PEI Mobility

Engineering the Future of Bus Articulation: PEI Mobility at Busworld Brussels

Located in Emilia-Romagna, in the heart of Italy's Motor Valley, PEI Mobility was born in a context of excellence and over the years has developed a wide range of products for interconnection, becoming a key partner for leading manufacturers of articulated buses.

PEI Mobility is a novelty on the international market because, despite its twenty years of experience, it is a company strongly committed to innovation and research that uses techniques such as 'hardware-in-the-loop' (HIL), suitable for dynamic product simulation, based on specific customer requirements.

The control unit (SCU), designed entirely by PEI Mobility, is supplied with our articulation systems and communicates with the vehicle, allowing real-time adjustment of the hydraulic system and controlling the behaviour of the vehicle in potentially critical situations.

It is compliant with:

- ECE-R155, ECE-R156 and ISO 21434:2021 (Cybersecurity)
- Unified diagnostic services (UDS), compliant with the ISO 14229 series
- Secure CAN Transceivers availability of all diagnostic services and features provided by the UDS standard including flash reprogramming, authentication procedures and advanced secure diagnostics

The use of latest-generation software and continuous technological investments, together with an ever-growing team of engineers, make PEI Mobility the perfect partner for tackling the challenges facing the public mobility sector recently.

Times have changed, and the market is increasingly focused on electric mobility and environmental and social sustainability, undergoing unprecedented focus on passenger comfort.

Consequently, the structure of buses is also changing: the transition from endothermic engines to electric motors allows, for example, a different use of space inside the vehicle.

Electric batteries are often installed on the roof, at the articulation joint, which must have an increasingly robust structure to support their weight while ensuring reliability and safety.

The latest concept for electric articulated buses places the batteries under the floor to optimise space and functionality.

In the latest-generation chassis, the drive axle is often positioned at the front of the vehicle, as the constraints of endothermic engines no longer apply. This allows manufacturers to use simpler and lighter articulation systems, such as the Puller type.

PEI Mobility's product range also includes this last type of articulation: an essential but also reliable system, deriving from a technology with roots in the past, which today finds new applications in electric-powered articulated mobility, where lightness and high performance are ever more important requirements.

PEI Mobility will present important new products at Busworld in Brussels from 4 to 9 October, join us at **HALL 6 STAND 639**!

Watch our videos **here**.

www.peimobility.com/en

PEI MOBILITY
Performing gangway

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THE HEART OF BUS ARTICULATION SYSTEMS

STABILITY CONTROL UNIT

The bus articulation systems of **PEI Mobility** are supplied with microprocessor-controlled electronics.

Visit us at
Hall 6 - Booth 639

busworld
EUROPE BRUSSELS
4-9 OCT 2025

www.peimobility.com