PRIMOVE WIRELESS CHARGING

The Z-Mover



For e-cars, *PRIMOVE* offers an efficient, safe and economically attractive charging system: the Z-Mover, a charging system that always ensures optimum distancing between transmission coils.

WHY CHOOSE PRIMOVE CHARGING?

Automatic

- No cables or plugs
- Integrated positioning system
- Ready for autonomous parking
- Designed for outdoor use



Efficient

- One system fits all vehicle heights
- Highest efficiency
- Compact and lightweight design



Safe

- Integrated state-of-the-art metal detection
- Minimized electro-magnetic emissions
- No access for living objects
- Pinch protection included







THE TECHNOLOGY BEHIND



- An optimized air gap ensures improved efficiency compared to systems with higher gaps between the coils
- 2. A particularly small, light and cost efficient vehicle coil assembly, due to a special magnetic design and the reduced air gap
 - Homogenous primary field thanks to the wayside coil being a 3-phase, multipolar system
 - Significantly smaller profiles of the copper wires and less ferrites in the receiving coil in the vehicle
 - Design supporting high efficiency even when misaligned
- **3.** Flexibility on z-axis
 - One vehicle coil for all vehicle heights (sports car, limousine, SUV, cross-country)

- **4.** 3-6 times smaller electro-magnetic stray-field, compared to a system without Z-mover
 - Distance to vehicle floor: 1.0 cm
 - Distance between copper coils: 3.5 cm
- **5.** No need for "living object detection" due to extra small air gap
- **6.** Savings on magnetic material, power electronics and safety systems
 - Significantly higher than additional material cost for the mechanical system
- 7. Made for continuous outdoor use
 - Operating reliably under all weather conditions



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