

Press Release

Innovation power "made in Germany": Compleo presents HPC charger eTower 200

eTower 200 sets new standards in HPC technology thanks to its maximum efficiency, grid-friendliness, compactness, highest usability and modular structure, delivering exceptional performance

Dortmund/Germany, November 9, 2023 - [Compleo Charging Solutions](#), one of the leading full-service providers of charging technology for electric vehicles in Europe, announces the market launch of its High Power Charger (HPC) eTower 200. Developed and manufactured in Germany, this high-performance charger boasts maximum power, highest efficiency and a compact design. The eTower is equipped with numerous innovative features, such as modular power distribution, the iconic lighting concept and the "Single Point of Service" approach, simplifying installation, operation, and usage significantly. At its core are the in-house developed silicon carbide power-electronic charging modules, enabling the realisation of new regulatory and various market-specific requirements, including the implementation of grid-supporting functions.

The modular technology of the eTower 200 enables high-speed charging with a peak output of 200 kW and an efficiency of more than 96%. Thanks to a state-of-the-art power distribution system based on seven independent power modules, entirely developed by Compleo in Germany, the eTower can distribute power dynamically and intelligently. The charging technology continuously adapts to the specific charging situation, maximizing performance. Each power module delivers up to 920 volts and 72 amperes, allowing drivers to charge their electric vehicles in the shortest time and continue their journey. All power semiconductors used in the modules are manufactured using state-of-the-art silicon carbide (SiC) technology. By completely shutting down the power modules in standby mode, standby power consumption can be minimized.

One of a kind - compact, efficient, user-friendly

With the eTower 200, Compleo sets new standards for efficient space utilization and offers exceptional flexibility in terms of installation location. Installers and service technicians can easily and quickly access the device during maintenance or inspections, thanks to the "Single Point of Service" concept, providing the smallest service area in the 200 kW HPC charger class. All components of the charging system are accessible through a single service door facing the occupied parking space. Additionally, the eTower 200 can be placed directly in front of walls, leading to an even more efficient use of space. This opens a wider range of location possibilities and maximizes flexibility in installation. Thanks to its low height - also the lowest in its class - the eTower can even be installed in places with limited ceiling height, such as parking garages or under roofs. This makes the device the ideal choice for challenging locations where space and height are equally important. Furthermore, the innovative Wire Hub makes the installation process considerably easier. It holds all the necessary supply lines safely and securely, reduces the amount of installation work and thus lowers installation costs.

The eTower 200 is tailored precisely to the requirements of Charge Point Operators (CPOs). They benefit from optimal profitability and efficient operation. The high-tech charging technology adapts flexibly to the individual energy requirements of each electric vehicle to ensure optimal and efficient charging. By using compact 29 kW modules, the charging station automatically distributes available power so that both vehicles can consistently maximize their full power potential. For operators, this means an increase in energy sales of up to 35 MWh per year, which can translate into additional revenue of several thousand Euros.* In the event of a service call, a high level of redundancy ensures uninterrupted operation. Even if one power module switches to service mode, the performance of all other modules remains unaffected, continuing to deliver power. Furthermore, replacing, upgrading or maintaining the modules does not require cranes or heavy equipment.

During the rapid expansion of the DC fast charging structure, the grids are under increasing strain and grid operators are facing challenges. The goal is to ensure grid stability. The integrated Active Frontend in the module can provide not only active power but also reactive power to the grid if needed, stabilizing grid voltage. Integrated, advanced control and filtering stages also contribute to reducing harmonics and emissions.



However, not only installers and CPOs, but also users benefit from the outstanding features of the eTower 200. Charging is as easy as conventional refueling. The LED charge status display provides optimal visibility, allowing electric vehicle drivers to check the State of Charge (SOC) of the connected vehicle from a distance. This helps to select a suitable charging point, especially if all others are already occupied. A durable, bright all-weather display ensures a reliable display regardless of the weather conditions. Four robust, weatherproof buttons enable easy operation and barrier-free access. Additionally, the eTower 200 boasts the quietest operation in its class, enabling its use in residential areas without causing disruptive noise.

Convenient and legally compliant charging processes

Users of the new eTower 200 benefit from a considerably simplified and accelerated payment process. Payments can be made directly without the need for additional login or registration. The HPC charging solution is designed for all major debit and credit cards, allowing users to choose their preferred payment method without any restrictions. The integrated payment terminal systematically performs a pre-authorization check. This verification ensures that the payment methods used have sufficient funds, guaranteeing reliable transactions and worry-free payouts for CPOs.

The storage and display module, SAM© for short, ensures kWh-accurate and calibration-compliant billing, regardless of integration into existing backend systems. It immediately displays the amount of energy charged and stores it for later review. Thanks to the plug-and-play functionality, there is no additional effort required for commissioning - it is ready to use straight away. The eTower's payment terminal eliminates the need for a physical receipt printer. Instead, customers receive access to a digital receipt server via the digital receipt function, which enables them to retrieve their payment receipts securely and conveniently online - even days after the charging process.

"With the launch of the eTower, we are starting a new chapter in Compleo's history. The technology behind our HPC solution is the result of continuous innovation and our commitment to maintaining our course and continuing to develop ground-breaking solutions in the field of electromobility, even in challenging times," said Joerg Lohr, CEO of Compleo. "With the impressive charging power and high usability of the eTower 200, we aim to revolutionize fast charging for electric vehicles and demonstrate the superiority of e-mobility."

Christian Müller-Winterberg, Vice President Research & Development at Compleo, adds: "Only a few market players have the core competence to develop power electronic charging modules. We are proud to have this unique capability within our company. This allows us to accelerate our innovation path for DC fast charging stations and at the same time respond flexibly to market requirements."

*Assumption: 8 charges/day at €0.50/kWh. Reference vehicles: Tesla Model 3 LR with 15% starting SOC & Audi e-tron 55 with 20% starting SOC.

###

About Compleo

Compleo Charging Solutions is one of the leading full-service providers of charging technology for electric vehicles in Europe. As part of the KOSTAL Group, the company supports its business customers with various charging stations and a back-end for charging infrastructure. Compleo offers both AC and DC charging stations, including the first legally compliant DC charging stations on the market. The company is headquartered in Dortmund, Germany. Customers include Allego, Clever, EWE Go, Deutsche Telekom, Siemens, and more than 300 municipal utilities.

For more information, visit: www.compleo-charging.com

Press contact

Katrin Osburg
PR & Communications
presse@compleo-cs.com