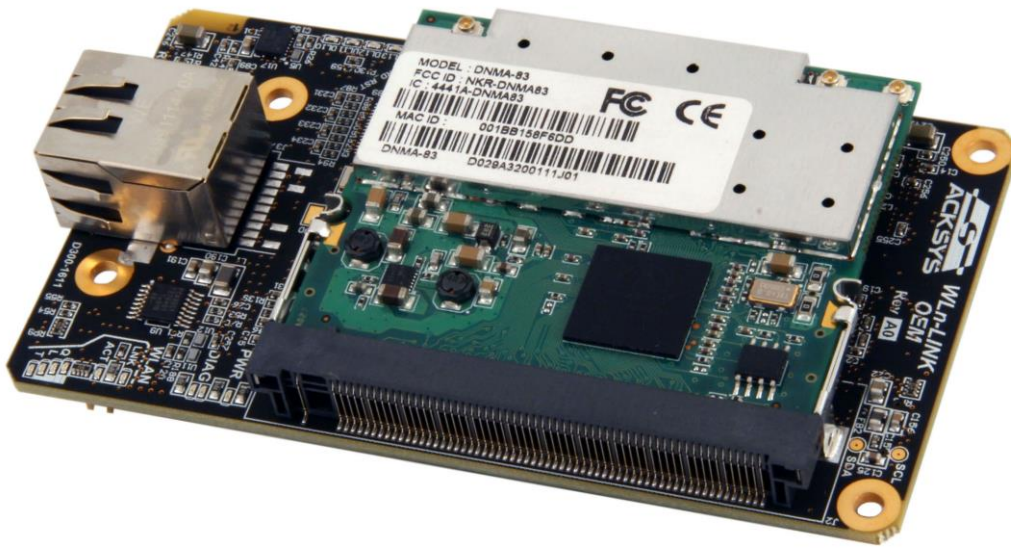


Ready-to-use compact 11n WiFi embedded module Access Point, Ethernet Bridge, Repeater & MESH point



Evaluation board

- IEEE 802.11n a/b/g (MIMO 3T3R), up to 300 Mbps radio bit rate
- MESH, WMM QoS, multiple SSID and centralized RADIUS security support
- Web based configuration, SNMP administration; serial port, C-Key & I2C interfaces
- Auto-sensing Gigabit 10/100/1000 Base TX auto MDI/MDIX (TTL or RJ45)
- Single +5VDC power supply
- Small sized PCB (L: 103 x W: 57 x H: 20 mm)

WLn-LINK-OEM



The WLn-LINK-OEM embedded module is a 2.4 / 5 / 5.4 GHz IEEE 802.11n a/b/g solution designed to quickly and easily add wireless LAN to a wide range of wired Ethernet OEM products.



More than just a radio adapter, the WLn-LINK-OEM features a fully integrated IEEE 802.11n a/b/g radio and a powerful PowerPC processor that provides a complete wireless connection in a single small footprint.

The WLn-LINK-OEM reduces the design time and eliminates the risk associated in wireless chipset based designs by providing all of the WiFi network protocols and processing needed to quickly implement embedded wireless solutions; its industrial-grade performance makes it ideally suited for harsh environments.



Integrators and manufacturers (rugged computers & instruments, intrinsically safe wireless devices, remotely operated vehicles UAV/UGV/UUV, automotive, COTS-based data communication units for military applications ...) can rely on this new technology to add wireless network features to their existing equipments.

TECHNICAL CHARACTERISTICS

Ethernet link	1-port Gigabit Ethernet 10/100/1000 Base TX auto-sensing, plug & play mode & auto MDI/MDIX cross-over, RJ45 or TTL Ethernet interface (HE10 connector)
Serial port	One serial port (TTL level)
WiFi network	Compliant to the IEEE 802.11n a/b/g 2.4 / 5 GHz standards MIMO 3T3R, 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 802.11n a/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
Data rate	Up to 300 Mbps (with the 3T3R radio)
Channels	2.4 GHz: 13 channels in b/g, 7 channels in 11n / 5 GHz: 19 channels in a/h, 11 channels in 11n
Output power	Transmitter +20 dBm (TPC), +26 dBm for the 400mW model
Sensitivity	Receiver -92 dBm for IEEE 802.11 a/g/n and -95 dBm for IEEE 802.11b
Antenna	2 MMCX connectors (2 antennas) or 3 Hirose UFL connectors (3 antennas) depending on models
Modulation	OFDM: BPSK, QPSK, 16QAM, 64QAM / DSSS: DBPSK, DQPSK, CCK
Security	64/128 bits WEP, WPA-PSK, WPA2-PSK, IEEE 802.1x (centralized RADIUS authenticator & supplicant), MAC addresses filtering, SSID broadcast control
Modes	Access point to build a WiFi network infrastructure, Bridge to connect any Ethernet equipments to this network, MODBUS/TCP wireless gateway, Repeater, Mesh point (IEEE 802.11s), infrastructure, AD-HOC, bridge router, rapid roaming (30 mS), WMM QoS, multicast and IGMP-Snooping modes are supported
Administration	Built-in WEB interface, the setup of the device is achieved using any web browser, SNMP agent, ACKSYS NDM, serial port, Telnet/SSH, CLI
Operating systems	Windows, Linux, UNIX as well as any operating system supporting TCP/IP
Signalling	LEDs signaling for radio quality, WLAN activity and status, LAN Link 10/100/1000 and activity, power supply, C-Key and product diagnostic, temperature probe.
Miscellaneous	Temperature probe, built-in electronic serial number
Power supply	+5VDC (+/- 5%), 8 Watts typical (13 Watts for the 400 mW radio model)
Dimensions	Small sized PCB L: 103 x W: 57 x H: 20 mm, xx g (W: 73 mm for the 400 mW model)
Environment	Operating temperature: -20°C to +70°C or -40°C to +75°C for extended temperature range model Storage: -65°C to +100°C, Humidity: 5% to 95% (non-condensing)

References to order

WLn-LINK-OEM-RJ/R	Access Point, Ethernet Bridge, Repeater & Mesh point module for wireless WiFi IEEE 802.11n a/b/g, without antenna nor antenna cable (MOQ = 10 units), RJ45 Ethernet interface, radio defined by the /R suffix
WLn-LINK-OEM-TTL/R	Same as above with TTL Ethernet Interface, radio defined by the /R suffix
WLn-LINK-OEM-EVAL/R	Evaluation kit containing the WLn-LINK-OEM-TTL module, an evaluation board, 0 dBi antennas & pigtail cables and +12VDC power adapter (AC 110 / 240V), radio defined by the /R suffix (no suffix or /3 valid only) /R (radio) coding: No suffix = 100 mW radio, 3T3R, -20°C to +70°C /1 = 100 mW radio, 2T2R, -20°C to +70°C /2 = 400 mW radio, 2T2R, -40°C to +75°C /3 = 400 mW radio, 3T3R, -40°C to +75°C
WL-KIT-ANT-1a	One antenna kit: 15 cm Hirose UFL cable with RP-SMA connector & bi-band 2.4 / 5 GHz antenna (0 dBi) for 100mW radio
WL-KIT-ANT-1b	One antenna kit: 15 cm Hirose MMCX cable with RP-SMA connector & bi-band 2.4 / 5 GHz antenna (0 dBi) for 400mW radio
WL-ANT-TERM-MMCX	50 Ohms antenna termination connector (for 400 mW radio, /2 & /3 models)
C-Key_M2	Save / Restore configuration key for the WLn-LINK-OEM

All the brand names mentioned in this document are trademarks. ACKSYS is constantly looking at ways to improve its products. The current specifications may therefore be modified without notice and the characteristics set out herein should not be construed as creating any contractual obligation. All the products featured herein are designed and manufactured in Europe.

ACKSYS Communications & Systems

ZA Val Joyeux – 10 rue des Entrepreneurs – 78450 Villepreux (France) – Tel. +33 1 30 56 46 46 – Fax +33 1 30 56 12 95

Email: sales@acksys.fr - Web: www.acksys.com - N° NATO FA2 F6