## Tender text – Compleo DUO advanced & highline

General information	<ul> <li>Charging station for charging electric vehicles according to IEC 61851-1 Mode 3</li> </ul>
	Charging in (semi)-public and private areas
	<ul> <li>Two AC charging points</li> <li>Two Type 2 sockets with interlock according to IEC 62196 or two attached,</li> </ul>
	spiralised Type 2 charging cables with up to 6.5 m usable length
	<ul> <li>Billing of charging time and/or charging power in compliance with calibration law regulations</li> </ul>
	<ul> <li>Guaranteed readability of charging data</li> </ul>
	<ul> <li>Integrated, MID-compliant smart meter with viewing window</li> </ul>
	CE certification
	Conformity with EU directives RoHS and REACH
	Can be customised by foiling the pedestal
	Made in Germany at production sites in Dortmund
Mechanical data	<ul> <li>Mounting on the floor, on the wall or on a post. Prefabricated base option- ally available</li> </ul>
	<ul> <li>Weight with full equipment maximum 45 kg</li> </ul>
	Compact design with low depth both
	a) for floor mounting (H x W x D: $1441 \times 400 \times 225$ mm) and
	b) for wall/post mounting (H x W x D: 1000 x 400 x 225 mm)
	Protection class of the housing min. IP44
	<ul> <li>Protection class of relevant components min. IP54</li> <li>Protection class (mechanical impact registrance) min. IV10</li> </ul>
	<ul> <li>Protection class (mechanical impact resistance) min. IK10</li> <li>Weatherproof, scratchproof and corrosion-resistant SMC housing</li> </ul>
	<ul> <li>Weatherproof, scratchproof and corrosion-resistant SMC housing</li> <li>Theft protection possible through use of operator's own profile half cylinde</li> </ul>
	<ul> <li>Protection against vandalism due to locked sliding cover - Unlocking by au</li> </ul>
	thentication
Electrical data	• 3-phase connection to the local grid with 400 V, 50 Hz
	Configurable input current up to 63 A
	<ul> <li>Max. 2 x 11 kW charging power with attached charging cables</li> </ul>
	<ul> <li>Max. 2 x 22 kW charging power with charging sockets</li> </ul>
	<ul> <li>Supply line cross-section up to max. 35 mm<sup>2</sup></li> </ul>
Protective devices	<ul> <li>Integrated RCD per charging point, type A, 30 mA</li> </ul>
	<ul> <li>Integrated 6 mA DC fault current detection per charging point, alternatively 2x RCDs type B</li> </ul>
	As few service calls as possible: RCDs automatically reconnected via the
	backend in course of the semi-annual functionality test
	<ul> <li>Integrated welding detection for each charging point</li> </ul>
	<ul> <li>Ensures unbalanced load conformity for single-phase charging vehicles</li> </ul>
	Integrated 3-pole circuit breaker per charging point
	<ul> <li>Integrated 1-pole circuit breaker for control components per charging poin</li> </ul>
	Overvoltage protection type 2+3 or type 1+2+3 according to DIN EN 61643
	11, all-pole, integrated
	<ul> <li>Contact protection class of the electrical components with open housing IPxxB</li> </ul>
Connectivity	Use of the OCPP 1.6 JSON communication protocol, integration of the charg
	ing station in all compatible back-ends possible
	Integrated LTE modem, Ethernet interface
	<ul> <li>Integrated NFC reader (ISO 14443 A/B, ISO 18092, ECMA-340, ISO 15693)</li> </ul>
	<ul> <li>Integrated charging station controller with high computing power</li> </ul>
	Continuous security and feature updates via backend or locally via web in
	terface

	<ul> <li>Intelligent load management with static upper limit possible without additional hardware</li> <li>External dynamic power setting possible, e.g. via Modbus TCP, to include building load and PV feed-in</li> <li>Integration into an existing energy management system possible, e.g. via Modbus TCP</li> </ul>
Installation	<ul> <li>Ready-to-connect installation of the charging infrastructure</li> <li>Individually tested safety protection technology</li> <li>Installation of the charging pole possible by two persons without a crane</li> <li>Lockable front access to the safety components and to the integrated control for maintenance and troubleshooting purposes</li> <li>Setup and parameterization via internal Ethernet interface</li> <li>Factory preconfigured backend connection</li> <li>Operating instructions included</li> <li>Storage temperature between -25°C and +80°C</li> </ul>
Operation	<ul> <li>Operating temperature between -25°C and +40°C</li> <li>If necessary, reduce the charging current or switch off to avoid overheating (derating)</li> <li>Use at an altitude of up to 2,000 m above sea level</li> </ul>
Authentication	<ul> <li>Authorization of the charging process via RFID, remote or, if necessary, without authentication</li> <li>Optional authentication via Giro-e</li> </ul>
UI/UX	<ul> <li>At least 4.3" display incl. indication of charging power or similar</li> <li>LED status display provides information on readiness, charging process and errors</li> <li>Graphic operating instructions on user interface</li> </ul>