



# Industrial wireless routers portfolio








WiFi + Cellular devices

**ACKSYS**  
COMMUNICATIONS & SYSTEMS



# WiFi routers, access points, clients and repeaters



FEATURES	 AirLink	 AirBox	 AirXroad	 RuggedAir	 RailBox	 RailTrack	 WaveNet-Ex
APPLICATIONS	Machine manufacturers Automation Mobile applications (AGVs...)	Critical industrial automation	Mobile applications (bus, heavy vehicle...)	Outdoor Harsh environment Railway	Outdoor Harsh environment Railway	Outdoor Harsh environment Railway	Explosive environment
WIFI INTERFACE	1 radio 802.11n 2.4 / 5 GHz 300 Mbps	1 or 2 radios 802.11n or 11ac* 2.4/5 GHz 300 Mbps (+ 1.3 Gbps)*	1 radio 802.11n 2.4 / 5 GHz 300 Mbps	1 radio 802.11ac 2.4 / 5 GHz 1.3 Gbps	1 or 2 radios WiFi 6 / WiFi 6E* 2.4 / 5 / 6 GHz* 1 or 2 x 4.8 Gbps*	3 radios 802.11n or 11ac 2.4 / 5 GHz 3 x 1.3 Gbps	1 or 2 radios 802.11n or 11ac 2.4 / 5 GHz Up to 600 Mbps
SECURITY	SSID broadcast enable/disable Firewall, VPN DoS, WIDS Secure TLS/SSL administration (https), SNMP V3 WPA2 / WPA3 802.1X authentication	SSID broadcast enable/disable Firewall, VPN DoS, WIDS Secure TLS/SSL administration (https), SNMP V3 WPA2 / WPA3 802.1X authentication	SSID broadcast enable/disable Firewall, VPN DoS, WIDS Secure TLS/SSL administration (https), SNMP V3 WPA2 / WPA3 802.1X authentication	SSID broadcast enable/disable Firewall, VPN DoS, WIDS Secure TLS/SSL administration (https), SNMP V3 WPA2 / WPA3 802.1X authentication	SSID broadcast enable/disable Firewall, VPN DoS, WIDS Secure TLS/SSL administration (https), SNMP V3 WPA2 / WPA3 802.1X authentication	SSID broadcast enable/disable Firewall, VPN DoS, WIDS Secure TLS/SSL administration (https), SNMP V3 WPA2 / WPA3 802.1X authentication	SSID broadcast enable/disable Firewall, VPN DoS, WIDS Secure TLS/SSL administration (https), SNMP V3 WPA2 / WPA3 802.1X authentication
MESH	✓	✓	✓	N/A	✓*	✓*	✓*
WIFI FAST ROAMING	< 30 ms	< 30 ms	< 30 ms	< 30 ms	< 30 ms	N/A	< 30 ms
ETHERNET PORTS CONNECTORS	1 x 10/100/1000 RJ45	2 x 10/100/1000 RJ45	1 x 10/100/1000 M12	2 x 10/100/1000 M12	2 x 10/100/1000/2500 M12	2 x 10/100/1000 (M12) 2 x fiber (SFP cage) PoE+ PSE injector*	1 x 10/100/1000 M25 x 1.5 or 3/4" x npt-f cable gland
DIMENSIONS (mm) FORMAT MOUNTING	127 x 78 x 24 Compact Universal / DIN rail	141.2 x 99 x 35 Compact Universal / DIN rail	115 x 64 x 34 Rugged housing Universal	175 x 80 x 57 Rugged housing Fixing plate	175 x 80 x 57 Rugged housing Fixing plate	305 x 200 x 75 Rugged housing Fixing points	297 x 238 x 90 Aluminum or stainless steel ATEX enclosure
POWER SUPPLY	9 to 48 VDC PoE	Redundant 9 to 48 VDC PoE	9 to 48 VDC PoE	Redundant 12 to 36 VDC Isolated PoE	Redundant 24 to 110 VDC* Isolated* PoE+*	110 to 230 VAC (50/60 Hz) Isolated	10 to 30 VDC PoE M25 x 1.5 or 3/4" x npt-f cable gland
INPUTS / OUTPUTS	N/A	2 inputs & 2 outputs (isolated)	N/A	1 alarm input and output	1 alarm input and output	1 alarm input and output	N/A
BACKUP KEY	N/A	N/A	N/A	✓	✓	✓	N/A
ENVIRONMENT: OPERATING TEMPERATURE IP RATING	-20°C to +60°C IP30	-20°C to +60°C IP30	-40°C to +70°C IP66	-40°C to +70°C IP66	-25°C to +70°C Option -40°C to +85°C IP66	-25°C to +70°C Option -40°C to +85°C IP66	-40°C to +60°C IP66
SPECIFIC STANDARDS	EN61373 (shocks & vibrations)	ECE R10 (vehicles) EN61373 (shocks & vibrations)	ECE R10 (vehicles) EN61373 (shocks & vibrations) EN60068-2 (climatic tests)	EN50155 [IEC60571] (railway) EN50121-3-2, EN50121-4 (EMC) EN60068-2 (climatic tests) EN61373 (shocks & vibrations) EN45545-2 (smoke-fire)	EN50155 [IEC60571] (railway) EN50121-3-2, EN50121-4 (EMC) EN60068-2 (climatic tests) EN61373 (shocks & vibrations) EN45545-2 (smoke-fire)	EN50121-4 (EMC) EN60068-2 (climatic tests)	II 2G Ex db IIC T5-T4 Gb II 2D Ex tb IIIC T110°C/T140°C Db I M2 Ex db I Mb*

\* Depending on the model

# Cellular routers + WiFi

FEATURES	 <b>AirWan</b>	 <b>AirBox LTE</b>	 <b>RailBox LTE</b>
APPLICATIONS	Machine manufacturers Automation Mobile applications (Buses, AGVs)	Machine manufacturers Automation Mobile applications (Buses, AGVs)	Harsh environments Railway
CELLULAR INTERFACE	1 SIM LTE category 4 150 Mbps ↓ & 50 Mbps ↑ LTE, UMTS/HSPA+, GSM/GPRS/EDGE (worldwide) GPS, Galileo, BeiDou, GLONASS	Dual SIM LTE category 4 150 Mbps ↓ & 50 Mbps ↑ LTE, UMTS/HSPA+, GSM/GPRS/EDGE (worldwide) GPS, Galileo, BeiDou, GLONASS	Dual SIM LTE category 12 600 Mbps ↓ & 150 Mbps ↑ LTE-A, UMTS/HSPA+, GSM/GPRS/EDGE (worldwide) GPS, Galileo, BeiDou, GLONASS
WIFI INTERFACE	1 radio* 802.11n 2.4 / 5 GHz 300 Mbps	1 radio 802.11n 2.4 / 5 GHz 300 Mbps	1 radio 802.11n or 11ac* 2.4 / 5 GHz 1.3 Gbps*
SECURITY	SSID broadcast enable/disable Firewall, VPN DoS, WIDS Secure TLS/SSL administration (https), SNMP V3 WPA2 / WPA3 802.1X authentication	SSID broadcast enable/disable Firewall, VPN DoS, WIDS Secure TLS/SSL administration (https), SNMP V3 WPA2 / WPA3 802.1X authentication	SSID broadcast enable/disable Firewall, VPN DoS, WIDS Secure TLS/SSL administration (https), SNMP V3 WPA2 / WPA3 802.1X authentication
MESH	✓	✓	✓
WIFI FAST ROAMING	< 30 ms	< 30 ms	< 30 ms
ETHERNET PORTS CONNECTORS	1 x 10/100 + 1 x 10/100/1000 RJ45	2 x 10/100/1000 RJ45	2 x 10/100/1000/2500 M12
DIMENSIONS (mm) FORMAT MOUNTING	147 x 41 x 100 Compact Universal / DIN rail	141.2 x 99 x 35 Compact Universal / DIN rail	175 x 80 x 57 Rugged housing Fixing plate
POWER SUPPLY	7 to 48 VDC PoE	Redundant 9 to 48 VDC PoE	Redundant 24 to 110 VDC* Isolated* PoE+*
INPUTS / OUTPUTS	N/A	2 inputs & 2 outputs (isolated)	1 input & 1 output
BACKUP KEY	N/A	N/A	✓
ENVIRONMENT: OPERATING TEMPERATURE IP RATING	-20°C to +60°C IP40	-20°C to +60°C IP30	-25°C to +70°C Option -40°C to +85°C IP66
SPECIFIC STANDARDS	ECE R10 (vehicles) EN61373 (shocks & vibrations)	ECE R10 (vehicles) EN61373 (shocks & vibrations)	EN50155 [IEC60571] (railway) EN50121-3-2, EN50121-4 (EMC) EN60068-2 (climatic tests) EN61373 (shocks & vibrations) EN45545-2 (smoke-fire)

\* Depending on the model

# OEM modules



FEATURES	 EmbedAir100	 EmbedAir1000	 EmbedAir1000 LTE
APPLICATIONS	Equipment manufacturers	Equipment manufacturers	Equipment manufacturers
CELLULAR INTERFACE	N/A	N/A	Dual SIM LTE category 4 150 Mbps ↓ & 50 Mbps ↑ LTE, UMTS/HSPA+, GSM/GPRS/EDGE (worldwide) GPS, Galileo, BeiDou, GLONASS
WIFI INTERFACE	1 radio 802.11n (WiFi 4) 2.4 / 5 GHz 300 Mbps	2 radios 802.11n or 11ac 2.4 / 5 GHz 300 Mbps + 1.3 Gbps	1 radio 802.11n 2.4 / 5 GHz 300 Mbps
SECURITY	SSID broadcast enable/disable Firewall, VPN DoS, WIDS Secure TLS/SSL administration (https), SNMP V3 WPA2 / WPA3 802.1X authentication	SSID broadcast enable/disable Firewall, VPN DoS, WIDS Secure TLS/SSL administration (https), SNMP V3 WPA2 / WPA3 802.1X authentication	SSID broadcast enable/disable Firewall, VPN DoS, WIDS Secure TLS/SSL administration (https), SNMP V3 WPA2 / WPA3 802.1X authentication
MESH	✓	✓	✓
WIFI FAST ROAMING	< 30 ms	< 30 ms	< 30 ms
ETHERNET PORTS CONNECTORS	1 x 10/100 RJ45 or HE10 (TTL)	1 x 10/100/1000 RJ45 or HE10 (TTL)	1 x 10/100/1000 RJ45 or HE10 (TTL)
DIMENSIONS (mm) : FORMAT MOUNTING	89 x 51 x 28 Mezzanine card	89 x 51 x 28 Mezzanine card	92.6 x 50.8 x 27.2 Mezzanine card
POWER SUPPLY	5 VDC	5 VDC	5 VDC
INPUTS / OUTPUTS	N/A	N/A	N/A
BACKUP KEY	N/A	N/A	N/A
ENVIRONMENT: OPERATING TEMPERATURE	-20°C to +60°C	-40°C to +70°C	-40°C to +70°C
SPECIFIC STANDARDS	N/A	N/A	N/A



# Why choose ACKSYS ?

## > RELIABILITY AND ROBUSTNESS

ACKSYS' products are designed to be used in harsh environment, this is why their manufacturing components are carefully selected, controlled and submitted to endurance tests. They come with a 5-year or lifetime warranty.

## > LONG LASTING PRODUCTS

In order to provide long lasting solutions to its customers, ACKSYS works closely with its suppliers to foresee any eventual obsolete products and thus back-up its product line to avoid any stock rupture. ACKSYS also pays attention to develop products compatible with existing solutions.

## > RELEVANT SOLUTIONS

ACKSYS develops tailored solutions designed to fit its customers' specific business needs or unique application environment and is also able to adapt its products upon request. All ACKSYS' products are compliant with the standards in the various targeted markets.

## > CUSTOMER SERVICE COMMITMENT

ACKSYS has developed a solid pre-sales and after-sales process to ensure that customers receive the highest level of support at every stage of their projects. ACKSYS commits to provide state-of-the-art technology, products and training to keep its customers, distributors and VARs in the forefront of the communication age.

**ACKSYS**  
COMMUNICATIONS & SYSTEMS

Since 1984, ACKSYS Communications & Systems has acquired a strong know-how in designing and manufacturing industrial data communication solutions (WiFi and cellular).

Its expertise and high quality standards allows it to meet the most severe requirements in transportation (rail & road), industrial (M2M, IIoT, automation), military (marine, land, air), aeronautics, mining (underground and above ground), oil & gas and environment (renewable energy, water, waste water).

Its inbuilt engineering, technical and commercial teams are able to meet accurately the expectations of its customers and assist them from the definition of their needs to the deployment. Thanks to a qualified and structured distribution network, ACKSYS is present on the five continents and can therefore meet any industrial application need, any time.

### ACKSYS Communications & Systems

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