Certificate Holder: Teison Energy Technology Co.,Ltd.

Certificate Number: OCA.0016.1070.CS

Product Type: Charging Station

Product Designation: Teison DC Pro - TS-EDC180AA/AC43

Firmware Version: 1.43_1.2.1

Certification Date: August 20, 2025

This certificate attests that the above mentioned product successfully completed certification testing in conformance with the reference specification OCPP 1.6 (Edition 2 FINAL, 2017-09-28 including Errata 2025-04). The optional OCPP protocol features that are covered by this certificate can be found in the Abstract of the Test Report that is part 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 this complete test report.

Applied	Performed by / On	Document Evidence
Conformance testing according to the test specification referenced by the test report	Korea Smart Grid Association
May 26, 2025	Teison_PICS 1.6 CS_TEISON DC Pro_v2.0.3_product designation2

The abstract of test report 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 the Test Report

Test Report OCPP 1.6 Certification	

Test laboratory:	Korea Smart Grid Association
Location:	Seoul, Korea
Test Report Reference:	KSGA-OCPP1.6TEST-035-2025
Test Location	KSGA Test Lab

Product Designation:	Teison DC Pro - TS-EDC180AA/AC43
Vendor name:	Teison Energy Technology Co.,Ltd.
Device Under Test:	Charging Station
Firmware Version:	1.43_1.2.1
Config ID:	9FFF1E8A-34141C2A

Test Result Summary for the Certified Functionalities

Certification Profile	Test Result	Description
Core	Pass	Basic Charging Station, functionality for booting, authorization, configuration, transactions, remote control.
Firmware Management	Pass	Support for firmware update management and diagnostic log file download.
Local Authorization List Management	Pass	Features to manage a local list in the charging station containing authorization data for whitelisting users.
Smart Charging	Pass	Support for Smart Charging, to control charging.
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.
Reservation	Pass	Support for reservation of a connector of a Charging Station.

Certification Extension	Test Result	Description
Security extension	Pass	Implementation of the whitepaper: Improved security for OCPP 1.6-J

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

Hardware Feature Set

The Hardware Feature set is the actual set of relevant hardware properties of the product tested, that influence the OCPP messaging behavior. In the table below you can see for each hardware feature relevant for OCPP whether this is applicable for this product.

ID	Feature	Supported / Present
HFS-1	Has a detachable cable	No
HFS-2	Has a fixed cable	Yes
HFS-3	Has AC support	Yes
HFS-4	Has DC support	Yes
HFS-5	Has 1 phase support	No
HFS-6	Has 2 phase support	No
HFS-7	Has 3 phase support	Yes
HFS-8	No. Connectors	3
HFS-9	Communication technology	WiFi, Ethernet, Mobile Network
HFS-10	RFID readers	Single
HFS-11	DC power level	180

Connector	Current	Phases	Type	Cable Type
1	AC	3	cType2	Fixed Cable
2	DC		cCCS1	Fixed Cable
3	DC		GBT - NOT VALIDATED	Fixed Cable

Optional Features

The OCPP specification contains many implementation options that can be selected by a vendor, often in the form of optional message fields or configuration variables, that can be used to support advanced functions. Whereas the certification profiles determine which OCPP functionality is implemented, the features describe how much of a certain functionality in a profile has been implemented. The tables below indicate per certification profiles, for each available optional feature within this profile, whether this has been implemented in this product and tested for conformance or not.

Core

ID	Core Features	Supported / Present
C-01	Support for offline authorization of transactions	Yes
C-02	Support for allowing Offline Authorization for Unknown Ids	No
C-03	Support for maximizing energy for invalid ids	No
C-04	Authorization Cache	Yes
C-05	Support to limit StatusNotifications	No
C-06	Authorization status after cable disconnected on EV side	
C-06.1	Support for maintaining authorization when cable disconnected on EV side	Yes
C-06.2	Support for not maintaining authorization when cable disconnected on EV side	Yes
C-07	Support for local start	Yes
C-08	Support for local stop	Yes
C-10	Unlocking of connector when cable disconnected on EV side	
C-10.1	Support for unlocking connector when cable disconnected on EV side	No
C-10.2	Support for not unlocking when cable disconnected on EV side	Yes

ID	Metervalues	Tested During Certification	Supported According to Vendor
C-09	Supported MeterValue Measurands		
C-09.1	MeterValuesSampled Data	Energy.Active.Import.Register Power.Offered Power.Active.Import Voltage Current.Import SoC	Energy.Active.Import.Register Voltage Power.Offered Power.Active.Import Current.Import SOC

ID	Metervalues	Tested During Certification	Supported According to Vendor
C-09.2	MeterValuesAligned Data	Energy.Active.Import.Register Power.Offered Power.Active.Import Voltage Current.Import SoC	Energy.Active.Import.Register Voltage Power.Offered Power.Active.Import Current.Import SOC

Smart Charging

ID	Certification Profile: Smart Charging	Supported / Present
SC-1	Supported charging rate units	
SC-1.1	A	Yes
SC-1.2	W	Yes

Reservation

ID	Certification Profile: Reservation	Supported / Present
R-1	Support reservations of entire Charging Station	Yes

Firmware Management

ID	Certification Profile: Firmware Management	Supported / Present
F-1	Support for Secure Firmware Updates	Yes

Security

ID	Security Extension	Supported / Present
SEC-1	Security Profile 1: Unsecured Transport with Basic Authentication	Yes
SEC-2	Security Profile 2: TLS with Basic Authentication	Yes
SEC-3	Security Profile 3: TLS with Client Side Certificates	Yes

Security Cipher Suites

ID	Security Extension : Cipher Suites	Supported / Present
SEC-4	Supported Cipher Suites	TLS_ECDHE_ECDSA_WITH_AES_128_GCM_SHA256,TLS_ECDHE_ECDSA_WITH_AES_256_GCM_SHA384,TLS_RSA_WITH_AES_128_GCM_SHA256,TLS_RSA_WITH_AES_256_GCM_SHA384

Additional Questions

The table below lists a number of questions that are needed for determining the complete list of conformance test for this product.

ID	Additional Questions for Lab Testing	Answer
AQ-1	Can the last CentralSystemRootCertificate can be removed?	No
AQ-2	Does the Charging Station have a cable lock, which prevents the EV driver to connect the EV and EVSE before authorization?	No
AQ-3	Can the last ChargePointCertificate be removed?	No
AQ-4	Is your Charging Station able to download firmware while there is an ongoing transaction?	No
AQ-5	Does your Charging Station enforce a selection of EVSE prior to authorization?	No
AQ-6	Does your Charging Station support charging an EV using IEC 61851-1?	No
AQ-7	Reporting of StopTransaction after power loss	
AQ-7.1	Charge Point configured to report StopTransaction before going down.	No
AQ-7.2	Charge Point configured to report StopTransaction after going down and being back online again.	Yes

Other Relevant Settings

The table below lists a number of settings that are needed for configuring the test setup for the conformance test for this product.

ID	Limit / Setting	Value
ORS-1	GetConfigurationMaxKeys	33
ORS-4	Minimum MeterValueSampleInterval supported	2
ORS-5	Maximum MeterValueSampleInterval supported	6000
ORS-6	Minimum HeartbeatInterval supported	2
ORS-7	Maximum HeartbeatInterval supported	6000
ORS-11	WebSocketPingInterval	30

ID	Certification Profile: Local Authorization List Management	Value
ORS-12	LocalAuthListMaxLength	10000
ORS-13	SendLocalListMaxLength	10000

ID	Certification Profile: Smart Charging	Value
ORS-14	ChargingProfileMaxStackLevel	5
ORS-15	ChargingScheduleMaxPeriods	6
ORS-19	MaxChargingProfilesInstalled	3

ID	Firmware Management Settings	Value
ORS-16	Supported file transfer protocols	HTTP FTP

Performance Measurement Result

The tables below shows the list of key performance indicators that are measured during the conformance test. The first table indicates the values that the vendor indicates that are valid maximum values for this product. The second table lists the actual performance measurements during the tests performed in a controlled environment.

Name	Max Value	Unit	Description
OCPP response timeout	120	seconds	The timeout used for exchanging OCPP response messages. Messages to the DUT can be handled within this timeout.
OCPP triggered function timeout	120	seconds	The timeout used for when waiting for an OCPP function with its corresponding request message. Messages to the DUT can be handled within this timeout. This value excludes firmware, diagnostics and rebooting
Transaction authorization time by RemoteStartTransaction	120	seconds	The time between the RemoteStartTransaction.req message and the corresponding StartTransaction.req. Only cases where the RemoteStartTransaction immediately results in an authorization followed by a StartTransaction.req are included.
Transaction authorization end time by RemoteStopTransaction	120	seconds	The time between the RemoteStopTransaction.req message and the corresponding StopTransaction.req. Only cases where the RemoteStopTransaction immediately results in an end of the authorization followed by a StopTransaction.req are included.

Name	Min Value	Max Value	Average Value	Unit
OCPP response timeout	0.27	5.28	0.41	seconds
OCPP triggered function timeout	0.56	2.32	1.09	seconds
Transaction authorization time by RemoteStartTransaction	2.62	2.62	2.62	seconds
Transaction authorization end time by RemoteStopTransaction	4.33	5.04	4.68	seconds

Communication technology used during performance measurement	WiFi

Statement of Approval

Vendor

Name	Feng Gao Ming	Date: 2025-08-20
Company	Teison Energy Technology Co.,Ltd.	Signature:
Department	Management	
Position	Chairman	
Location	Yangzhou, Jiangsu, China	

Test Laboratory

Name	Philip YANG	Date: 2025-08-20
Name reviewer	Joe Lee	Signature:
Company	Korea Smart Grid Association	
Department	Quality Certification Center	
Position	Chief Researcher	
Location	Seoul, Korea	

OCTT Version	Release_2025-04
OCTT Instance ID	7a4beba641b8341e27a88c78d48bf4aa
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