# OCPP 1.6 Subset Certificate



Certificate holder: EL-Electric

Certificate number: OCA.0016.0591.CS

Product type: Charging Station

Product designation: DC50kW/WEV-D50PM-C1A

OCPP Software version: 1.1.1.2

Hardware feature set as stated below

Certification date: December 7, 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, December 7, 2023	(KSGA)EL-ELECTRIC_Test Report_WEV-D50PM-C1A_v1.5

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 laboratory:	Korea Smart Grid Association				
Location:	Seoul, Korea				
Test execution location:	EL-Electric (Namyangju, Korea)				
Test Report Reference:	KSGA-OCPP1.	6TEST-228-2023			
Vendor name:	EL-Electric				
Device Under Test:	Charging Stati	on			
Communication:	JSON				
OCPP Software version:	1.1.1.2				
Product designation:	DC50kW/WEV	-D50PM-C1A			
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•	/ for the ce	ertified functionalities			
Functionalities	OCPP 1.6	Description			
	Certification				
	Test Results				
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.			
		3 3			
Local Authorization List Management	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.			

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or for getting the latest information from

the Charging Station.



#### Performance Measurement Results

Name	PICS value	Measured value	Description
OCPP triggered function timeout:	60s	0:00:13	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:	60s	00:00:07	The response time for when waiting for an OCPP response message.
Response time RemoteStartTransaction:	60s	00:00:00	The response time for the RemoteStartTransaction message.

## Test Configuration

Vendor	EL-Electric
DUT / SUT	Charging Station
Communication	JSON
Туре	DC50kW/WEV-D50PM-C1A
OCPP Software version	1.1.1.2
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

Device supports sending milliseconds in timestamps.

Yes



OCPP Charging Station	Configuration
Configuration key	Value
AllowOfflineTxForUnknownId	TRUE
AuthorizationCacheEnabled	TRUE
AuthorizeRemoteTxRequests	TRUE
BlinkRepeat	0
ClockAlignedDataInterval	10
ConnectionTimeOut	60
ConnectorPhaseRotation	Unknown
ConnectorPhaseRotationMaxLength	0
GetConfigurationMaxKeys	0
HeartbeatInterval	60
LightIntensity	0
LocalAuthorizeOffline	TRUE
LocalPreAuthorize	FALSE
MaxEnergyOnInvalidId	0
MessageTimeout	-
MeterValuesAlignedData	-
MeterValuesAlignedDataMaxLength	50
Meter Values Sampled Data	Energy.Active.Import.Register
Meter Values Sampled Data Max Length	50
MeterValueSampleInterval	10
MinimumStatusDuration	0
NumberOfConnectors	1
ResetRetries	0
StopTransactionMaxMeterValues	50
StopTransactionOnEVSideDisconnect	FALSE
Stop Transaction On Invalid Id	TRUE
StopTxnAlignedData	-
StopTxnAlignedDataMaxLength	50
StopTxnSampledData	-
StopTxnSampledDataMaxLength	50
SupportedFeatureProfiles	Core
SupportedFeatureProfilesMaxLength	5
TransactionMessageAttempts	0
Transaction Message Retry Interval	10
UnlockConnectorOnEVSideDisconnect	FALSE
WebSocketPingInterval	0
Local Auth List Enabled	-
Local Auth List Max Length	-
SendLocalListMaxLength	-
ReserveConnectorZeroSupported	-
ChargeProfileMaxStackLevel	-
Charging Schedule Allowed Charging Rate Unit	-
ChargingScheduleMaxPeriods	-
ConnectorSwitch3to1PhaseSupported	-
MaxChargingProfilesInstalled	-
Supported File Transfer Protocols	-



## Statement of Approval

Vendor		<b>Date</b> : 2023.12.07
Name	Park Jeonggeun	Signature
Company	EL-Electric	_
	President	
	Chief Executive Officer	Ju/~ 1
Location	Namyangju, Korea	

Test laboratory		<b>Date</b> : 2023.12.07
Name	Philip YANG	Signature
Company	Korea Smart Grid Association	4
Department	Quality Certification Center	
Position	Chief Researcher	
Location	Seoul, Korea	,