OCPP 1.6
Subset Certificate

Certificate holder: **BiEnergy Co., Ltd**

Certificate number: OCA.0016.0759.CS

Product type: Charging Station

Product designation: CL5436-A11
OCPP Software version: 4078-240508
Hardware feature set as stated below

Certification date: June 14, 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 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 Testing Certification institute,* June 14, 2024	*KTC2024-00145_Test report_v240530_signed*

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 Testing Certification institute**
Location:	Gyeonggi-do Korea
Test execution location:	Gyeonggi-do Korea
Test Report Reference:	KTC2024-00145
Vendor name:	**Bienergy**
Device Under Test:	Charging Station
Communication:	JSON
OCPP Software version:	4078-240508
Product designation:	CL5436-A11

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 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. 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:	30 s	00:00:05	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:	30 s	00:00:01	The response time for when waiting for an OCPP response message.
Response time RemoteStartTransaction:	30 s	00:00:00	The response time for the RemoteStartTransaction message.

Test Configuration

Vendor	Bienergy
DUT / SUT	Charge Point
Communication	JSON
Type	CL5436-A11
OCPP Software version	4078-240508
OCTT version	OCTT 1.6 v1.4.4

Hardware feature set	
Feature	**Configuration**
Socket(s) / connector(s)	single
Fixed cable	Yes
Communication technology	Ethernet
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	TRUE
AuthorizationCacheEnabled	FALSE
AuthorizeRemoteTxRequests	TRUE
BlinkRepeat	60
ClockAlignedDataInterval	20
ConnectionTimeOut	60
ConnectorPhaseRotation	NotApplicable
ConnectorPhaseRotationMaxLength	0
GetConfigurationMaxKeys	20
HeartbeatInterval	30
LightIntensity	50
LocalAuthorizeOffline	TRUE
LocalPreAuthorize	FALSE
MaxEnergyOnInvalidId	0
MessageTimeout	-
MeterValuesAlignedData	Energy.Active.Import.Interval
MeterValuesAlignedDataMaxLength	2
MeterValuesSampledData	Energy.Active.Import.Register,Current.Import,Voltage,Power.Active.Import,SoC
MeterValuesSampledDataMaxLength	8
MeterValueSampleInterval	20
MinimumStatusDuration	0
NumberOfConnectors	1
ResetRetries	3
StopTransactionMaxMeterValues	-
StopTransactionOnEVSideDisconnect	TRUE
StopTransactionOnInvalidId	FALSE
StopTxnAlignedData	
StopTxnAlignedDataMaxLength	1
StopTxnSampledData	
StopTxnSampledDataMaxLength	1
SupportedFeatureProfiles	Core,LocalAuthListManagement,SmartCharging,RemoteTrigger
SupportedFeatureProfilesMaxLength	6
TransactionMessageAttempts	3
TransactionMessageRetryInterval	5
UnlockConnectorOnEVSideDisconnect	FALSE
WebSocketPingInterval	0
LocalAuthListEnabled	TRUE
LocalAuthListMaxLength	1000
SendLocalListMaxLength	10
ReserveConnectorZeroSupported	FALSE
ChargeProfileMaxStackLevel	10
ChargingScheduleAllowedChargingRateUnit	Current,Power
ChargingScheduleMaxPeriods	20
ConnectorSwitch3to1PhaseSupported	FALSE
MaxChargingProfilesInstalled	1
SupportedFileTransferProtocols	-

Statement of Approval

Vendor		Date: 2024-06-14
Name	Kim Joobeom	Signature
Company	Bienergy	
Department	R&D Team	
Position	Principal Researcher	
Location	Seoul, Korea	

Test laboratory		Date: 2024-05-13
Name	Sol Cho	Signature
Company	Korea Testing Certification institute	
Department	EV Charging & Power Transfer Center	
Position	Research engineer	
Location	Gyeonggi-do, Korea	