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WIRELESS CHARGING.

CERV CONFERENCE

**BMW
GROUP**



DEFINITION OF PREMIUM CHARGING.

... fast



... intelligent



... comfortable



BMW'S PREMIUM CHARGING OFFERS.

... fast

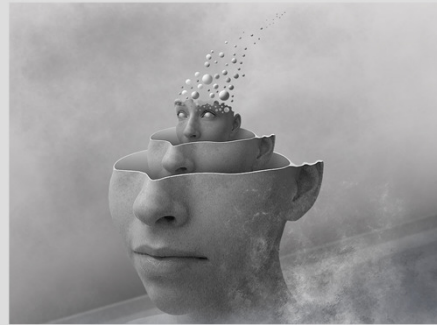


All US BMW i3 are equipped with SAE DC Fast Charging.

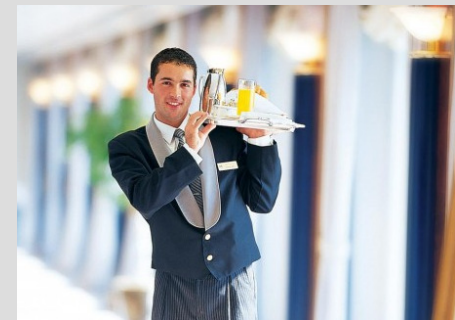
BMW is supporting the roll out of DC infrastructure.



... intelligent



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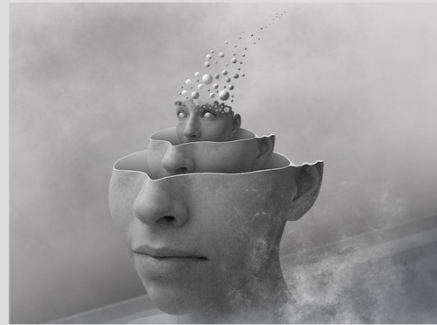


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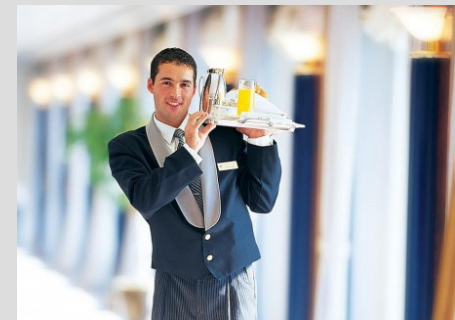
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The BMW i smart Charging App allows the customers to charge their car intelligently by using the customers energy tariff to charge the car most efficient.



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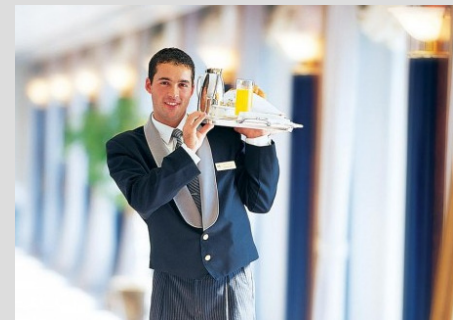
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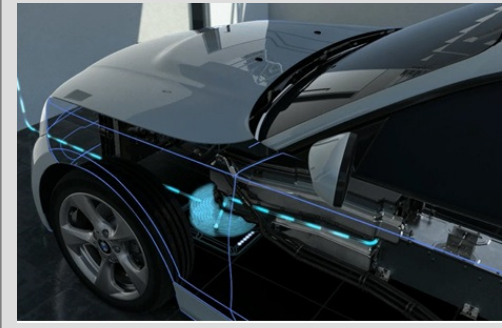
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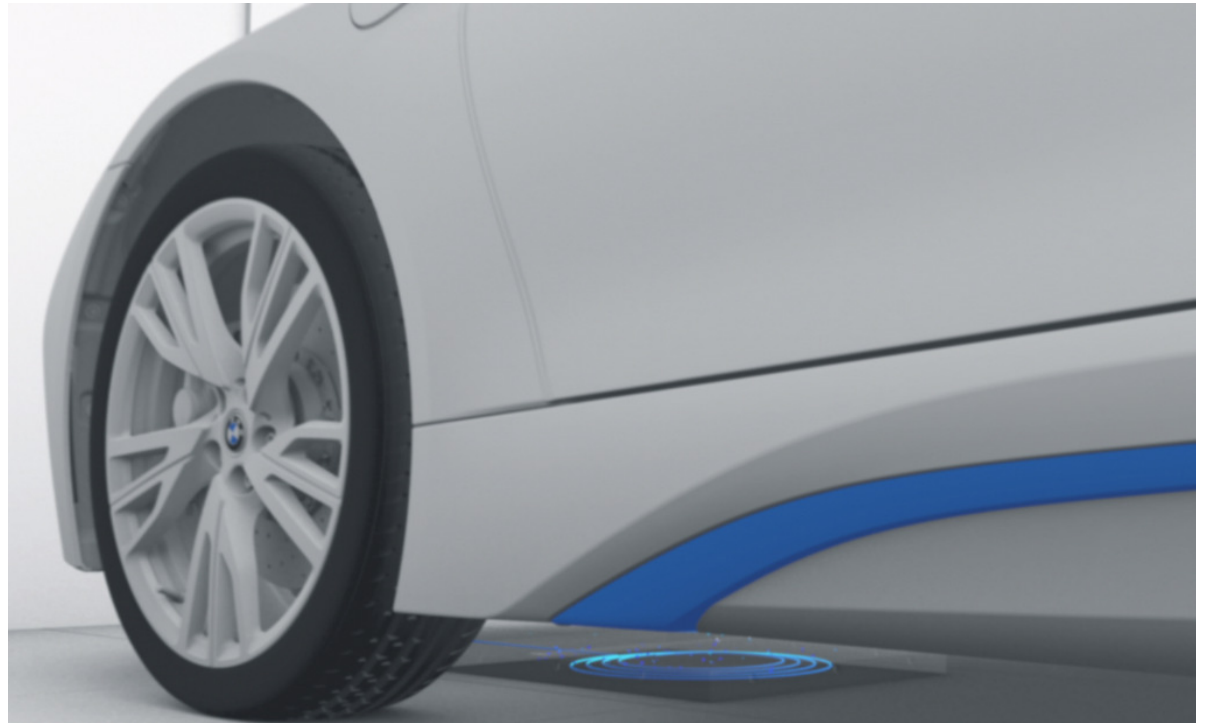
Wireless charging is the next step to offer the customer a premium charging experience.



WIRELESS CHARGING OFFERS A COMFORTABLE CHARGING EXPERIENCE.

Easy and convenient

- No plugging
- No refueling
- Always connected
- Fully charged <2.5h

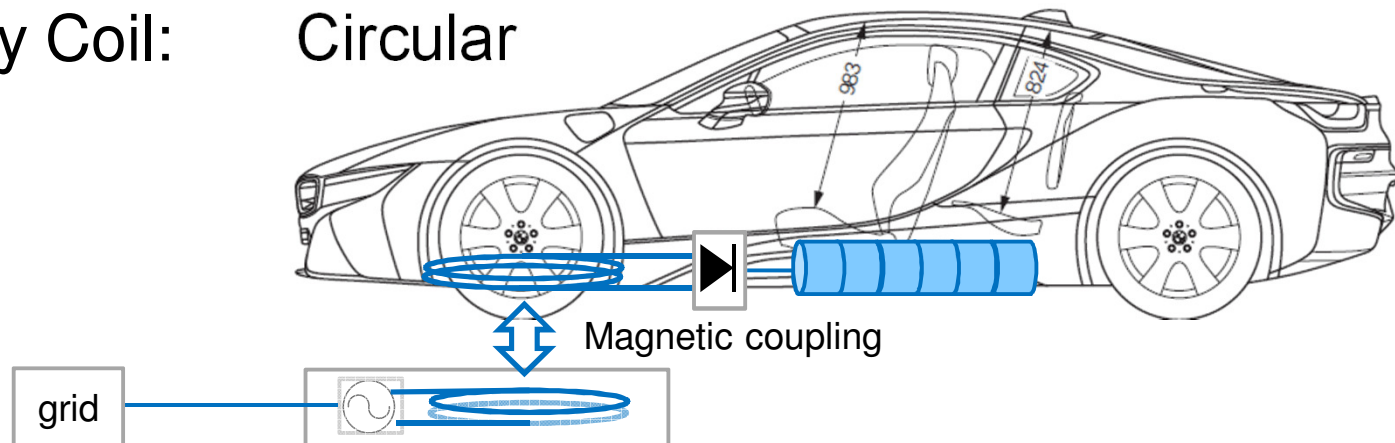


CUSTOMER EXPERIENCE.

- Charging pad will automatically establish wireless communication with the vehicle.
- The customer will get an supported guidance (shown in the vehicle display) to reach the best position (coil to coil) for power transfer.
- Automatic start of the charging process.
- Charging status can be checked on the display key or App.
- System will stop when foreign objects are detected.

HOW IT WORKS.

- Frequency: 85 kHz
- Communication: IEEE 802.11n @ 2.4 und 5GHz
- Power: ≥ 3.7 kW (PHEV)
 ≥ 7.4 kW (BEV)
- Efficiency: $\geq 90\%$
- Secondary Coil: Circular



WAYS TO PARK THE VEHICLE.

Supported Positioning
Drive by your own



Automatic Positioning



STANDARDIZATION.

- The standardization is key for interoperability.
- BMW is active in SAE, ISO/IEC.
- The Harmonization between SAE and ISO/IEC is key to achieve true interoperability.
- System
 - SAE J2954, ISO19363 / IEC61980
- Communication
 - SAE J2847/6, ISO/IEC 15118-7

THANK YOU.

