OCPP 1.6 Subset Certificate



Certificate holder:	HUMAX EV
Certificate number:	OCA.0016.0537.CS
Product type:	Charging Station
Product designation:	HEV-Q2050S OCPP Software version: HMI.02.00.06 Hardware feature set as stated below
Certification date:	October 23, 2023

This certificate attests that the above mentioned product successfully completed certification testing in conformance with the reference specification OCPP 1.6 - Edition 2 with OCPP 1.6 Errata sheet (v4.0 Release, 2019-10-23). The optional features of the protocol covered by this certificate can be found in the abstract of this certificate.

Test cases have been performed as described in the test report referred to below. The results and remarks can be found in the complete test report.

Applied tests	Performed by / on	Document evidence
Conformance testing according to the test specification referenced by the test report	Korea Smart Grid Association, October 23, 2023	(KSGA)HUMAXEV_Test Report template_ChargingStation_HEV- Q2050S_231023

The abstract of test report in the Annex is an integral part of this certificate. This certificate is valid from the Certification Date specified above. This certificate is only applicable to the product designation described above and permits the use of the OCPP logo as laid down in the OCA certification logo license agreement on this product only.

This certificate shall neither be tendered nor accepted by any party as a guarantee covering quality of a product which includes OCPP. The Open Charge Alliance, and/or its agents, including, inter-alia, test laboratories, disclaim liability for any damages or losses incurred by the certified company or by any other party resulting from reliance on the results of OCPP certification testing.

For the Open Charge Alliance:

ONOPH CARON Chairman



Abstract of test report

Test Result Summary

Test Report OCPP 1.6 Certification				
Test laboratory: Korea Smart Grid Association				
Location: Seoul, Korea				
Test execution location: HUMAX EV (Seongnam, Korea)				
Test Report Reference: KSGA-OCPP1.6TEST-193-2023				
Vendor name:	HUMAX EV			
Device Under Test: Charging Station				
Communication: JSON				
OCPP Software version: HMI.02.00.06				
Product designation:	HEV-Q2050S			

Test Result Summary for the certified functionalities			
Functionalities	OCPP 1.6 Certification Test Results	Description	
Core	Pass	Basic Charging Station functionality for booting, authorization (incl. cache if available), configuration, transactions, remote control.	
Optional features			
Firmware Management	N/A	Support for (remote) firmware update management and diagnostic log file download.	
Smart Charging	N/A	Support for Smart Charging (all profile types, including stacking), to control charging.	
Reservation	N/A	Support for reservation of a connector of a Charging Station.	
Local Authorization List Managemen	N/A	Features to manage a local list in the charging station containing authorization data for whitelisting users.	
Remote Trigger	N/A	Support for remotely triggering messages that originate from a Charging Station. This can be used for resending messages or for getting the latest information from the Charging Station.	



Performance Measurement Results

Name	PICS value	Measured value	Description
OCPP triggered function timeout:	40s	00:00:36	The response time for when waiting for an OCPP function with its corresponding request message. (Firmware update, Diagnostics and Reboot are excluded from this measurement.)
OCPP response timeout:	20s	00:00:12	The response time for when waiting for an OCPP response message.
Response time RemoteStartTransaction:	10s	00:00:04	The response time for the RemoteStartTransaction message.

Test Configuration

Vendor	HUMAX EV
DUT / SUT	Charging Station
Communication	JSON
Туре	HEV-Q2050S
OCPP Software version	HMI.02.00.06
OCTT version	OCTT 1.6 v1.4.3

Hardware feature set				
Feature Configuration				
Socket(s) / connector(s)	Single			
Fixed cable	<yes></yes>			
Communication technology	Ethernet, Mobile network			
RFID readers	Single			

Non-OCPP Charge Point Configuration

Configuration key	Value
<>	<>

All other relevant limits and non-OCPP settings that are relevant for the test laboratory and for the correct functioning of the CSMS:

Limit / setting	Value
Device supports sending milliseconds in timestamps.	Yes

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OCPP Charging Station Configuration			
Configuration key	Value		
AllowOfflineTxForUnknownId	-		
AuthorizationCacheEnabled	-		
AuthorizeRemoteTxRequests	TRUE		
BlinkRepeat	3		
ClockAlignedDataInterval	20		
ConnectionTimeOut	60		
ConnectorPhaseBotation	0.NotApplicable		
ConnectorPhaseRotationMaxLength	1		
GetConfigurationMaxKeys	20		
HeartbeatInterval	30		
LightIntensity	100		
LocalAuthorizeOffline	FALSE		
LocalPreAuthorize	FALSE		
MaxEnergyOnInvalidId	1000		
MessageTimeout	-		
MeterValuesAlignedData	Energy.Active.Import.Register		
MeterValuesAlignedData MeterValuesAlignedDataMaxLength	n		
MeterValuesSampledData	e Energy.Active.Import.Register		
	Linergy. Active. Import. Register		
MeterValuesSampledDataMaxLength MeterValueSampleInterval	20		
MinimumStatusDuration			
MinimumotatusDuration NumberOfConnectors	0		
	1		
ResetRetries	1		
StopTransactionMaxMeterValues	20		
StopTransactionOnEVSideDisconnect	TRUE		
StopTransactionOnInvalidId	TRUE		
StopTxnAlignedData	-		
	1		
StopTxnSampledData	Energy.Active.Import.Register,Fee		
StopTxnSampledDataMaxLength	1		
SupportedFeatureProfiles	Core		
SupportedFeatureProfilesMaxLength	5		
TransactionMessageAttempts	3		
TransactionMessageRetryInterval	15		
	FALSE		
WebSocketPingInterval	180		
LocalAuthListEnabled	-		
LocalAuthListMaxLength	-		
SendLocalListMaxLength	-		
ReserveConnectorZeroSupported	-		
ChargeProfileMaxStackLevel			
ChargingScheduleAllowedChargingRateUnit			
ChargingScheduleAllowedChargingHateOnit ChargingScheduleMaxPeriods			
ConnectorSwitch3to1PhaseSupported			
MaxChargingProfilesInstalled			
	_		
SupportedFileTransferProtocols	-		

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Statement of Approval

Vendor			Date: 2023.10.23
Name	LEE JUNG HON	ſ	Signature
Company	HUMAX EV		
Department	SW TEAM 1		Jalant
Position	Team Leader		- 2fafano
Location	Seongnam, Korea		

Test laboratory		Date: 2023.10.23
Name	Philip YANG	Signature
Company	Korea Smart Grid Association	14
Department	Quality Certification Center	
Position	Chief Researcher	
Location	Seoul, Korea	,

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