



ARGENTINA RAILWAY Case Study

FiberinMotion train-to-ground solution

Argentine Railway chooses RADWIN

RADWIN's train-to-ground solution enhances onboard passenger security and safety

Customer: Argentine Railway (Ferrocarriles Argentinos), Argentina's primary rail operator and the 8th largest railway in the world.

Partners: Datastar and BTW.

Need: Enhanced passenger safety

Argentine Railway sought to enhance passenger safety onboard its trains. As part of its plan to establish a state-of-the-art CCTV surveillance system, the railway operator sought a wireless broadband provider to supply the technology that will support the surveillance network.

Argentine Railway requirements

- » A solution that would support high-speed broadband connectivity to streamline communications from the moving trains to the train control center.
- » Enable the train control center to view the train driver and allow the train driver to see video from the tracks to ensure that tracks are clear when approaching the cross sections. This would allow the driver to stop the train if vehicles are on the tracks.
- » Minimum 100Mbps capacity to enable 24x7 real-time monitoring from the train control center.
- » Enable the driver to contact the NOC and see route and upcoming intersections on screen.
- » A solution that would enable wireless connectivity for live broadcasts from the train.
- » A solution that would ensure seamless roaming and low latency.





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Performing a PoC

Argentine Railway issued a tender and considered several communications options, including relying on 3G mobile network coverage.

After careful consideration, the rail operator opted to build a dedicated network for enhanced capacity and coverage.

Railway Argentine turned to Datastar to assist in finding a suitable solution for their requirements. Datastar, together with partner BTW, recommended RADWIN's train-to-ground solution.

After conducting a PoC, Argentine Railway found that RADWIN's equipment outperformed other vendor equipment and showed highest capacity and uninterrupted video transmission.

RADWIN's Fiber-in-Motion solution

RADWIN's transportation base stations were installed on poles along the tracks and the transportation mobile units were mounted on board the train cars. The deployment of the train-to-ground technology initially covers the Buenos Aires to La Plata route to the east coast of the country, with installation on more than 150 carriage trains.

Deployment to-date

- » Number of base stations installed: 67
- » Number of mobile units installed: 156
- » Tracks: 60 Km (1st line out of 5)
- » Capacity: 100 Mbps
- » Application: CCTV and VoIP, Wi-Fi in future

About RADWIN

RADWIN is the leading provider of train-to-ground solutions. RADWIN's FiberinMotion® solution delivers up to 750 Mbps per train and is deployed by leading transportation authorities worldwide to power a broad range of applications including high-speed Wi-Fi for passengers, real time high-definition CCTV, PIS, CBTC and more.

www.radwin.com

RADWIN's FiberinMotion train-to-ground solution highlights

- » Highest net throughput in motion – up to 750Mbps per train.
- » Supporting train speeds of up to 350 Km/h / 220 Mph.
- » Incorporating field-proven air interface and cutting-edge technologies.
- » Multi-service platform supporting multiple applications including high-speed Wi-Fi, real-time CCTV, PIS and signaling.
- » Superior performance in tunnels and NLOS.
- » Railway environment certified.
- » Rugged design to withstand the challenging railway environment, including operation in underground tunnels and tracks, shocks and vibrations.

