

# Test Report Charge Station connected with OCPP 1.6 to GreenFlux Platform

Manufacturer Name: Kempower

Manufacturer Number

Manufacturer Model: C502P320

Firmware Version : 0.15.32

#	Function	Acceptance Criteria	Result
1	Boot notification	<ul style="list-style-type: none"> <li>Receive a (not empty) BootNotification message, containing chargePointModel and chargePointVendor (required by OCPP 1.6), and chargePointSerialNumber, iccid, chargePointVendor, firmwareVersion and chargePointModel</li> </ul>	Ok
2	Heartbeat (automatic)	<ul style="list-style-type: none"> <li>Receive OCPP command from CS i.e. heartbeat registered</li> <li>When CS is not providing heartbeat, send OCPP command to see heartbeat</li> <li>Provide TCP/IP default heartbeat at least every 1 hour from CS (configurable under Set Configuration).</li> </ul>	ok
3	Change availability	<ul style="list-style-type: none"> <li>After sending ChangeAvailability with type Operative, the status must change to Available.</li> <li>After sending ChangeAvailability with type Inoperative, the status must change to Unavailable.</li> <li>This availability must be reflected by receiving a StatusNotification message (per socket)</li> <li>Receive a (not empty) StatusNotification message per connector (including connector 0), containing: <ul style="list-style-type: none"> <li>i. If not in error: status with Available, Preparing, Charging, SuspendedEV, SuspendedEVSE, Finishing, Reserved, Unavailable or Faulted</li> <li>ii. If in error: error details (errorCode)</li> </ul> </li> </ul>	ok
4	Get configuration (list parameters that can be read)	<ul style="list-style-type: none"> <li>After sending GetConfiguration() the Charge Station must respond with a GetConfiguration message, containing the total number of items, followed by a message with the complete list of items.</li> </ul>	Ok, Configuration (67) Full list
5	Set configuration (set parameters that can be configured)	<ul style="list-style-type: none"> <li>After sending ChangeConfiguration (per item) a message with status Accepted must be received (and not "Not Supported", "Not implemented")</li> </ul>	Ok, heartbeat interval edited
6	Start charge transaction (both)	<ul style="list-style-type: none"> <li>After sending RemoteStartTransaction the transaction must start, and a</li> </ul>	ok

	local notification and remote trigger)	<p>StartTransaction message (including transactionId) must be received, followed by several StatusNotification messages (according to OCPP 1.6)</p> <ul style="list-style-type: none"> <li>Local StartTransaction should start with an Authorize, which – if approved – must be followed by a StartTransaction and several StatusNotification messages (according to OCPP 1.6).</li> <li>If not approved the sequence must stop</li> </ul>	
7	Stop charge transaction (both local notification and remote trigger)	<ul style="list-style-type: none"> <li>After sending RemoteStopTransaction (by using the transactionId) the transaction must stop, via a StopTransaction message, followed by several StatusNotification messages (according to OCPP 1.6)</li> <li>Local StopTransaction starts with receiving a StopTransaction and several StatusNotification messages (according to OCPP 1.6)</li> <li>When the charging cable is disconnected, a StopTransaction message must be received</li> </ul>	ok
8	Receive Meter reading	<ul style="list-style-type: none"> <li>Meter values are received at the start of transaction and stop of transaction</li> <li>Meter values are received, according to meter interval that can be set by user (at least 30 seconds interval when charging)</li> <li>Voltage, current and power reading are received, according to meter interval that can be set by user (at least 30 seconds interval)</li> </ul>	Ok
9	Reset CS (both hard and soft reset)	<ul style="list-style-type: none"> <li>Hard reset (ResetType 0): Charging Station comes online after reset (BootNotification message, StatusNotification message, etc.)</li> <li>Soft reset (ResetType 1): Charging Station comes online after reset (BootNotification message, StatusNotification message, etc.)</li> </ul>	<p>Hard rest (boot notification received) Soft reset (boot notification received)</p> <p>Note: charge point self test after each reboot</p>
10	Any hardware related notifications or error conditions	<ul style="list-style-type: none"> <li>Create an error (e.g. disconnecting communication pin or power pin connection or create 3 phase imbalance supply), notifications to be represented in the StatusNotification messages.</li> <li>Error messages on connector 0 are from the Charging Station itself.</li> </ul>	Ok
11	Charging cable connection status	<ul style="list-style-type: none"> <li>Status to be represented in the StatusNotification messages.</li> <li>When car is connected, the charging station changes from Available to Occupied and to Error (connection is timed out).</li> </ul>	Ok
12	Remote Firmware update	<ul style="list-style-type: none"> <li>Receive firmware file from manufacturer.</li> </ul>	1 <sup>st</sup> test – failed (charge point did not come up online after firmware update) vendor were using a

		<ul style="list-style-type: none"> <li>• After sending UpdateFirmware, FirmwareStatusNotification message with FirmwareStatus "Downloading" must be received, followed by FirmwareStatusNotification message with FirmwareStatus "Installed".</li> <li>• Automatically reboot if connectors are available</li> </ul>	<p>software version which was not supposed to be used for testing)</p> <p>Retest All notifications received Hard reboot – ok</p> <p>Hard reset is needed after each update (manually)</p>
13	Remotely initiate and get diagnostics reports	<ul style="list-style-type: none"> <li>• After sending GetDiagnostics, with specific timeframe and ftp location, the Charging Station must send GetDiagnostics message and upload the diagnostic file to the specified ftp location</li> </ul>	<p>Notifications received file uploaded</p> <p>Note: Kempower has access/visibility Access also given to clients</p>
14	Get past charge transactions	<ul style="list-style-type: none"> <li>• When Charging Station reconnects, after being offline, the cached transactions must be sent to the server automatically</li> </ul>	<p>Ok, two connectors tested</p> <hr/> <p>Start and stop transactions notifications received + meter values</p>
15	Clear cache (if applicable)	<ul style="list-style-type: none"> <li>• After sending the ClearCache, a message with status Accepted must be received</li> </ul>	ok
16	TriggerMessage	<ul style="list-style-type: none"> <li>• After booting the centralsystem will send a TriggerMessage requesting the status of the charger.</li> </ul>	Ok,accepted status notification received as reply