

## Tender text – Compleo CITO 500

<b>General information</b>	<ul style="list-style-type: none"> <li>• Charging station for charging electric vehicles according to IEC 61851-1 Mode 3 &amp; Mode 4</li> <li>• Charging in (semi)-public areas</li> <li>• One, two or three charging points</li> <li>• One CCS charging point (DC) with attached charging cable (3m), optionally one CHAdeMO charging cable (DC), optionally one type 2 socket (AC) with interlock according to IEC 62196</li> <li>• Execution of a DC and an AC charging process in parallel</li> <li>• DC &amp; AC: billing of charging time and/or charging power in compliance with calibration regulations</li> <li>• DC &amp; AC: guaranteed readability of charging data</li> <li>• Integrated, MID-compliant smart meters</li> <li>• CE certification</li> <li>• Conformity with EU directives RoHS and REACH</li> <li>• Can be customised by painting and foiling the housing</li> <li>• Made in Germany at production sites in Dortmund</li> </ul>
<b>Mechanical data</b>	<ul style="list-style-type: none"> <li>• Mounting on the ground on a solid base or on a concrete pedestal</li> <li>• Weight with full equipment maximum 300 kg</li> <li>• Compact design with low depth (H x W x D: 1995 x 640 x 511 mm)</li> <li>• Protection class of housing min. IP44</li> <li>• Protection class of relevant components min. IP54</li> <li>• Protection class (mechanical impact resistance) min. IK10</li> <li>• Weatherproof, corrosion-resistant stainless steel enclosure</li> <li>• Lockable door for front maintenance access</li> <li>• Theft protection through use of operator's own profile half-cylinder</li> <li>• Cable management system optional (6.5 m charging cable length)</li> </ul>
<b>Electrical data</b>	<ul style="list-style-type: none"> <li>• 3-phase connection to the local mains supply with 400 V, 50 Hz</li> <li>• Configurable input current up to 112 A</li> <li>• Max. 50 kW charging power DC, 200 - 480 V, 125 A</li> <li>• Max. 22 kW charging power AC, 400 V, 32 A</li> <li>• Supply cable cross-section up to max. 95 mm<sup>2</sup></li> <li>• Efficiency &gt; 94 % at 65 A and 400 V DC</li> </ul>
<b>Protective devices</b>	<ul style="list-style-type: none"> <li>• Integrated RCD per charging point, type A, 30 mA</li> <li>• Integrated 6 mA DC fault current detection per charging point, alternatively 2x RCDs type B</li> <li>• Integrated circuit breaker (MCB) C50 (DC)</li> <li>• Integrated 3-pole circuit breaker (AC)</li> <li>• Integrated welding detection for each charging point</li> <li>• Ensures unbalanced load conformity for single-phase charging vehicles</li> <li>• Overvoltage protection type 2+3 or type 1+2+3 according to DIN EN 61643-11, all-pole, integrated</li> <li>• Highest safety through insulation monitoring</li> <li>• Contact protection class of the electrical components with open housing IPxxB</li> </ul>
<b>Connectivity</b>	<ul style="list-style-type: none"> <li>• Use of the OCPP 1.6 JSON communication protocol, integration of the charging station in all compatible back-ends possible</li> <li>• Integrated LTE modem, Ethernet interface</li> <li>• Integrated NFC reader (ISO 14443 A/B, ISO 18092, ECMA-340, ISO 15693)</li> <li>• Integrated charging station controller with high computing power</li> <li>• Intelligent load management with static upper limit possible without additional hardware</li> </ul>

	<ul style="list-style-type: none"> <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>
<b>Installation</b>	<ul style="list-style-type: none"> <li>• Ready-to-connect installation of the charging infrastructure</li> <li>• Individually tested safety protection technology</li> <li>• Installation of the charging pole possible with the help of 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>
<b>Operation</b>	<ul style="list-style-type: none"> <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>
<b>Authentication</b>	<ul style="list-style-type: none"> <li>• Authorization of the charging process via RFID, remote or, if necessary, without authentication</li> <li>• Optional authentication via Giro-e</li> </ul>
<b>UI/UX</b>	<ul style="list-style-type: none"> <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>• Near-field lighting</li> <li>• Graphic operating instructions on user interface</li> </ul>