WLg-SWITCH

3-in-1 combo: rugged 8-port Ethernet switch, POE injector, WiFi AP / BRIDGE / REPEATER



- 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 PSE: up to 8 ports PoE power source 802.11af
- Shock & vibration proof, IP30 metal enclosure, DIN rail or panel mounting













Introduction

WLg-SWITCH is a 3-in-1 combo solution: 8-port managed Ethernet switch, 2.4 / 5 GHz WiFi ACCESS POINT / BRIDGE / REPEATER and 120W power injector (POE PSE) designed for harsh industrial environments and automotive applications. The unit is housed in a compact enclosure ready to be DIN rail or panel mounted.

Both Switch and power injector are manageable that make it possible to offer advanced configuration.

WLg-SWITCH can be managed using a web browser or SNMP; the "C-Key" allows for quick and easy on-site replacement of the WLg-SWITCH unit, eliminating the need to reconfigure the replacement part or to use any other equipment, giving it a high availability.

WLg-SWITCH fulfills the most severe requirements in terms of operating environment: operating temperature from -20°C to +70°C (-4°F to 158°F), shockproof and vibration proof according to MIL-STD-810F standard, IP 30 seal rating.

Technical characteristics overview

Ethernet Switch	8-port 10/100 Base TX Fast Ethernet interface, RJ45 connector, auto MDI/MDIX crossover, IEEE 802.3x full-duplex and half-duplex auto-adaptive, wire-speed reception and transmission, high performance lookup engine, automatic address learning and aging, 120W POE PSE feature according to IEEE 802.3.af
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
Antennas	Two 2dBi 2.4 / 5 GHz antenna for 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, Bridge router, fast roaming, Infrastructure & AD-HOC, BRIDGE ROU-TER, rapid 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 for quick and easy on-site replacement of the WLg-SWITCH 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 +72VDC, removable clamp cage terminal Device should be powered from a +48VDC power supply (130W) in the POE PSE mode
PoE PSE	Up to 8 ports PoE power source 802.11af. Requires a 48V external power supply (15W/port)
Consumption	10 Watts maximum (POE injector power consumption not included)
Dimensions & weight	L: 110 mm x W: 50 mm x H: 151 mm (4.33 x 1.97 x 5.94 inch), weight 650g (22.9 oz)
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

3-in-1 combo: 8-Port Ethernet switch, WiFi Access Point / Ethernet Bridge / Repeater (IEEE 802.11a/b/g/h & super AG, 2.4 / 5 GHz operation), 8-port power injector (120W), shipped with two 2dBi 2.4 / 5 GHz antennas WLg-SWITCH

C-Key_M1 Save / Restore configuration key for the WLg-SWITCH

WLg-RF400MW High power radio option (26 dBm, 400 mW)

 $\mathsf{WLg}\text{-}\mathsf{FIX}\text{-}\mathsf{PLQ}$ Panel fixing metallic plate

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

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