AURIGA
ON BOARD
ATO&ERTMS

CAF Signalling is a world reference in the design and implementation of rail control solutions for the railway industry.

AURIGA OBS is a compact and modular ERTMS/ATO system, optimised and customised for the operational and commercial needs of our customers. This solution enables full interoperability beyond national borders, compatible with systems from different trackside manufacturers and performs safe supervision of train movement with high availability.

CAF Signalling's AURIGA system is a benchmark in the international market and has already been chosen by numerous and relevant operators, vehicle manufacturers and stakeholders worldwide.

KEY FEATURES

BL3 R2 (3.6.0) according to TSI 2019/776 (newest version).

- **Safety**

  Development under certified Safety Management System and Life Cycle (compliant with 402/2013 Common safety method and CENELEC EN 50126, EN 50128, EN 50129).

- **Flexible Train Interfaces**

  Open and flexible train interfaces based on bus technology (Ethernet, MVB, CAN, RS-485, …) that minimises wiring.

- **Space allocation**

  Compact design and NO forced ventilation that minimises required on-board space.

- **Single EVC**

  Double cabin configuration using a single EVC with low power consumption regardless of train length.

- **Availability**

  Dynamic redundancy 2oo3 EVC and 1oo2 ATO architecture providing high availability.
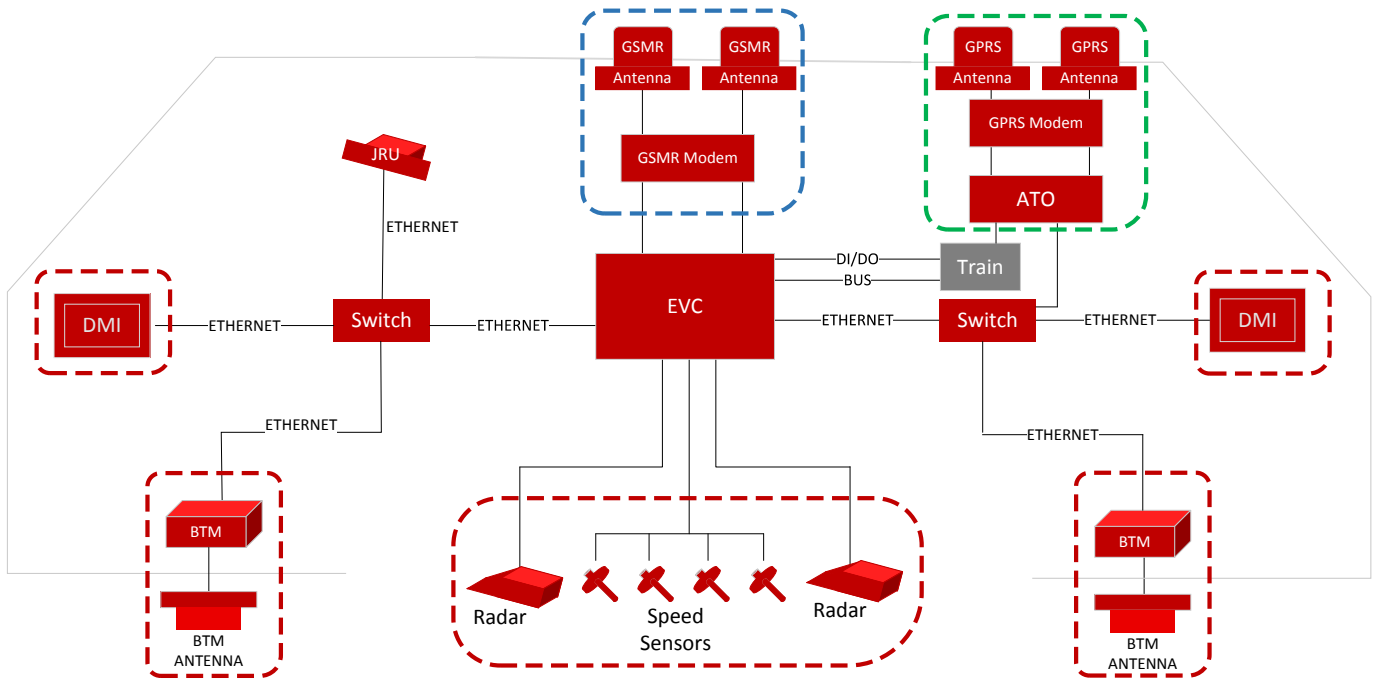
- **Odometry**

  High accuracy and robust odometry system with 3oo6 dynamic redundancy.

- **ATO over ERTMS (AoE)**

  First AoE based on European standards.

COMMON ARCHITECTURE: ERTMS L2 + ATO

Odometry, BTM and DMI shared by ETCS and ATO

AURIGA allows scalable strategies depending on the operational needs & trackside infrastructure availability, going from ERTMS L1 to L2 and up to ERTMS L2 + AoE.

CAF Signalling´s AoE according to UNISIG + EEUG.

THE BENEFITS OF AoE ARE:

- Improves stability of operation, less operational perturbation and fast recovery from traffic disturbances.

- Drives closer to the ETCS supervision curves.

- Optimised driving that saves energy.

- Smooth traction/brake control that reduces maintenance of mechanical components.

- For full-automated lines, less vulnerable to disruptions due to rostering issues (staff turnover).