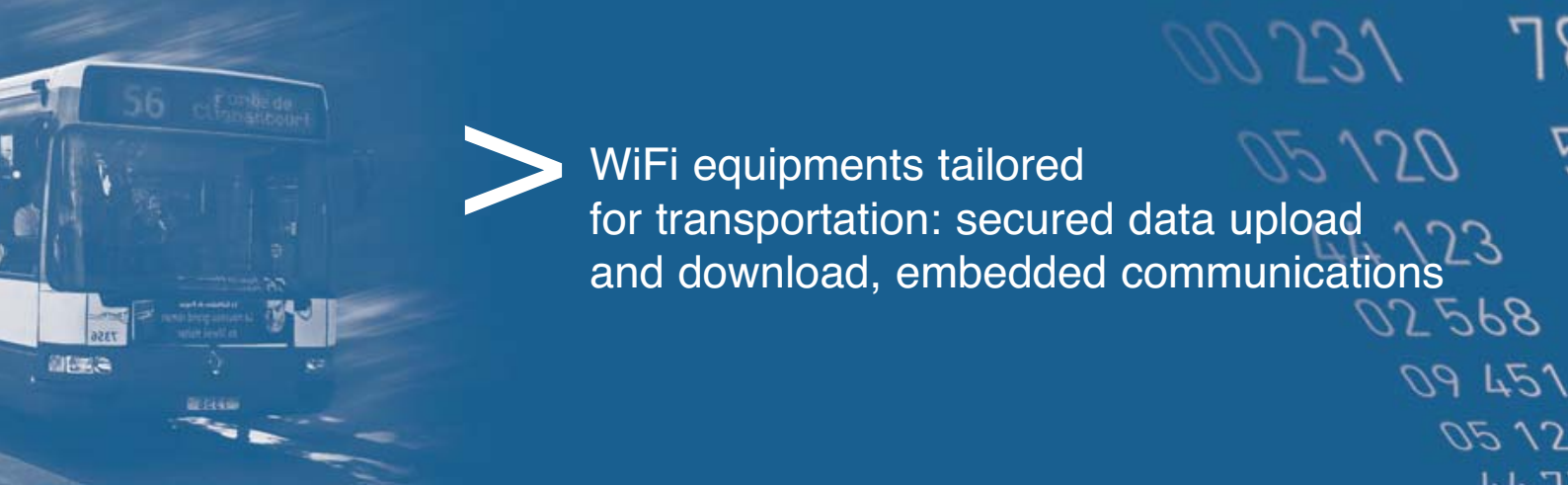


For all on-board or ground
transportation applications

Rugged WiFi communication solutions

ACKSYS
Communications & Systems,
the preferred partner of transport-
specialized integrators
and manufacturers





> WiFi equipments tailored for transportation: secured data upload and download, embedded communications



ACKSYS supplies a wide range of wireless solutions that rely on the IEEE 802.11 a/b/g/n standards: Ethernet bridges, access points, repeaters and serial to WiFi gateways.

These products fulfill the strong environmental constraints inherent in transportation, they ensure secured data transfer for carriage to carriage and carriage to ground.

Main Features

- WiFi Access point, Ethernet bridge, repeater and serial gateway
- EN50155, MIL-STD-810F, UTAC E2 standards compliant...
- Secure WiFi network
- Fast roaming (< 50 ms) for a reliable and lossless communication service during vehicle motion
- Advanced routing function (eases integration in bus, train or tram applications)
- MESH network
- Dual-radio card models (network redundancy or dual-networking)



WLg-ABOARD range



Trains and trams

Train to train and train to track data transfers are constantly increasing (downloading of maintenance data, video recording, Internet access...). As wiring between carriages is expensive and often difficult, indeed impossible for data exchange with the track, WiFi naturally found its place as the most reliable, efficient and affordable means of communication. Taking into account the environmental constraints inherent in rolling stock equipments, ACKSYS designed [the WLg-ABOARD range](#):

- ◆ Robust and waterproof IP66 aluminum enclosure
- ◆ Ultra-Lock® M12 connectors (Power supply and Ethernet ports)
- ◆ Shockproof and vibration proof (MIL-STD-810F & EN50155)
- ◆ Dual input insulated power supply +9VDC to +140VDC
- ◆ Easy on-site unit maintenance replacement, thanks to the C-KEY (rugged removable memory key for quick configuration back-up/recovery)



Buses and coaches

Bus fleet operational costs optimization as well as passenger security are two major issues for operators. For this reason the number of on-board electronic equipments has considerably increased over the past years. WiFi quickly found its place amongst these equipments: cut in wiring costs, data upload/download optimization (passenger information, video recording, ticketing and operational data).

Unobtrusively integrated in electrical enclosures near to passengers, these WiFi equipments must meet specific requirements, therefore ACKSYS designed the [WLG-xROAD range](#):

- ◆ Smart compact waterproof IP65 aluminum enclosure
- ◆ M1F1 (smoke & fire) standard compliant
- ◆ UTAC E2 certified, shockproof and vibration proof (MIL-STD-810F)
- ◆ +9VDC to +50VDC power supply
- ◆ Removable antenna for roof mounting



WLG-xROAD range



Trackside and station

ACKSYS offers 3-in-1 solutions ([Wireless switch series](#)) featuring WiFi access point, managed switch and POE injector to fulfill the vehicle to ground infrastructure network communication requirements (depots, stations...).

This solution thus minimizes the number of products to deploy and to maintain. Devices use several antennas to ensure high throughput (MIMO) and optimal radio coverage thanks to refracted waves in closed environments (diversity mode).



Wireless switch range

- ◆ 3-in-1 combo solution: WiFi access point, Ethernet switch, POE injector
- ◆ Multiple antennas for "diversity mode" support and MIMO
- ◆ Extended temperature range: -20°C to +70°C (-4 to 158°F) for outdoor installation
- ◆ Redundant power supply input, alarm contact output
- ◆ Easy on-site unit maintenance replacement, thanks to the C-KEY (rugged removable memory key for quick configuration back-up/recovery)

Rugged wireless communication solutions

>> Transportation applications

For evermore communicating buses, trains and trams...

ACKSYS supplies a wide range of WiFi equipments designed for transportation applications:

- Ethernet bridges, access points, repeaters
- Serial gateways

On the strength of 12 years of experience in this area, ACKSYS naturally turned up as a major partner thanks to a structured offer adapted to each sector: buses, trains/trams and ground infrastructures (depots, stations, maintenance workshops).

Our products are today widely deployed for applications such as:

- ◆ Automated ticketing operational data upload/download
- ◆ Contextual content display for passenger information (bus stops, tourism, marketplaces...)
- ◆ Passengers video protection
- ◆ Inter-carriage communications
- ◆ Automatic door surveillance system
- ◆ On-board infotainment and Internet access
- ◆ Passenger counting systems
- ◆ Traffic lights priority



Since 1984, ACKSYS has specialized in the design and supply of data communication equipments for the most demanding markets: transportation, petrochemical, aeronautic, military, hosting & handling, water treatment, heavy industries...

Product ranges

WiFi access points, bridges and repeaters (2,4 / 5 GHz), 900 MHz radio, Ethernet switches, serial port servers (Ethernet, WiFi, USB), data gateways (MODBUS RTU, MODBUS/TCP), serial multi-port boards, media converters.

ACKSYS designs reliable (5-year warranty) and long lasting products to insure smooth operation of your applications as well as the deployment of your installations for many years to come.

The ACKSYS distributors network is present in 20 countries throughout North America, Europe, South Africa, the Middle East and Far East, South East Asia and Australia.

www.acksys.com

ACKSYS Communications & Systems

ZA Val Joyeux - 10 rue des entrepreneurs - 78450 Villepreux - France

phone +33 1 30 56 46 46 - Fax +33 1 30 56 12 95 - sales@acksys.fr