# OCPP 1.6 Subset Certificate



## JoongAng Control Co., Ltd

Certificate number:OCA.0016.0075.CSProduct type:Charging StationProduct designation:JC-92C1-7-0P(ACCharger)<br/>OCPP Software version: 0.0.1 / Hardware feature set as stated<br/>belowCertification date:March 21, 2022

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, March 21, 2022	KSGA_20220321 Test Report_JoongAng

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

**Certificate holder:** 

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

### Abstract of test report

#### Test Result Summary

Test Report OCPP 1.6 Certification			
Test laboratory:	Korea Smart Grid Association		
Location:	Seoul , Korea		
Test Report Reference: KSGA-OCPP1.6TEST-030-2022			
Vendor name:	JoongAng Control		
Device Under Test: Charging Station			
Communication: JSON			
OCPP Software version:	0.0.1		

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 functionalities				
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 Manageme	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.		

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#### Performance Measurement Results

Performance Measurement Results				
Name	ne PICS value Measured value Description			
OCPP triggered function timeout:	30s	00:00:19	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:	30s	00:00:01	The response time for when waiting for an OCPP response message.	
Response time RemoteStartTransaction:	30s	00:00:01	The response time for the RemoteStartTransaction message.	

#### Test Configuration

Vendor	JoongAng Control
DUT / SUT	Charging Station
Communication	JSON
Туре	JC-92C1-7-0P(ACCharger)
OCPP Software version	0.0.1
OCTT version	OCTT 1.6 v1.4.3

Test Configuration

Hardware feature set				
Feature				
Socket(s) / connector(s)	Single			
Fixed cable <yes></yes>				
Communication technology	Ethernet			
RFID readers Oner per EVSE				

	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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OCDD Character Station	Conformation.
OCPP Charging Station	_
Configuration key	Value
AllowOfflineTxForUnknownId	FALSE
AuthorizationCacheEnabled	FALSE
AuthorizeRemoteTxRequests	FALSE
BlinkRepeat	- 0
ClockAlignedDataInterval ConnectionTimeOut	60
ConnectorPhaseRotation	RST
ConnectorPhaseRotationMaxLength	
GetConfigurationMaxKeys	11
HeartbeatInterval	60
LightIntensity	
LocalAuthorizeOffline	TRUE
LocalPreAuthorize	TRUE
MaxEnergyOnInvalidId	TRUE
MessageTimeout	
	Current.Import, Current.Offered,
	Energy.Active.Import.Register,
	Energy.Active.Import.Interval,
Motor/aluerAlianedData	Power.Active.Import, Power.Offered,
MeterValuesAlignedData MeterValuesAlignedDataMaxLength	SoC, Voltage 8
MeterValuesAlignedDataMaxLength MeterValuesAlignedDataMaxLength	8
meter valdes Alighed Data MaxLength	Current.Import, Current.Offered,
	Energy.Active.Import.Register,
	Energy.Active.Import.Interval,
	Power.Active.Import, Power.Offered,
MeterValuesSampledData	SoC, Voltage
MeterValuesSampledDataMaxLength	8
MeterValueSampleInterval	300
MinimumStatusDuration	
NumberOfConnectors	1
ResetRetries	1
StopTransactionMaxMeterValues	
StopTransactionOnEVSideDisconnect	TRUE
StopTransactionOnInvalidId	TRUE
	Current langest Current Offered
	Current.Import, Current.Offered, Energy.Active.Import.Register,
	Energy.Active.Import.Interval,
	Power.Active.Import, Power.Offered,
StopTxnAlignedData	SoC, Voltage
StopTxnAlignedDataMaxLength	8
	Current.Import, Current.Offered,
	Energy.Active.Import.Register,
	Energy.Active.Import.Interval,
	Power.Active.Import, Power.Offered,
StopTxnSampledData	SoC, Voltage
StopTxnSampledDataMaxLength	8
	Core, FirmwareManagement,
	LocalAuthListManagement,
	Reservation, SmartCharging,
SupportedFeatureProfiles	RemoteTrigger
SupportedFeatureProfilesMaxLength TransactionMessageAttempts	6
	5
	20
TransactionMessageRetryInterval	30 TRUE
TransactionMessageRetryInterval UnlockConnectorOnEVSideDisconnect	TRUE
TransactionMessageRetryInterval UnlockConnectorOnEVSideDisconnect WebSocketPingInterval	TRUE 0
TransactionMessageRetryInterval UnlockConnectorOnEVSideDisconnect WebSocketPingInterval LocalAuthListEnabled	TRUE 0 FALSE
Transaction Message Retry Interval Unlock Connector On EVS ide Disconnect Web Socket Ping Interval Local Auth List Enabled Local Auth List MaxLength	TRUE 0 FALSE 100000
TransactionMessageRetryInterval UnlockConnectorOnEVSideDisconnect WebSocketPingInterval LocalAuthListEnabled LocalAuthListMaxLength SendLocalListMaxLength	TRUE 0 FALSE
TransactionMessageRetryInterval UnlockConnectorOnEVSideDisconnect WebSocketPingInterval LocalAuthListEnabled LocalAuthListMaxLength SendLocalListMaxLength ReserveConnectorZeroSupported	TRUE 0 FALSE 100000 100
TransactionMessageRetryInterval UnlockConnectorOnEVSideDisconnect WebSocketPingInterval LocalAuthListEnabled LocalLuthListMaxLength SendLocalListMaxLength ReserveConnectorZeroSupported ChargeProfileMaxStackLevel	TRUE 0 FALSE 100000 100 5
TransactionMessageRetryInterval UnlockConnectorOnEVSideDisconnect WebSocketPingInterval LocalAuthListEnabled LocalAuthListMaxLength SendLocalListMaxLength ReserveConnectorZeroSupported ChargeProfileMaxStackLevel ChargingScheduleAllowedChargingRateUnit	TRUE 0   FALSE 100000   100 5   Power 5
TransactionMessageRetryInterval UnlockConnectorOnEVSideDisconnect WebSocketPingInterval LocalAuthListEnabled LocalLuthListMaxLength SendLocalListMaxLength ReserveConnectorZeroSupported ChargeProfileMaxStackLevel ChargingScheduleAllowedChargingRateUnit ChargingScheduleMaxPeriods	TRUE 0   FALSE 100000   100 5   Power 24
TransactionMessageRetryInterval UnlockConnectorOnEVSideDisconnect WebSocketPingInterval LocalAuthListEnabled LocalListMaxLength SendLocalListMaxLength ReserveConnectorZeroSupported ChargeProfileMaxStackLevel ChargingScheduleAllowedChargingRateUnit ChargingScheduleMaxPeriods ConnectorSwitch3to1PhaseSupported	TRUE 0 FALSE 100000 100 5 Power 24 -
TransactionMessageRetryInterval UnlockConnectorOnEVSideDisconnect WebSocketPingInterval LocalAuthListEnabled LocalLuthListMaxLength SendLocalListMaxLength ReserveConnectorZeroSupported ChargeProfileMaxStackLevel ChargingScheduleAllowedChargingRateUnit ChargingScheduleMaxPeriods	TRUE 0   FALSE 100000   100 5   Power 24

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#### Statement of Approval

Vendor			Date: 2022.03.21
Name	Seong-il KIM		Signature
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Department	Software convergence team		letro.
Position	Researcher		Ju Co
Location	Korea		

Test laboratory		Date: 2022.03.21
Name	Philip YANG	Signature
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