## Technical characteristics overview

<b>Ethernet Link</b>	10/100 Base TX Ethernet interface, RJ45 or TTL Ethernet interface (HE10 connector)
<b>WiFi network</b>	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 all existing IEEE 802.11 a/b/g/h 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>	2 Hirose UFL connectors enable to connect up to 2 antennas for diversity
<b>Modulation</b>	OFDM: BPSK, QPSK, 16QAM, 64QAM 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>	From +3.3VDC or +5VDC power source on an HE10 connector
<b>Consumption</b>	3.5 Watts typical, 5 Watts maximum
<b>Dimensions &amp; weight</b>	Small sized PCB L: 89 x W: 51 x H: 20 mm, 47 g
<b>Environment</b>	Operating temperature: -20°C to +70°C, storage: -65 to +100°C Humidity: 5% to 95% (non-condensing), please consult us for the -40°C to +85°C range

## Ordering references

WLg-LINK-OEM-RJ	Access Point, Ethernet Bridge, repeater (WDS) module for wireless WiFi IEEE 802.11a/b/g/h & super AG, without antenna nor antenna cable, RJ45 Ethernet interface (per quantities only)
WLg-LINK-OEM-TTL	Access Point, Ethernet Bridge, repeater (WDS) module for wireless WiFi IEEE 802.11a/b/g/h & super AG, without antenna nor antenna cable, TTL Ethernet interface (per quantities only)
WL-KIT-ANT-1a	15 cm Hirose UFL cable with RSMA connector and bi-band 2.4 / 5 GHz antenna (0 dBi)
WLg-LINK-OEM-EVAL	Contains both WLg-LINK-OEM-RJ PCB and the WL-KIT-ANT-1a antenna / cable kit / +5VDC power supply
WLg-RF400MW	High power radio option (26 dBm, 400 mW), requires the WLg-LINK-OEM module to be powered from a 3.3 VDC power source only

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