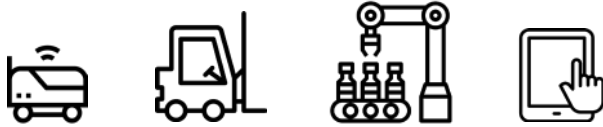


# AirLink

## Compact industrial WiFi access point and client



### APPLICATIONS

AGVs, AMRs, Robots...  
Industrial automation  
Remote access

- All-in-one : AP/client/repeater/Mesh/router
- Fast data rates up to 300 Mbps - WiFi 802.11n - MIMO 2T2R - 2.4/5 GHz
- WaveOS operating system :
  - Advanced security WPA3, 802.1X Radius, Firewall, OpenVPN, IPSec, GRE tunnel...
  - Configuration from: Internet browser, WaveManager management and supervision software, SNMP
  - Redundancy functions, routing, fast-roaming...
- Industrial design :
  - 9 to 48VDC power supply and PoE 802.3af
  - Metal enclosure, wall or DIN rail mounting
  - Enhanced ESD protection and shock/vibration resistance



## Introduction

AirLink is a WiFi device designed and optimized for mobile applications and industrial processes:

- Compact and practical: its small footprint, mounting system (wall or DIN rail) and wide power supply range make it easy to integrate into electrical cabinets or tight spaces. It's the perfect solution for machines, logistics vehicles or PLCs manufacturers
- Mobility : the possibility of using remote antennas, its resistance to shocks & vibrations and its particular fast-roaming performances (< 30 ms) make it the ideal product for embedding in mobile equipment
- Reinforcement of the coverage: it has 2 antennas to work in MIMO and thus reinforcing the WiFi coverage and the reliability of your indoor radio communications (IIoT, MtoM, mobility of operators...), with all types of WiFi infrastructure (Cisco, HPE Aruba...)
- Centralized administration: WaveManager tool (Windows or Linux) to configure, monitor, troubleshoot and manage network deployments of ACKSYS hardware, both locally and remotely.



AirLink is an all-in-one multifunction product :

- Access point to provide a local wireless access around a machine
- Client to enable a continuous and secure connectivity of fixed and mobile equipment
- Repeater to extend a wireless network in areas with poor or no coverage
- Mesh to create easily a WiFi backbone (Mesh network) between fixed or mobile equipment

AirLink integrates the latest security standards (WPA3 Personal & Enterprise (Radius), DoS, Firewall...) as well as routing functions facilitating mass deployments (e.g. machines, AGVs...).

It supports any type of Ethernet protocol such as Modbus/TCP, EtherNet/IP, Safe Ethernet, PROFINET...

## Technical characteristics overview

<b>Ethernet interface</b>	1-port Gigabit Ethernet 10/100/1000 Base TX auto-sensing, auto MDI/MDIX cross-over, RJ45 Ethernet interface			
<b>WiFi interface</b>	1 radio IEEE 802.11a/b/g/n, MIMO 2T2R, 2.4 / 5 GHz, ANI (Adaptive Noise Immunity)			
<b>WiFi radio data rate</b>	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: MCS0-7, 2 streams (6.5 to 300 Mbps)			
<b>Operating frequencies</b>	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			
<b>Output power</b>	2.4 GHz : up to 23.5 dBm (aggregate) / 5 GHz : up to 21 dBm (aggregate)			
<b>Sensitivity max.</b>	2.4 GHz : -94 dBm / 5 GHz : -96 dBm			
<b>Radio connectors</b>	2 x RP-SMA			
<b>Security</b>	Firewall, DoS, https, MAC filtering, WPA/WPA2/WPA3-Personal & Enterprise (IEEE 802.1X/RADIUS), tunnels L2 (GRE), VPN (OpenVPN, IPsec), SNMP V3, Rogue AP detector			
<b>WiFi modes</b>	Access point, client, MESH (IEEE 802.11s), infrastructure, AD-HOC, fast roaming (less than 30 ms), WMM QoS			
<b>WiFi services</b>	Hot Spot 2.0, Wireless Load Balancing (Load balancing, load steering, client roaming control)			
<b>Ethernet networking</b>	IPv4/IPv6 compliance, frames filtering, bridging, repeater, STP/RSTP, VLAN, DHCP (server & client), DNS relay			
<b>Ethernet routing</b>	Multicast (PIM), IP redundancy (VRRP), static routes, NAT router, router			
<b>Administration</b>	http, https, SNMP agent (V1, V2C, V3), WaveManager administration software			
<b>LEDs Signaling</b>	Radio : activity - status   Ethernet : link 10/100/1000 - activity   Power : on-off			
<b>Power supply</b>	+9VDC to +48VDC, 3-pin Phoenix connector & PoE 802.3af			
<b>Consumption</b>	IDLE mode : 1.7 W / Maximum average : 5.8 W / Recommended power supply : 7 W			
<b>Dimensions &amp; weight</b>	Compact case L : 103 x l : 67 x h : 24 mm, weight 225 g			
<b>Standards and certifications</b>		CE (RED)	Safety : EN 62368-1:2014+A11, EN62311 EMC : EN301-489-1, EN301-489-17 Radio : EN 300 328 2.1.1 (2.4 GHz), EN 301 893 2.1.1 (5 GHz, DFS)	
		FCC :	Radio : FCC ID Z9W-RMB	
		USA (UL 62368-1, Ed. 3) Canada (CAN/CSA C22.2 No. 62368-1-19) 5801569		Korea (KCC) MSIP-RMI- WIR- AirLINK
		Brazil 16253-20-09679		Japan (MIC Giteki) 018-190174
		Environmental	Shocks and vibrations	EN 61373 (CAT 1 CLASS B)
<b>Environment</b>	IP30 Operating temperature: -20°C to +60°C , storage: -40°C à +85°C, humidity: 0% to 99% (non-condensing)			
<b>MTBF</b>	3,649,822 hours (failure rate : 0.273986 per million hours)			
<b>Warranty</b>	5 years			

## Ordering references

<b>AirLink</b>	WiFi access point, client, repeater (WDS) and MESH point (IEEE 802.11 a/b/g/n), 10/100/1000 RJ45 Ethernet interface, shipped with two 2.4GHz - 3 dBi / 5GHz - 4 dBi antennas		
<b>Optional accessories</b>			
PWS12-UNI-PH3	AC (110V / 220V) to 12VDC power adapter with cable terminated by a 3-pin Phoenix terminal block		
WL-FIX-RD2	Din rail fixing kit		
SOCLE-RPS/RPS-1.5M	Magnetic base for RP-SMA antenna 1.5m cable (RP-SMA plug)		

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