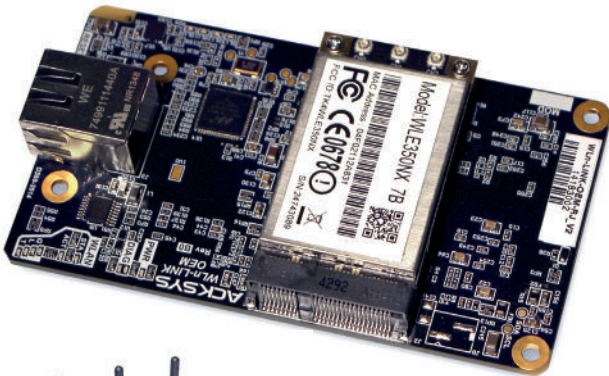


WLn-LINK-OEM

Ready-to-use compact 802.11n WiFi embedded module
Access point, Ethernet bridge, repeater & MESH point



Evaluation board available

- Complete ready-to-use solution (access point, bridge, repeater, Mesh point) requiring no driver software
- Small sized PCB (L: 103 x l: 57 x H: 20 mm)
- WiFi IEEE 802.11a/b/g/n 3T3R & Gigabits LAN interfaces, radio bit rates up to 450 Mbps
- Secure WiFi link
- Available in industrial temperature range
- Web based configuration, SNMP administration
- Reduces TTM, design risk & cost



Introduction

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

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

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 overview

Ethernet interface	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 interface	One serial port (TTL level)
WiFi interface	1 radio IEEE 802.11 a/b/g/n, MIMO 3T3R, 2.4 / 5 Ghz
WiFi radio data rate	802.11a : 6, 9, 12, 18, 24, 36, 48 and 54 Mbps 802.11b/g : 1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48 and 54 Mbps 802.11n : MCS0-23, 3 streams (6.5 to 450 Mbps)
Operating frequencies	ISM : 2.4-2.483 GHz (up to 14 channels) UNII : 5.15-5.25 GHz (up to 4 channels) UNII-2 : 5.25-5.35 GHz (up to 4 channels) UNII-2 ext : 5.470-5.725 GHz (up to 11 channels) UNII-3 : 5.725-5.825 GHz (up to 4 channels) Supports DFS and TPC
Output power	Up to 24dBm (aggregate), depending on radio card model
Antennas	3 U.FL connectors
Security	IEEE 802.1x (RADIUS authenticator & supplicant), WPA2-PSK, WPA-PSK, WEP
WiFi Modes	Access point, client, repeater, MESH point (IEEE 802.11s), infrastructure, AD-HOC, client router, WMM QoS, multicast, dynamic routing and firewall modes fully supported, fast roaming (less than 30 ms), redundancy (VRRP)
Administration	Built-in WEB interface, SNMP agent, administration software for Windows/Linux (ACKSYS NDM)
LEDs Signaling	Radio : quality and activity Ethernet : link 10/100/1000 and activity Power : on-off Product diagnostic
Power supply	+5VDC (+/- 5%), 8 Watts typical
Dimensions & weight	Small sized PCB, L: 103 x l: 57 x H: 20 mm, approx. 50g
Standards	Radio module CE and FCC certified. WLn-LINK-OEM has to be certified in the final product.
Environment	Operating temperature: -20°C to +70°C or -40°C to +85°C (for extended temperature range model) Storage: -65°C to +100°C, Humidity: 5% to 95% (non-condensing)
Warranty	1 year

Ordering references

WLn-LINK-OEM-RJ/R	Access point, Ethernet bridge, repeater & Mesh point WiFi IEEE 802.11a/b/g/n module, 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, one WL-KIT-ANT-1a and a +12VDC power adapter (AC 110 / 240V), radio defined by the /R suffix /R codage (radio): No suffix = 250 mW radio, 3T3R, -20°C to +70°C /3 = 250 mW radio, 3T3R, -40°C to +85°C
WL-KIT-ANT-1a	1 RF cable (15cm) with 1 bi-band 2.4 / 5 GHz omnidirectional antenna 2 dBi (RP-SMA connector)
C-Key-M2	Save / Restore configuration key for the WLn-LINK-OEM

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