OCPP 1.6 Full Certificate



Certificate holder: COSTEL Co., Ltd

Certificate number: OCA.0016.0778.CS

Product type: Charging Station

Product designation: CEC-1010BC

OCPP Software version: V1.0.2

Hardware feature set as stated below

Certification date: May 30, 2024

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 are also covered by this certification.

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, May 30, 2024	(KSGA)Costel_Test Report_CEC- 1010BC_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 Report OCPP 1.6 Certification			
Test laboratory:	Korea Smart Grid Association		
Location:	Seoul, Korea		
Test execution location: COSTEL Co.,Ltd (Seongnam, Korea)			
Test Report Reference: KSGA-OCPP1.6TEST-076-2024			
Vendor name:	COSTEL Co.,Ltd		
Device Under Test:	Charging Station		
Communication:	JSON		
OCPP Software version:	V1.0.2		
Product designation:	CEC-1010BC		

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	Pass	Support for (remote) firmware update management and diagnostic log file download.	
Smart Charging	Pass	Support for Smart Charging (all profile types, including stacking), to control charging.	
Reservation	Pass	Support for reservation of a connector of a Charging Station.	
Local Authorization List Management	Pass	Features to manage a local list in the charging station containing authorization data for whitelisting users.	
Remote Trigger	Pass	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

Name	PICS value	Measured value	Description
OCPP triggered function timeout:	60s	00:00:22	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	00:00:06	The response time for when waiting for an OCPP response message.
Response time RemoteStartTransaction:	30s	00:00:04	The response time for the RemoteStartTransaction message.

Test Configuration

Vendor	COSTEL Co.,Ltd
DUT / SUT	Charging Station
Communication	JSON
Туре	CEC-1010BC
OCPP Software version	V1.0.2
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	Value	
Device supports sending milliseconds in timestamps.	Yes	



OCPP Charging Station	Configuration
Configuration key	Value
AllowOfflineTxForUnknownId	FALSE
AuthorizationCacheEnabled	-
AuthorizeRemoteTxRequests	FALSE
BlinkRepeat	-
ClockAlignedDataInterval	900
ConnectionTimeOut	90
ConnectorPhaseRotation	NotApplicable
ConnectorPhaseRotationMaxLength	-
GetConfigurationMaxKeys	5
HeartbeatInterval	20
LightIntensity	-
LocalAuthorizeOffline	FALSE
LocalPreAuthorize	FALSE
	FALSE
MaxEnergyOnInvalidId	-
MessageTimeout	-
MeterValuesAlignedData	Energy. Active. Import. Register
MeterValuesAlignedDataMaxLength	6
	Energy, Active. Import, Register, So
MeterValuesSampledData	C, Voltage, Current. Import, Power. A
	ctive.Import,Power.Offered
MeterValuesSampledDataMaxLength	6
MeterValueSampleInterval	5
MinimumStatusDuration	0
NumberOfConnectors	1
ResetRetries	1
StopTransactionMaxMeterValues	1
StopTransactionOnEVSideDisconnect	TRUE
StopTransactionOnInvalidId	TRUE
StopTxnAlignedData	Energy.Active.Import.Register
StopTxnAlignedDataMaxLength	1
StopTxnSampledData	Energy.Active.Import.Register,So
StopTxnSampledDataMaxLength	1
	Core, Firmware Management, Local
SupportedFeatureProfiles	AuthListManagement,Reservation
	,SmartCharging,RemoteTrigger
SupportedFeatureProfilesMaxLength	-
TransactionMessageAttempts	10
TransactionMessageRetryInterval	60
UnlockConnectorOnEVSideDisconnect	FALSE
WebSocketPingInterval	0
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LocalAuthListEnabled	FALSE
LocalAuthListMaxLength	10
SendLocalListMaxLength	10
ReserveConnectorZeroSupported	FALSE
ChargeProfileMaxStackLevel	3
ChargingScheduleAllowedChargingRateUnit	- Ampère
ChargingScheduleMaxPeriods	5
ConnectorSwitch3to1PhaseSupported	-
MaxChargingProfilesInstalled	3
SupportedFileTransferProtocols	ftp

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Statement of Approval

Vendor		Date: 2024.05.30
Name	Sae rom, Kim	Signature
Company	COSTEL Co.,Ltd	/
Department	R&D Center	
Position	Engineer	/
Location	Seongnam, Korea	

Test laboratory			Date: 2024.05.30
Name	Philip YANG		Signature
Company	Korea Smart Grid Association		14
Department	Quality Certification Center		9/
Position	Sition Chief Researcher		
Location	Seoul, Korea		