Wireless RS232 / RS422 / RS485 serial device server for factory automation

Top "C-Key" for quick configuration Save & Restore

- Serial RS232 / RS422 / RS485 full duplex up to 250 Kbps
- 9-36 VDC wide range power supply
- IEEE 802.11 a / b / g /h WiFi radio (2.4 / 5 GHz)
- Shockproof & vibration proof IP30 metal enclosure, DIN rail or panel mounting
- Point to Point (virtual cable) & multipoint modes, virtual COM port redirector (ViP)
- TCP Client / Server, UDP & MODBUS/TCP support

WLg-IDA/S

IEEE 802.11a/b/g WiFi 2.4 / 5 GHz

Cerfified RF module

WiFi™

RoHS WEEE

5-YEAR WARRANTY

ACKSYS
COMMUNICATIONS & SYSTEMS

WLg-IDA/S gives access to any serial equipments from Windows, UNIX & Linux computers connected to your WiFi Ethernet TCP/IP network, make it possible to communicate between two distant serial equipments through the network, or directly with a peer to peer connection (Ad-Hoc mode).

WLg-IDA/S is designed for industrial and transportation applications, it can be used for material handling, real-time information transmission, and inventory management.

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/S unit, eliminating the need to reconfigure the replacement part or to use any other equipment.

WLg-IDA/S fulfils the most severe requirements in terms of operating environment: operating temperature from -20°C to +70°C, shockproof and vibration proof according to MIL-STD-810F standard, IP30 seal rating.

TECHNICAL CHARACTERISTICS OVERVIEW

Serial link	Full RS232 / 422 / 485 serial interface, 250 Kbps
RS signals available	RS232 mode: TxD, RxD, RTS, DTR, CTS, DCD, DSR, RI RS422/485 mode: -Tx, +Tx, -Rx, +Rx (+RX and –RX signals can be polarized with jumpers)
Cables connection	SUB D9 male connector for RS signals, 5-point removable terminal block for RS422/485
WiFi network	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 802.11a/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's AR5414 (AR5006XS) chip-set, single channel rapid roaming (<50 mS)
Radio data rate	Up to 108 Mbps (Super AG mode)
Channels	13 channels (b/g modes), 8 channels (a mode), 11 channels (h mode)
Output power	Transmitter +20 dBm (TPC)
Sensitivity	Receiver –92 dBm for IEEE 802.11 a/g and -95 dBm for IEEE 802.11b
Antenna	Two 2 dBi bi-band external antennas, RP-SMA connector
Modulation	OFDM: BPSK, QPSK, 16QAM, 64QAM DSSS: DBPSK, DQPSK, CCK
Security	64/128 bits WEP, WPA-PSK, WPA2-PSK, IEEE 802.1x (RADIUS)
Modes	Support for TCP Client/Server, DHCP Client, TELNET RFC2217 extension, Telnet Server, COM port re-director (VIP), multipoint or point to point virtual link over UDP modes and MODBUS/TCP Client/Server, MODBUS/RTU & MODBUS/ASCII protocols, direct communication (ad hoc) or from access point
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, TELNET from the serial link
Operating systems	Windows, Linux, UNIX as well as any operating system supporting TCP/IP
Signalling	Led display for power supplies, serial & WLAN activity, radio receive level
Alarms	Relay output warning: power failure, 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
Consumption	4.5 Watts typical
Dimensions & weight	Shockproof & vibration proof metal enclosure (L: 110 x W: 150 x H: 120 mm), 550 g
Standards	MIL-STD-810F, 514.5 & 516.5 methods (shocks & vibrations) EN 301489-17 & EN 61000-6-2 (CEM)
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

References to order

WLg-IDA/S	Wireless RS232/RS422/RS485 device server over Ethernet IEEE 802.11 a/b/g/h (WiFi 2.4 / 5 GHz), with Windows COM port redirector software (VIP), MODBUS/TCP data gateway, MODBUS/TCP gateway support, dual 9-36 VDC power supply, built-in antenna and additional RP-SMA connector for a second antenna (diversity mode)
C-Key_M1	Save / Restore configuration key for the WLg-IDA/S
WLg-RF400MW	High power radio option (26 dBm, 400 mW)
WLg-FIX-PLQ	Panel fixing metallic plate