# OCPP 1.6 Subset Certificate



Certificate holder:	HUMAX EV	
Certificate number:	OCA.0016.0326.CS	
Product type:	Charging Station	
Product designation:	HEV-Q1050 OCPP Software version: HMI.01.00.38 Hardware feature set as stated below	
Certification date:	April 13, 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, April 13, 2023	(KSGA)HUMAXEV_Test Report template_HEV-Q1050_230413

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

Authenticity of this certificate can be verified at www.openchargealliance.org



# Abstract of test report

### Test Result Summary

Test Report	OCPP 1.6	Certification		
st laboratory: Korea Smart Grid Association				
Location:	Seoul , Korea			
Test Report Reference:	KSGA-OCPP1.6TEST-065-2023			
Vendor name:	HUMAX EV			
Device Under Test:	Charging Stat	ion		
Communication:	JSON			
OCPP Software version:	HMI.01.00.38			
Test Result Summary	/ for the ce	ertified 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.		

#### Page **1** from **4**



# Performance Measurement Results

Name	PICS value	Measured value	Description
OCPP triggered function timeout:	50s	00:00:46	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:	10s	00:00:01	The response time for when waiting for an OCPP response message.
Response time RemoteStartTransaction:	10s	00:00:00	The response time for the RemoteStartTransaction message.

#### Test Configuration

Vendor	HUMAX EV		
DUT / SUT	Charging Station		
Communication	JSON		
Туре	HEV-Q1050		
OCPP Software version	HMI.01.00.38		
OCTT version	OCTT 1.6 v1.4.3		

Hardware feature set					
Feature Configuration					
Socket(s) / connector(s)	Multiple				
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

Page 2 from 4

Subset Certified

OCPP Charging Station Configuration				
Configuration key	Value			
AllowOfflineTxForUnknownId	-			
AuthorizationCacheEnabled	-			
AuthorizeRemoteTxRequests	TRUE			
BlinkRepeat	3			
ClockAlignedDataInterval	0			
ConnectionTimeOut	60			
ConnectorPhaseRotation	-			
ConnectorPhaseRotationMaxLength	-			
GetConfigurationMaxKeys	10			
HeartbeatInterval	20			
LightIntensity	10			
LocalAuthorizeOffline	TRUE			
LocalPreAuthorize	FALSE			
MaxEnergyOnInvalidId	1000			
MessageTimeout	-			
MeterValuesAlignedData	Energy.Active.Import.Register			
MeterValuesAlignedDataMaxLength	0			
MeterValuesSampledData	Power.Active.Import			
MeterValuesSampledDataMaxLength	5			
MeterValueSampleInterval	30			
MinimumStatusDuration	0			
NumberOfConnectors	2			
ResetBetries	0			
StopTransactionMaxMeterValues	20			
StopTransactionInfameter Values	TRUE			
StopTransactionOnInvalidId	TRUE			
StopTxnAlignedData				
StopTxnAlignedDataMaxLength	- 1			
StopTxnSampledData	-			
StopTxnSampledDataMaxLength	- 1			
SupportedFeatureProfiles	Core			
SupportedFeatureProfilesMaxLength	5			
	3			
	FALSE			
WebSocketPingInterval	60			
LocalAuthListEnabled	-			
LocalAuthListMaxLength	-			
SendLocalListMaxLength	-			
ReserveConnectorZeroSupported	-			
ChargeProfileMaxStackLevel	-			
ChargingScheduleAllowedChargingRateUnit	-			
ChargingScheduleMaxPeriods	-			
ConnectorSwitch3to1PhaseSupported	-			
MaxChargingProfilesInstalled	-			
SupportedFileTransferProtocols	-			

#### **OCPP Charging Station Configuration**

Page **3** from **4** 



# Statement of Approval

Vendor		Date: 2023.04.13	
Name	JO IL HO	Sig	nature
Company	HUMAX EV		10
Department	SW Team1	202	
Position	Team leader		10
Location	Gyungi, Korea		

Test laboratory		Date: 2023.04.13	
Name Philip YANG		Signature	
Company Korea Smart Grid Association			
Department Quality Certification Center		7	
Position	Chief Researcher		
Location	Seoul, Korea		

Page **4** from **4**