WLg-IDA/N

WiFi access point, 2-port Ethernet bridge & WDS repeater for industrial automation



- 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
- Dual DC power supply input (+9VDC to +36VDC),
 POE IEEE 802.3af for /NP
- Shock & vibration proof IP30 metal enclosure, DIN rail or panel mounting





quick configuration, save & restore









Introduction

WLg-IDA/N features a WLAN interface coupled to a 2-port Ethernet 10/100 designed for harsh industrial environments and automotive applications. The unit is housed in a compact enclosure ready to be DIN rail or panel mounted.

The device offers many switch technology advancements, including auto MDI/MDIX crossover for easy plug and play application.

The configuration of the device is achieved using the web browser installed on your computer; it also offers SNMP administration / configuration and an optional C-Key which allows quick and easy on-site replacement of the WLg-IDA/N unit, eliminating the need to reconfigure the replacement part or to use any other equipment.

WLg-IDA/N fulfills the most severe requirements in terms of operating environment: operating temperature from -20° C to $+70^{\circ}$ C, shock and vibration proof according to MIL-STD-810F standard, IP30 seal rating.

Technical characteristics overview

Ethernet link	2-port Ethernet 10/100 auto-sensing; RJ45 connectors; 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, 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/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 AR5414 (AR5006XS) chip set
Data rate	Up to 108 Mbps (Super AG mode), TCP user data rate up to 44 Mbps
Channels	13 channels (b/g modes), 8 channels (a mode), 11 channels (h mode) Number of channels may vary depending on local laws.
Output power	Transmitter +20 dBm (Optional 26 dBm)
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) + one RP-SMA connector for an additional antenna (diversity mode)
Modulation	OFDM: BPSK, QPSK, 16QAM, 64QAM, DSSS: DBPSK, DQPSK, CCK
Security	64/128 bits WEP, WPA-PSK, WPA2-PSK, IEEE 802.1x (RADIUS supplicant & authenticator), 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	Built-in WEB interface; SNMP V2c agent; ACKSYS NDM (Networking Device Manager). ACKSYS unique "C-Key" allows a quick and easy on-site replacement of the WLg-IDA unit, eliminating the need to reconfigure the replacement part or to use any other equipment (optional)
Operating systems	Windows, Linux, UNIX as well as any operating system supporting TCP/IP
Protocols	Ethernet TCP/IP & UDP, MODBUS/TCP, Ethernet/IP, PROFINET
Signaling	Led display for power supplies, LAN on each port & WLAN activity, radio receive level
Alarms	Relay output warning: power failure, LAN or WLAN connection failure, Watchdog. 1 FORM B solid state relay, 60V 0.15A, contacts on removable clamp cage terminal
Power supply	Dual input, +9 to +36VDC, removable clamp cage terminal, POE IEEE 802.3af for the /NP model
Consumption	4.5W typical
Dimensions & weight	Shock & vibration proof metal enclosure (L: 110 x W: 150 x H: 120 mm), 570 g
Standards	MIL-STD-810F, 514.5 & 516.5 methods (shocks & vibrations) EN 301489-17 & EN 61000-6-2 (EMC)
Environment	Operating temperature: -20°C to +70°C (-4°F to 158°F), storage: -65°C to +100°C (-85°F to 212°F), Humidity: 5% to 95% (non-condensing), IP 30 seal rating

Ordering references

WiFi Access Point, 2-port Ethernet Bridge & WDS Repeater (a/b/g/h), dual power input from +9VDC to +36VDC, shipped with 1 dual band 2 dBi omnidirectional (2.4 / 5 GHz) antenna and 1 meter of Ethernet RJ45 cable WLg-IDA/N

WLg-IDA/NP Same as above with POE IEE 802.3af power supply C-Key_M1 Save / Restore configuration key for the WLg-IDA/N WLg-RF400MW High power radio option (26 dBm, 400 mW)

WLg-FIX-PLQ Panel fixing metallic plate

CAB-RJ45-1M 1 meter Ethernet RJ45 cable, straight

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