

Connected industry












WiFi communication solutions
for industrial applications



ACKSYS
COMMUNICATIONS & SYSTEMS





Connected industry : WiFi ranges overview

WiFi networks (APs, clients, repeaters and routers)

												
Typical applications		<ul style="list-style-type: none"> Harsh environments Railway 		<ul style="list-style-type: none"> Mobile (city buses, handling/hoisting, rotating machinery, automated trolleys...) Outdoor 		<ul style="list-style-type: none"> Explosive atmospheres, ATEX zones 1 & 21 	<ul style="list-style-type: none"> Schneider Electric M340 & M580 PLCs 	<ul style="list-style-type: none"> Critical industrial automation 	<ul style="list-style-type: none"> Machine manufacturers Industrial and building automation 	<ul style="list-style-type: none"> Equipment manufacturers 		
WiFi interface	<ul style="list-style-type: none"> 3 radios 802.11 a/b/g/n/ac 2.4/5 GHz 3 x 1.3 Gbps 	<ul style="list-style-type: none"> 1 or 2 radios 802.11 a/b/g/n/ac 2.4/5 GHz 1 or 2 x 1.3 Gbps 	<ul style="list-style-type: none"> 1 radio 802.11 a/b/g 2.4/5 GHz 54 Mbps 	<ul style="list-style-type: none"> 1 radio 802.11 a/b/g/n 2.4/5 GHz 450 Mbps 	<ul style="list-style-type: none"> 1 radio 802.11 a/b/g 2.4/5 GHz 54 Mbps 	<ul style="list-style-type: none"> 1 radio 802.11 a or g 2.4 or 5 GHz 54 Mbps 	<ul style="list-style-type: none"> 1 radio 802.11 a/b/g 2.4/5 GHz 54 Mbps 	<ul style="list-style-type: none"> 1 radio 802.11 a/b/g 2.4/5 GHz 54 Mbps 	<ul style="list-style-type: none"> 1 radio 802.11 a/b/g 2.4/5 GHz 54 Mbps 	<ul style="list-style-type: none"> 1 radio 802.11 a/b/g 2.4/5 GHz 54 Mbps 	<ul style="list-style-type: none"> 1 radio 802.11 a/b/g/n 2.4/5 GHz 450 Mbps 	
Security	<ul style="list-style-type: none"> SSID broadcast enable/disable Filtering, Firewall DoS https WEP, WPA/WPA2-Personal & Enterprise (IEEE 802.1X/RADIUS) 	<ul style="list-style-type: none"> SSID broadcast enable/disable Filtering, Firewall DoS https WEP, WPA/WPA2-Personal & Enterprise (IEEE 802.1X/RADIUS) 	<ul style="list-style-type: none"> SSID broadcast enable/disable Filtering WEP, WPA /WPA2-Personal 	<ul style="list-style-type: none"> SSID broadcast enable/disable Filtering, Firewall DoS https WEP, WPA/WPA2-Personal & Enterprise (IEEE 802.1X/RADIUS) 	<ul style="list-style-type: none"> SSID broadcast enable/disable Filtering WEP, WPA /WPA2-Personal 	<ul style="list-style-type: none"> SSID broadcast enable/disable Filtering WEP, WPA /WPA2-Personal 	<ul style="list-style-type: none"> SSID broadcast enable/disable Filtering WEP, WPA /WPA2-Personal 	<ul style="list-style-type: none"> SSID broadcast enable/disable Filtering WEP, WPA /WPA2-Personal 	<ul style="list-style-type: none"> SSID broadcast enable/disable Filtering WEP, WPA /WPA2-Personal 	<ul style="list-style-type: none"> SSID broadcast enable/disable Filtering WEP, WPA /WPA2-Personal 	<ul style="list-style-type: none"> SSID broadcast enable/disable Filtering WEP, WPA /WPA2-Personal 	<ul style="list-style-type: none"> SSID broadcast enable/disable Filtering, Firewall DoS https WEP, WPA/WPA2-Personal & Enterprise (IEEE 802.1X/RADIUS)
Mesh 802.11s	X*	X*		X							X	
Fast roaming	N/A	< 30 ms	< 50 ms	< 30 ms	< 50 ms	< 50 ms	< 50 ms	< 50 ms	< 50 ms	< 50 ms	< 30 ms	
Ethernet ports Connectors	<ul style="list-style-type: none"> 2 x 10/100/1000 (M12) 2 x fiber (SFP cage) PoE+ PSE injector* 	<ul style="list-style-type: none"> 2 x 10/100/1000 (M12) M12 	<ul style="list-style-type: none"> 2 x 10/100 M12 	<ul style="list-style-type: none"> 1 x 10/100/1000 RJ45 (or custom) 	<ul style="list-style-type: none"> 1 x 10/100 RJ45 (or custom) 	<ul style="list-style-type: none"> 2 x 10/100 Cable gland / terminal block 	<ul style="list-style-type: none"> 3 x 10/100 RJ45 	<ul style="list-style-type: none"> 2 x 10/100 RJ45 	<ul style="list-style-type: none"> 1 x 10/100 RJ45 	<ul style="list-style-type: none"> 1 x 10/100 RJ45 or HE10 (TTL) 	<ul style="list-style-type: none"> 1 x 10/100/1000 RJ45 or HE10 (TTL) 	
Dimensions (mm) Format Mounting	<ul style="list-style-type: none"> 305 x 200 x 75 Rugged housing Fixing points 	<ul style="list-style-type: none"> 80 x 175 x 57 Rugged housing Fixing plate 	<ul style="list-style-type: none"> 80 x 175 x 57 Rugged housing Universal 	<ul style="list-style-type: none"> 185 x 64 x 35 Rugged housing Universal 	<ul style="list-style-type: none"> 115 x 64 x 35 Rugged housing Universal 	<ul style="list-style-type: none"> 276 x 276 x 214 Ex d enclosure Universal 	<ul style="list-style-type: none"> Module for M340 & M580 racks (Schneider Electric) 	<ul style="list-style-type: none"> 110 x 50 x 120 DIN rail 	<ul style="list-style-type: none"> 103 x 67 x 24 Compact Universal / DIN rail 	<ul style="list-style-type: none"> 89 x 51 x 20 Mezzanine card 	<ul style="list-style-type: none"> 103 x 57 x 20 Mezzanine card 	
Power supply	<ul style="list-style-type: none"> 110 to 230 VAC (50 to 60 Hz) Isolated 	<ul style="list-style-type: none"> Redundant 24 to 110 VDC* Isolated* PoE+* 	<ul style="list-style-type: none"> Redundant 9 to 110 VDC* Isolated* PoE* 	<ul style="list-style-type: none"> 9 to 36 VDC 	<ul style="list-style-type: none"> 9 to 50 VDC PoE* 	<ul style="list-style-type: none"> 230 VAC 9 to 72 VDC 	<ul style="list-style-type: none"> Backplane powered (Hot Plug) 	<ul style="list-style-type: none"> Redundant 9 to 36 VDC PoE 	<ul style="list-style-type: none"> 9 to 48 VDC 	<ul style="list-style-type: none"> 3.3 VDC or 5 VDC 	<ul style="list-style-type: none"> 5 VDC 	
Alarm output	X	X	X*					X				
Backup key	X	X	X					X			X	
Environment: Operating temperature IP rating	<ul style="list-style-type: none"> -25 to +70°C Option -40 to +75°C IP66 	<ul style="list-style-type: none"> -25 to +70°C Option -40 to +85°C IP66 	<ul style="list-style-type: none"> -25 to +70°C Option -40 to +80°C IP66 	<ul style="list-style-type: none"> -25 to +70°C IP66 	<ul style="list-style-type: none"> -25 to +70°C IP65 	<ul style="list-style-type: none"> -25 to +55°C IP66 	<ul style="list-style-type: none"> -25 to +70°C IP20 	<ul style="list-style-type: none"> -25 to +70°C Option -40 to +80°C IP30 	<ul style="list-style-type: none"> 0 to +70°C IP30 	<ul style="list-style-type: none"> -20 to +70°C Option -40 to +80°C 	<ul style="list-style-type: none"> -20 to +70°C Option -40 to +75°C 	
Specific standards	<ul style="list-style-type: none"> EN50121-4 (EMC) EN60068-2 (climatic) 	EN50155 [IEC60571] (railway) <ul style="list-style-type: none"> EN50121-3-2, EN50121-4 (EMC) EN61373 (shocks & vibrations) EN60068-2 (climatic tests) EN45545-2 (smoke-fire rolling stock) 		<ul style="list-style-type: none"> E-marked (automotive vehicles) EN61373 (shocks & vibrations) EN60068-2 (climatic tests) 		<ul style="list-style-type: none"> Ex II 2GD EEx d IIC ATEX housing (zones 1 & 21) Ex II 2GD Eexe II T6 ATEX antennas (zones 1 & 21) 			<ul style="list-style-type: none"> EN61373 (shocks & vibrations) 			






* Depending on the model

Serial to WiFi gateways

	 WLg-xROAD/S	 WLg-IDA/S	 WLg-DONGLE	 WLg-DONGLE-OEM
Typical applications	<ul style="list-style-type: none"> • Mobile (city buses, handling/hoisting, rotating machinery, automated trolleys...) • Industrial automation 	<ul style="list-style-type: none"> • Industrial automation 	<ul style="list-style-type: none"> • Machine manufacturers • Smart buildings • Industrial automation 	<ul style="list-style-type: none"> • Equipment manufacturers
WiFi interface	<ul style="list-style-type: none"> • 1 radio • 802.11 a/b/g • 2.4/5 GHz • 54 Mbps 	<ul style="list-style-type: none"> • 1 radio • 802.11 a/b/g • 2.4/5 GHz • 54 Mbps 	<ul style="list-style-type: none"> • 1 radio • 802.11 a/b/g • 2.4/5 GHz • 54 Mbps 	<ul style="list-style-type: none"> • 1 radio • 802.11 a/b/g • 2.4/5 GHz • 54 Mbps
Security	<ul style="list-style-type: none"> • SSID broadcast enable/disable • Filtering • WEP, WPA /WPA2-Personal 			
Fast roaming	< 50 ms	< 50 ms	< 50 ms	< 50 ms
Serial interface	<ul style="list-style-type: none"> • RS232, RS422 or RS485 • SubD9 (or custom) • 250 Kb/s 	<ul style="list-style-type: none"> • RS232, RS422 ou RS485 • Sub D9 or terminal block • 250 Kb/s 	<ul style="list-style-type: none"> • RS232 • SubD9 • 250 Kb/s 	<ul style="list-style-type: none"> • RS232 (or TTL) • SubD9 (or HE10) • 250 Kb/s
Dimensions (mm) Format Mounting	<ul style="list-style-type: none"> • 115 x 64 x 35 • Rugged housing • Universal 	<ul style="list-style-type: none"> • 110 x 50 x 120 • DIN rail 	<ul style="list-style-type: none"> • 103 x 67 x 24 • Compact • Universal / DIN rail 	<ul style="list-style-type: none"> • 89 x 57 x 19 • Mezzanine card
Power supply	<ul style="list-style-type: none"> • 9 to 50 VDC 	<ul style="list-style-type: none"> • Redundant • 9 to 36 VDC 	<ul style="list-style-type: none"> • 5 VDC on jack connector • AC/DC block adapter supplied 	<ul style="list-style-type: none"> • 3.3 VDC or 5 VDC
Alarm output		X		
Backup key		X		
Environment: Operating temperature IP rating	<ul style="list-style-type: none"> • -25°C to +70°C • IP65 	<ul style="list-style-type: none"> • -25°C to +70°C • Option -40 to +80°C • IP30 	<ul style="list-style-type: none"> • 0 to +70°C • IP30 	<ul style="list-style-type: none"> • -20 to +70°C • Option -40 to +80°C
Specific standards	<ul style="list-style-type: none"> • E-marked (automotive vehicles) • EN61373 (shocks & vibrations) • EN60068-2 (climatic tests) 			

Ethernet switches + integrated WiFi

Point-to-point

	 AIRTRACK-S4	 WLG-SWITCH	 WLG-4LAN	 HyperLan-Pack	 Ethernet Air-Pack
Typical applications	<ul style="list-style-type: none"> Underground & surface mining 	<ul style="list-style-type: none"> Mobile (city buses, handling/hoisting, rotating machinery, automated trolleys...) Industrial automation 	<ul style="list-style-type: none"> Machine manufacturers Industrial and building automation 	<ul style="list-style-type: none"> Outdoor point-to-point communications 	<ul style="list-style-type: none"> Indoor point-to-point communications
WiFi interface	<ul style="list-style-type: none"> 1 radio 802.11 a/b/g 2.4/5 GHz 54 Mbps 	<ul style="list-style-type: none"> 1 radio 802.11 a/b/g 2.4/5 GHz 54 Mbps 	<ul style="list-style-type: none"> 1 radio 802.11 a/b/g 2.4/5 GHz 54 Mbps 	<ul style="list-style-type: none"> 1 radio per product 802.11 a 5 GHz 10 Mbps up to 50 Km 	<ul style="list-style-type: none"> 1 radio per product 802.11 a 5 GHz 54 Mbps
Security	<ul style="list-style-type: none"> SSID broadcast enable/disable Filtering WEP, WPA /WPA2-Personal 			<ul style="list-style-type: none"> SSID broadcast enable/disable Filtering WEP, WPA /WPA2-Personal 	
Fast roaming	< 50 ms	< 50 ms	< 50 ms	N/A	N/A
Ethernet ports Connectors	<ul style="list-style-type: none"> 4 x 10/100 M12 	<ul style="list-style-type: none"> 8 x 10/100 RJ45 PoE PSE injector 	<ul style="list-style-type: none"> 4 x 10/100 RJ45 	<ul style="list-style-type: none"> 2 x 10/100 per product M12 	<ul style="list-style-type: none"> 1 x 10/100 per product RJ45
Dimensions (mm) Format Mounting	<ul style="list-style-type: none"> 80 x 175 x 57 Rugged housing Universal 	<ul style="list-style-type: none"> 110 x 50 x 151 DIN rail 	<ul style="list-style-type: none"> 98 x 81 x 24 Compact Universal/DIN rail 	<ul style="list-style-type: none"> 80 x 175 x 57 Antennas Ø 60cm Rugged housings Pole/mast 	<ul style="list-style-type: none"> 103 x 67 x 24 Compact housings Universal/DIN rail
Power supply	<ul style="list-style-type: none"> Redundant 24 to 110 VDC Isolated 	<ul style="list-style-type: none"> Redundant 9 to 75 VDC 	<ul style="list-style-type: none"> 9 to 48 VDC 	<ul style="list-style-type: none"> Redundant 9 to 72 VDC or PoE 	<ul style="list-style-type: none"> 9 to 48 VDC AC/DC block adapters supplied
Alarm output	X	X			
Backup key	X	X		X	
Environment: Operating temperature IP rating	<ul style="list-style-type: none"> -25 to +70°C Option -40 to +80°C IP66 	<ul style="list-style-type: none"> -25 to +70°C Option -40 to +80°C IP30 	<ul style="list-style-type: none"> -20 to +70°C IP30 	<ul style="list-style-type: none"> -25 to +70°C IP66 	<ul style="list-style-type: none"> 0 to +70°C IP30
Specific standards	<ul style="list-style-type: none"> ISO 11452 sections 1, 2, 5, 7 (electrical disturbances) EN61373 (shocks & vibrations) 	<ul style="list-style-type: none"> E-marked (automotive vehicles) EN61373 (shocks & vibrations) 	<ul style="list-style-type: none"> EN61373 (shocks & vibrations) 		



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 pay 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 (WLAN / LAN / serial).

Its expertise and high quality standards allows it to meet the most severe requirements in transportation (rail & road), industrial (SCADA, 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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