Zero Emission School Bus & Infrastructure

Approved Product List for Zero-Emission School Bus and Infrastructure (ZESBI) Project

Administered by the California Energy Commission

Last Updated: January 2, 2025



This document was prepared as a result of work funded through the California Energy Commission. It does not necessarily represent the views of the Energy Commission, its employees, or the State of California. The Energy Commission, the state of California, its employees, contractors, and subcontractors make no warranty, express or implied, and assume no legal liability for the information in this document; nor does any party represent that the use of this information will not infringe upon privately owned rights. This document is updated bimonthly.

Contents

Acronyms	3
Criterion Definitions	4
Charger Technical Requirements	5
All ZESBI EVSE:	5
Bidirectional DCFC:	6
Level 2 and DCFC Approved Product List	6
Vehicle to Grid Approved Product List	.26

Acronyms

Acronym	Description
AC	Alternating Current
APL	Approved Product List
CCS	Combined Charging System
CEC	California Energy Commission
DC	Direct Current
DCFC	Direct Current Fast Charger
EV	Electric Vehicle
EVSE	Electric Vehicle Supply Equipment
IOU	Investor Owned Utilities
ISO	International Organization for Standardization
kW	Kilowatts
NRTL	Nationally Recognized Testing Laboratory
OCA	Open Charge Alliance
OCPP	Open Charge Point Protocol
SAE	Society of Automotive Engineers
UL	Underwriters Laboratories
V2G	Vehicle to Grid
ZESBI	Zero-Emission School Bus and Infrastructure

Criterion Definitions

Category	Description
ISO-15118 Ready	International Organization for Standardization (ISO) -15118 Ready is an industry standard that outlines digital communication between electric vehicles (EVs) and chargers and is already widely used for direct current charging controls. More information may be found <u>here</u> .
ISO-15118-3	Powerline communication based digital communication.
ISO-15118-20 Ready	ISO-15118-20 Ready includes bidirectional charging and stronger cybersecurity requirements than that of previous iterations of ISO15118.
OCPP 2.0.1 Capable	Charger <u>is capable of operating with the Open Charge Alliance</u> (OCA) Open Charge Point Protocol (OCPP) version 2.0.1., however is not yet integrated into the charger to date.
OCPP 2.0.1 Operational	Charger connects to a charging station management system and is <u>operational</u> with the OCA OCPP, version 2.0.1., however the charger <u>is not OCA OCPP certified</u> to date.
OCPP Certification Full 2.0.1	Network to EVSE connectivity is operated with <u>and is compliant</u> with the OCA OCPP, version 2.0.1.
OCPP Security 2.0.1	Network has completed certification with the OCA for Security Certification OCPP 2.0.1.
Rule 21	A tariff that describes the interconnection, operating and metering requirements for generation facilities to be connected to an investor-owned utility's distribution system and transmission system over which the <u>California Public Utilities Commission</u> has jurisdiction.
SAE J1772	Charger connector is compliant with Society of Automotive Engineers (SAE) J1772.
SAE J3400	Charger connector is compliant with SAE J3400.
SAE J1772 CCS	Charger connector is compliant with SAE 1772 Combined Charging System (CCS).
Underwriters Laboratory	Unit certified by qualified Nationally Recognized Test Laboratory.

Category	Description
Vehicle to Grid (V2G)	A charging technology that allows energy in an EV battery to be pushed back into the electrical grid. V2G is also commonly referred to as bidirectional charging because of the two-way flow of electrical energy.

Charger Technical Requirements

To be eligible for Zero-Emission School Bus and Infrastructure (ZESBI) incentives, an electric vehicle supply equipment (EVSE) must be on this ZESBI Approved Product List (APL) at the time the cost of the EVSE was incurred. See section 7.2 of the <u>California Energy Commission's (CEC's)</u> <u>ZESBI Implementation Manual</u> (IM) for more details.

For electric vehicle (EV) chargers using conductive connectors, only Level 2, direct current fast chargers (DCFC) and bidirectional DCFC are eligible for ZESBI funding. The minimum power level for an eligible Level 2 charger under ZESBI is 19.2 kilowatts (kW).

All ZESBI EVSE:

- 1. Must be safety certified by a Nationally Recognized Testing Laboratory (NRTL) recognized by the U.S. Occupational Safety and Health Administration (OSHA). <u>See OSHA's complete list of NRTLs</u>.
- 2. Must include a standard charging connector or interface:
 - a. At least 50 percent of Level 2 chargers shall include, at a minimum, a Society of Automotive Engineers (SAE) J1772 connector.
 i. The remaining 50 percent may include either SAE J1772 or SAE J3400 connectors.
 - b. At least 50 percent of DCFCs shall include, at a minimum, a SAE J1772/Combined Charging System 1 (CCS1) connector.
 - i. The remaining 50 percent may include either SAE J1772/CCS1 or SAE J3400 connectors.
- 3. Must be networked and support at a minimum:
 - a. Open Charge Point Protocol (OCPP) capable (EVSE installed after April 1, 2025, shall be certified for OCPP 2.0.1 or later).
 - b. Must be ISO 15118 Ready as defined in the CEC's <u>updated ISO 15118 recommendation</u>.
 - i. Powerline communication based digital communication as specified in ISO 15118-3.
 - ii. Secure management and storage of keys and certificates using a hardware security module, SoftHSM, or similar technology.
 - iii. Transport Layer Security version 1.2.
 - iv. Remotely receiving updates to activate or enable ISO 15118 use cases.
 - v. Connecting to a charging station management system (i.e. OCPP).

- vi. Selecting the appropriate communication protocol requested by the EV.
- 4. Must have reasonable pricing and reflect current market rates.
- 5. Must include proper regulatory signs for chargers and parking facilities.

Bidirectional DCFC:

In addition to the above requirements, bidirectional DCFC (if selected):

- 1. Must be safety certified to UL 1741 Supplement B as a prerequisite for interconnection.
 - a. Applicants and Incentive Recipients must refer to the applicable Investor Owned Utility's (IOU) interconnection tariff (Rule 21) for the latest requirements, IOUs set their own requirements, please reach out to your utility for further details about Rule 21.
 - b. This requirement does not apply to solicitations that are funding bidirectional chargers strictly for off-grid backup purposes.
- 2. Must be ISO 15118-20 Ready. An EVSE is considered ISO 15118-20 Ready if capable of the following:
 - i. Powerline communication based digital communication as specified in ISO 15118-3.
 - ii. Secure management and storage of keys and certificates used with ISO 15118-2 and ISO 15118-20.
 - iii. Transport Layer Security version 1.3.
 - iv. Remotely receiving updates to activate or enable ISO 15118-20 use cases.
 - v. Connecting to a charging station management system (i.e. OCPP).
 - vi. Selecting the appropriate communication protocol requested by the EV.

Level 2 and DCFC Approved Product List

The following ZESBI APL has been created using the <u>Electric Power Research Institute (EPRI) Vetted Product List</u> and captures the minimum criteria* listed in the ZESBI Implementation Manual for Level 2 and DCFC. The EVSE/charger selected for the ZESBI Incentive Project must be listed within this APL at the time the cost of the EVSE is incurred. For more information about any of the chargers listed below and/or more details about the information within the "Specification Notes", please reach out to the charger brand/original equipment manufacturer. EVSE original equipment manufacturers may contact ZESBI staff for questions about the EVSE listed in this APL at <u>schoolbusteam@calstrart.org</u>

*All EVSE installed after April 1, 2025, must be certified by the Open Charge Alliance (OCA) for OCPP 2.0.1 or later (compliant to <u>Core</u> (<u>Subset</u>) and <u>Security Profile Certifications</u>).

Brand	Model Number	Model Name	Charger Type	Maximum Power Output (kW)	Connector Type	OCPP 2.0.1	Specification Notes
ABB	A400	A400	DCFC	400	SAE J1772/CCS	Operational + Capable	Dual port. ISO 15118. Network Capable.
Alpitronic	HYC400-1	Hypercharger	DCFC	100	SAE J1772/CCS + J3400	Operational + Capable	1-4 Ports. ISO 15118. Network Capable.
Alpitronic	HYC400-2	Hypercharger	DCFC	200	SAE J1772/CCS + J3400	Operational + Capable	1-4 Ports. ISO 15118. Network Capable.
Alpitronic	HYC400-3	Hypercharger	DCFC	300	SAE J1772/CCS + J3400	Operational + Capable	1-4 Ports. ISO 15118. Network Capable.
Alpitronic	HYC400-4	Hypercharger	DCFC	400	SAE J1772/CCS + J3400	Operational + Capable	1-4 Ports. ISO 15118. Network Capable.
Alpitronic	HYC50	Hypercharger	DCFC	50	SAE J1772/CCS + J3400	Operational + Capable	1-2 Ports. ISO 15118. Network Capable.
Autel	Maxi UW19L002	MaxiCharger AC Pro 80A	Level 2	19.2	SAE J1772	Operational + Capable + Full Certificate + Security Certificate	Single port. ISO 15118. Fully Networked. Energy Star.
Autel	Maxi UW19C002	MaxiCharger AC Pro 80A	Level 2	19.2	SAE J1772	Operational + Capable + Full Certificate + Security Certificate	Single port. ISO 15118. Fully Networked. Energy Star.

Brand	Model Number	Model Name	Charger Type	Maximum Power Output (kW)	Connector Type	OCPP 2.0.1	Specification Notes
Autel	Maxi UW19LJ02	MaxiCharger AC 80A	Level 2	19.2	SAE J1772	Operational + Capable + Full Certificate + Security Certificate	Single port. ISO 15118. Fully Networked. Energy Star.
Autel	Maxi UW19CJ02	MaxiCharger AC 80A	Level 2	19.2	SAE J1772	Operational + Capable + Full Certificate + Security Certificate	Single port. ISO 15118. Fully Networked. Energy Star.
Autel	Maxi UW19LB02	MaxiCharger AC 80A	Level 2	19.2	SAE J1772	Operational + Capable + Full Certificate + Security Certificate	Single port. ISO 15118. Fully Networked. Energy Star.
Autel	DC HiPower	DC HiPower	DCFC	640	SAE J1772/CCS	Operational + Capable	ISO 15118. Fully Networked. The DC HiPower has a power cabinet with dispenser set up. It comes in 320, 480, or 640kW options and can be purchased with 2, 4, 6, or 8 ports depending on the number of dispensers.
BTC Power	EVP-2001-80-#	L2W-80-240-##- ###	Level 2	19.2	SAE J1772	Capable	ISO 15118. Fully Networked. Energy Star. Single port. BTC Power Hardware is network/backend agnostic, but

Brand	Model Number	Model Name	Charger Type	Maximum Power Output (kW)	Connector Type	OCPP 2.0.1	Specification Notes
							also provide our own basic network option if needed
BTC Power	EVP-2002-80-#	L2P-80-240-##- ###	Level 2	19.2	SAE J1772	Capable	ISO 15118. Fully Networked. Energy Star. Dual port. BTC Power Hardware is network/backend agnostic, but also provide our own basic network option if needed
CHAEVI	CV-3FD180P-IUL	SONIC	DCFC	180	SAE J1772/CCS + J3400	Operational + Capable	ISO 15118. Fully Networked. Energy Star. Dual port. Stand-Alone Equipment 120,150,180kW Serial-UL listed. Dynamic Load Balancing Available. NACS Cable Adaptable
CHAEVI	DCV-3FD180-ICN	DUOCONIC	DCFC	180	SAE J1772/CCS + J3400	Operational + Capable	ISO 15118. Fully Networked. Energy Star. Dual port. Stand-Alone Equipment 120,150,180kW Serial-UL listed. Dynamic Load Balancing Available

Brand	Model Number	Model Name	Charger Type	Maximum Power Output (kW)	Connector Type	OCPP 2.0.1	Specification Notes
ChargePoint	CP60##X-80A-L##	6000 Series	Level 2	19.2	SAE J1772	Operational + Capable	ISO 15118. Fully Networked. Energy Star. CP6000 family, NA, AC Station, 1 or 2 x Type 1 Cable, 50A or 80A, 1- Phase, 18' or 23' Cable, 6' or 8' Cable Management Kit, Pedestal or Wall Mount, 8" Touch Display, Contactless Credit Card and RFID Reader, Cellular/Wi-Fi, UL, Power Share Jumper, 1YR Parts Warranty, Optional credit card reader
ChargePoint	CPE250C-625-CCS1- 200A-***	Express 250	DCFC	62.5	SAE J1772/CCS	Capable	ISO 15118. Fully Networked ChargePoint Express 250 Station (62.5 kW) - includes Express 250 Station, 2x Power Modules, 1x CCS1 200A cable, 1x CHAdeMO cable or NACS, North America Modem/SIM, cUL and UL listed, requires CPE250-CMT-IMPERIAL in US, CPE250-CMT-METRIC in Canada. CPE250-CMT- IMPERIAL/METRIC not included. FWHA and FTA compliant models available as well as with integrated EMV Chip Reader terminal.

Brand	Model Number	Model Name	Charger Type	Maximum Power Output (kW)	Connector Type	OCPP 2.0.1	Specification Notes
ChargePoint	CPE280-800-NA	Express 280 DC Fast Charging Station	DCFC	160	SAE J1772/CCS	Capable	ISO 15118. Fully Networked. Energy Star. [Paired Unit] ChargePoint Express 280 Station (80 kW) - includes Express 280 Station, 2x Power Modules, 1 or 2 connectors including CCS1, CHAdeMO, NACS. North America Modem/SIM, cUL and UL listed, FWHA and FTA compliant models available.
ChargePoint	CPE280-800-NA	Express 280 DC Fast Charging Station	DCFC	80	SAE J1772/CCS	Capable	ISO 15118. Fully Networked. Energy Star. [Single Unit] ChargePoint Express 280 Station (80 kW) - includes Express 280 Station, 2x Power Modules, 1 or 2 connectors including CCS1, CHAdeMO, NACS. North America Modem/SIM, cUL and UL listed, FWHA and FTA compliant models available.

Brand	Model Number	Model Name	Charger Type	Maximum Power Output (kW)	Connector Type	OCPP 2.0.1	Specification Notes
ChargePoint	CPE280-800-NA-CHIP	Express 280 DC Fast Charging Station	DCFC	160	SAE J1772/CCS	Capable	ISO 15118. Fully Networked. Energy Star. [Paired Unit, Credit Card Reader sku] ChargePoint Express 280 Station (80 kW) - includes Express 280 Station, 2x Power Modules, 1 or 2 connectors including CCS1, CHAdeMO, NACS. North America Modem/SIM, cUL and UL listed, FWHA and FTA compliant models available.
ChargePoint	CPE280-800-NA-CHIP	Express 280 DC Fast Charging Station	DCFC	80	SAE J1772/CCS	Capable	ISO 15118. Fully Networked Energy Star. [Single Unit, Credit Card Reader sku] ChargePoint Express 280 Station (80 kW) - includes Express 280 Station, 2x Power Modules, 1 or 2 connectors including CCS1, CHAdeMO, NACS. North America Modem/ SIM, cUL and UL listed, FWHA and FTA compliant models available.
ChargePoint	CPE280-800-NA-FHWA	Express 280 DC Fast Charging Station	DCFC	160	SAE J1772/CCS	Capable	ISO 15118. Fully Networked. Energy Star. [Paired Unit, FHWA sku] ChargePoint Express 280 Station (80 kW) - includes Express 280 Station, 2x Power Modules, 1 or 2 connectors including CCS1, CHAdeMO, NACS. North America Modem/SIM, cUL and UL listed, FWHA and FTA compliant models available.

Brand	Model Number	Model Name	Charger Type	Maximum Power Output (kW)	Connector Type	OCPP 2.0.1	Specification Notes
ChargePoint	CPE280-800-NA-FHWA	Express 280 DC Fast Charging Station	DCFC	80	SAE J1772/CCS	Capable	ISO 15118. Fully Networked. Energy Star. [Single Unit, FHWA sku] ChargePoint Express 280 Station (80 kW) - includes Express 280 Station, 2x Power Modules, 1 or 2 connectors including CCS1, CHAdeMO, NACS. North America Modem/SIM, cUL and UL listed, FWHA and FTA compliant models available.
ChargePoint	Express Plus 1000 Power Block: CPPB0001*** PM1.5 43-001200-** EXPP-PL10##*-#*#*#- #*#*#-***	Express Plus	DCFC	500	SAE J1772/CCS	Operational + Capable	ISO 15118. Fully Networked. Express Plus system includes Power Block, Power Modules, and Power Link 1000 series; Used for Fleet or Commercial.
ChargePoint	Express Plus 2000 (EXPP-PL20##)	Express Plus	DCFC	500	SAE J1772/CCS	Operational + Capable	ISO 15118. Fully Networked. Energy Star. Express Plus system includes Power Block, Power Modules, and Power Link 2000 series; Each Power Link Dispenser can include 1 or 2 connctor including CCS, NACS, or CHAdeMO

Brand	Model Number	Model Name	Charger Type	Maximum Power Output (kW)	Connector Type	OCPP 2.0.1	Specification Notes
ChargePoint	Express Plus 2000 (EXPP-PL20##-CHIP)	Express Plus	DCFC	500	SAE J1772/CCS	Operational + Capable	ISO 15118. Fully Networked. Energy Star. [CHIP sku]Express Plus system includes Power Block, Power Modules, and Power Link 2000 series; Each Power Link Dispenser can include 1 or 2 connctor including CCS, NACS, or CHAdeMO
ChargePoint	Express Plus 2000 (EXPP-PL20##-FHWA)	Express Plus	DCFC	500	SAE J1772/CCS	Operational + Capable	ISO 15118. Fully Networked. Energy Star. [FHWA sku] Express Plus system includes Power Block, Power Modules, and Power Link 2000 series; Each Power Link Dispenser can include 1 or 2 connctor including CCS, NACS, or CHAdeMO
Espen	EVC/D030/S###	EVC/D030/S###	DCFC	30	SAE J1772/CCS	Operational + Capable	ISO 15118. Network capable. Energy Star. 1x CCS1 connector 1x CHAdeMO connector
Espen	EVC/D060/S###	EVC/D060/S###	DCFC	60	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star. 1x CCS1 connector 1x CHAdeMO connector
Espen	EVC/D120/S###	EVC/D120/S###	DCFC	120	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star. 1x CCS1 connector 1x CHAdeMO connector

Brand	Model Number	Model Name	Charger Type	Maximum Power Output (kW)	Connector Type	OCPP 2.0.1	Specification Notes
Espen	EVC/D180/S###	EVC/D180/S###	DCFC	180	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. 1x CCS1 connector 1x CHAdeMO connector; OCA Full and Security certificates under software version V1.00
Espen	EVC/D360/S###	EVC/D360/S###	DCFC	360	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star. Power Cabinet. 1x CCS1 connector or 1x CHAdeMO connector. Vetted dispensers: DDWU362T0TE2PN-RW, DDWU362T0TE2N7-RW, DDWU362V00E2N7-RW, DDWU362U0UE2PN-RW, DDWU362U0UE2PN-RW, DDWU362K0TE2PN-RW, DDWU362K0TE2N7-RW, DDWU362K0UE2PN-RW, DDWU362C00E2PN-RW, DDWU362G00E2N7-RW, DDWU362G00E2N7-RW, DDWU362C00E2PN-RW, DDWU362C00E2N7-RW, DDWU362U00E2N7-RW, DDWU362U00E2N7-RW, DDWU362U00E2N7-RW, DDWU362U00E2N7-RW, DDWU362U00E2N7-RW, DDWU362C00E2N7-RW,

Brand	Model Number	Model Name	Charger Type	Maximum Power Output (kW)	Connector Type	OCPP 2.0.1	Specification Notes
							DDWU362V0TE2N7-RW, DDWU362V00E2PN-RW.
EverCharge	EV002-80,E800-1001	EV02	Level 2	19.2	SAE J1772 + J3400	Operational + Capable	ISO 15118. Fully Networked. Energy Star. Single Port, Standalone network capability
EVPassport	C6AM150XX	C6AM150XX	DCFC	150	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star. Standalone DCFC, no HPC needed, runs off its own power
EVPassport	C6AM90XX	C6AM90XX	DCFC	95	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star. Runs on 208 3P power, standalone DCFC
FLO	Ultra	Ultra	DCFC	320	SAE J1772/CCS	Operational + Capable	ISO 15118. Fully Networked. Energy Star. Dual port.
Ford Pro Charging	FPC-AC0080ZC-U##	Ford Pro AC Charging Station, Series 2	Level 2	19.2	SAE J1772	Operational + Capable	ISO 15118. Fully Networked. Energy Star. Single Port NRTL Listed as EX-1193-1
Ford Pro Charging	FPC-AC0019ZC-U##		Level 2	19.2	SAE J1772	Operational + Capable	ISO 15118. Fully Networked. Energy Star. Single Port NRTL listed as LiteOn EX 1193 XXXX certified models

Brand	Model Number	Model Name	Charger Type	Maximum Power Output (kW)	Connector Type	OCPP 2.0.1	Specification Notes
Ford Pro Charging	FPC-DC0060AA-U##		DCFC	60	SAE J1772/CCS	Operational + Capable	ISO 15118. Fully Networked. Energy Star. Single or Dual Port 2x CCS1 connector . NRTL listed as Power Electronics NB060SU20
Ford Pro Charging	FPC-DC0120AA-U##		DCFC	120	SAE J1772/CCS	Operational + Capable	ISO 15118. Fully Networked. Energy Star. 2x CCS1 200A or 300A connector NRTL listed as Power Electronics NB120SU20
Gravity	GR-LH500CX		DCFC	500	SAE J1772/CCS	Operational + Capable	ISO 15118. Fully Networked.
Gravity	GT-AH200XX		DCFC	200	SAE J1772/CCS	Operational + Capable	ISO 15118. Fully Networked.
Gravity	GT-AV200XX		DCFC	200	SAE J1772/CCS	Operational + Capable	ISO 15118. Fully Networked.
Gravity	GT-LAV500EX		DCFC	500	SAE J1772/CCS	Operational + Capable	ISO 15118. Fully Networked.
Gravity	GT-LLH500EX		DCFC	500	SAE J1772/CCS	Operational + Capable	ISO 15118. Fully Networked.
Gravity	GT-LV500CX		DCFC	500	SAE J1772/CCS	Operational + Capable	ISO 15118. Fully Networked.
Integra Energy	IEV/D030/SXXX	IEV/D030/SXXX	DCFC	30	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star. 1x CCS1 connector 1x CHAdeMO connector
Integra Energy	IEV/D060/SXXX	IEV/D060/SXXX	DCFC	60	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star. 1x CCS1 connector 1x CHAdeMO connector

Brand	Model Number	Model Name	Charger Type	Maximum Power Output (kW)	Connector Type	OCPP 2.0.1	Specification Notes
Integra Energy	IEV/D120/SXXX	IEV/D120/SXXX	DCFC	120	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star. 1x CCS1 connector 1x CHAdeMO connector
Integra Energy	IEV/D180/SXXX	IEV/D180/SXXX	DCFC	180	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. 1x CCS1 connector 1x CHAdeMO connector; OCA Full and Security certificates under software version V1.00
loTecha	CCS-ACL2 / CCS-C80A	CCS-C80A- xxyyy	Level 2	19.2	SAE J1772	Operational + Capable	ISO 15118. Network Capable. Energy Star. Single Port. xx - cable length (15 or 25ft) yyy - LTE option
IoTecha	CCS-C80C	CCS-C80C- xxyyy	Level 2	19.2	SAE J1772	Operational + Capable	ISO 15118. Network Capable. Energy Star. Single Port. xx - cable length (15 or 25ft) yyy - LTE option
Jule (eCAMION)	Jule-100	Jule Charger 100	DCFC	100	SAE J1772/CCS + J3400	Operational + Capable	ISO 15118. Network Capable. DCFC that works with ESS w/ voltage range 650-800VDC
Jule (eCAMION)	Jule-200	Jule Charger 200	DCFC	200	SAE J1772/CCS + J3400	Operational + Capable	ISO 15118. Network Capable. DCFC that works with ESS w/ voltage range 650-800VDC

Brand	Model Number	Model Name	Charger Type	Maximum Power Output (kW)	Connector Type	OCPP 2.0.1	Specification Notes
Integra Energy	IEV/D360/SXXX	IEV/D360/SXXX	DCFC	360	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star. Power Cabinet. 1x CCS1 connector or 1x CHAdeMO connector. Vetted dispensers are DDWU362T0TE2PN- RW DDWU362T0TE2N7-RW, DDWU362V00E2N7-RW DDWU362U0UE2PN-RW, DDWU362U0UE2PN-RW, DDWU362K0TE2PN-RW, DDWU362K0TE2PN-RW, DDWU362K0UE2N7-RW, DDWU362K0UE2N7-RW, DDWU362G00E2N7-RW, DDWU362G00E2N7-RW, DDWU362C00E2N7-RW, DDWU362U00E2N7-RW, DDWU362U00E2N7-RW, DDWU362U00E2N7-RW, DDWU362U00E2N7-RW, DDWU362C00E2N7-RW, DDWU362V0UE2N7-RW, DDWU362V0UE2N7-RW, DDWU362V0UE2N7-RW, DDWU362V0UE2N7-RW, DDWU362V0UE2N7-RW, DDWU362V0UE2N7-RW, DDWU362V0UE2N7-RW, DDWU362V0UE2N7-RW, DDWU362V0UE2N7-RW, DDWU362V0UE2N7-RW, DDWU362V0UE2N7-RW, DDWU362V0UE2N7-RW, DDWU362V0CE2N7-RW, DDWU362V0CE2N7-RW, DDWU362V0CE2N7-RW, DDWU362V0CE2N7-RW, DDWU362V0CE2N7-RW, DDWU362V0CE2N7-RW, DDWU362V0CE2N7-RW, DDWU362V0CE2N7-RW, DDWU362V0CE2N7-RW, DDWU362V0CE2N7-RW,

Brand	Model Number	Model Name	Charger Type	Maximum Power Output (kW)	Connector Type	OCPP 2.0.1	Specification Notes
Jule (eCAMION)	Jule-300	Jule Charger 300	DCFC	350	SAE J1772/CCS + J3400	Operational + Capable	ISO 15118. Network Capable. DCFC that works with ESS w/ voltage range 650-800VDC
Lincoln Electric	Velion 150	Velion	DCFC	150	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Single port.
Loop Global	EVS-80A-L2-002	EV-Fleet	Level 2	19.2	SAE J1772	Operational + Capable	ISO 15118. Network Capable. Energy Star. SAE J1772, Standalone network capability
Loop Global	EVS-FLASH-300-D01	Infinity Flash	DCFC	300	SAE J1772/CCS + J3400	Full Certificate	ISO 15118. Fully Networked. Dual port. Power cabinet required: EVS-FLASH- 360-PC01
OpConnect	IC80	IC80	Level 2	19.2	SAE J1772	Operational + Capable	ISO 15118. Network Capable. Energy Star. Single Port NRTL Listed as EX-1193-1
OpConnect	SC80	SC80	Level 2	19.2	SAE J1772	Operational + Capable	ISO 15118. Network Capable. Energy Star. Single Port NRTL Listed as EX-1193-3
SWTCH Energy	EX-1193-3	SWTCH Lite-On Platinum SC3 80A	Level 2	19.2	SAE J1772	Operational + Capable	ISO 15118. Network Capable. Energy Star. Single Port NRTL Listed as EX-1193-3

Brand	Model Number	Model Name	Charger Type	Maximum Power Output (kW)	Connector Type	OCPP 2.0.1	Specification Notes
TECO- Westinghouse	DOWU362	Nexe VersaCharge 120kW	DCFC	360	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star. Power Cabinet. 1x CCS1 connector or 1x CHAdeMO connector. Vetted dispensers are DDWU362T0TE2PN- RW DDWU362T0TE2N7-RW, DDWU362V00E2N7-RW DDWU362U0UE2PN-RW, DDWU362U0UE2N7-RW, DDWU362K0TE2PN-RW, DDWU362K0TE2N7-RW, DDWU362K0UE2PN-RW, DDWU362C00E2PN-RW, DDWU362G00E2N7-RW, DDWU362G00E2N7-RW, DDWU362C00E2N7-RW, DDWU362U00E2N7-RW, DDWU362U00E2N7-RW, DDWU362U00E2N7-RW, DDWU362U00E2N7-RW, DDWU362U00E2N7-RW, DDWU362C00E2N7-RW, DDWU362V0UE2N7-RW,

Brand	Model Number	Model Name	Charger Type	Maximum Power Output (kW)	Connector Type	OCPP 2.0.1	Specification Notes
TECO- Westinghouse	DSWU122	Nexe VersaCharge 180kW	DCFC	120	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star. 1x CCS1 connector 1x CHAdeMO connector
TECO- Westinghouse	DSWU182	Nexe VersaCharge 60kW	DCFC	180	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. 1x CCS1 connector 1x CHAdeMO connector
TECO- Westinghouse	DSWU601	Nexe VersaCharge 90kW	DCFC	60	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star. 1x CCS1 connector 1x CHAdeMO connector
TECO- Westinghouse	DSWU901		DCFC	90	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star. 1x CCS1 connector 1x CHAdeMO connector
TECO- Westinghouse	DWWU301/ DW30		DCFC	30	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star. 1x CCS1 connector 1x CHAdeMO connector
Tellus Power	TP-EVPD-160kW		DCFC	160	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. 1x CCS1 connector 1x CHAdeMO connector; OCA Full and Security certificates under software version 230202.2346
Tellus Power	TP-EVPD-180kW		DCFC	180	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. 1x CCS1 connector 1x CHAdeMO connector
Tellus Power	TP-EVPD-300kW		DCFC	300	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Dual Port, either 2x CCS or 1x CCS + 1x CHAdeMO

Brand	Model Number	Model Name	Charger Type	Maximum Power Output (kW)	Connector Type	OCPP 2.0.1	Specification Notes
Tellus Power	TP-EVPD-360kW		DCFC	360	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Dual Port, either 2x CCS or 1x CCS + 1x CHAdeMO
TurnOnGreen	FSP1200/CPEVDC- 120KW-#	FSP1200	DCFC	120	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Single Port, CCS connector
TurnOnGreen	FSP300/CPEVDC- 30KW-#	FSP300	DCFC	30	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Single Port, CCS connector
TurnOnGreen	FSP600/CPEVDC- 60KW-#	FSP600	DCFC	60	J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Single Port, CCS connector
XCharge	C6AM150XX	C6AM150XX	DCFC	150	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star. Standalone DCFC, no HPC needed, runs off its own power
XCharge	C6AM90XX	C6AM90XX	DCFC	95	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star. Runs on 208 3P power, standalone DCFC
Zerova	DDWU362G00####_##		DCFC	360	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star.
Zerova	DDWU362K00####_##		DCFC	360	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star.
Zerova	DDWU362K0T####_##		DCFC	360	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star.
Zerova	DDWU362K0U####_##		DCFC	360	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star.
Zerova	DDWU362T0T####_##		DCFC	360	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star.
Zerova	DDWU362U00####_##		DCFC	360	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star.
Zerova	DDWU362U0U####_##		DCFC	360	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star.

Brand	Model Number	Model Name	Charger Type	Maximum Power Output (kW)	Connector Type	OCPP 2.0.1	Specification Notes
Zerova	DOWU362		DCFC	360	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star. Power Cabinet. 1x CCS1 connector or 1x CHAdeMO connector. Vetted dispensers are DDWU362T0TE2PN- RW DDWU362T0TE2N7-RW, DDWU362V00E2N7-RW DDWU362U0UE2PN-RW, DDWU362U0UE2PN-RW, DDWU362K0TE2N7-RW, DDWU362K0TE2N7-RW, DDWU362K0UE2PN-RW, DDWU362C00E2PN-RW, DDWU362G00E2N7-RW, DDWU362G00E2N7-RW, DDWU362C00E2N7-RW, DDWU362U00E2N7-RW, DDWU362U00E2N7-RW, DDWU362U00E2N7-RW, DDWU362U00E2N7-RW, DDWU362U00E2N7-RW, DDWU362C00E2N7-RW, DDWU362V0UE2N7-RW,

Brand	Model Number	Model Name	Charger Type	Maximum Power Output (kW)	Connector Type	ОСРР 2.0.1	Specification Notes
Zerova	DDWU362V00####_##		DCFC	360	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star.
Zerova	DDWU362V0K####_##		DCFC	360	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star.
Zerova	DDWU362V0T####_##		DCFC	360	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star.
Zerova	DDWU362V0U####_##		DCFC	360	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star.
Zerova	DDWU362V0V####_##		DCFC	360	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star.
Zerova	DSWU122	ICS DS120	DCFC	120	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star. 1x CCS1 connector 1x CHAdeMO connector
Zerova	DSWU182	ICS DS180	DCFC	180	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. 1x CCS1 connector 1x CHAdeMO connector; OCA Full and Security certificates under software version V1.00
Zerova	DSWU601	ICS DS60	DCFC	60	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star. 1x CCS1 connector 1x CHAdeMO connector

Brand	Model Number	Model Name	Charger Type	Maximum Power Output (kW)	Connector Type	OCPP 2.0.1	Specification Notes
Zerova	DSWU901		DCFC	90	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star. 1x CCS1 connector 1x CHAdeMO connector
Zerova	DWWU301/ DW30	ICS DW30	DCFC	30	SAE J1772/CCS	Operational + Capable	ISO 15118. Network Capable. Energy Star. 1x CCS1 connector 1x CHAdeMO connector

Vehicle to Grid Approved Product List

The following ZESBI APL has been created using the <u>EPRI Vetted Product List</u> and the CEC's <u>Vehicle-to-Grid (V2G) Equipment List</u>, and captures the minimum criteria listed in the <u>CEC's ZESBI IM</u>. The EVSE selected for the ZESBI Incentive Project must be listed within this APL at the time the cost of the EVSE is incurred. For more information about any of the chargers listed below and/or more details about the information within the "Specification Notes", please reach out to the charger brand/original equipment manufacturer.

EVSE original equipment manufacturers may contact ZESBI staff for questions about the EVSE listed in this APL at schoolbusteam@calstrart.org.

*If a bidirectional DCFC is selected, the Incentive Recipient is not required to participate in utility exporting events such as Emergency Load Reduction Programs (ELRP), ELRP may be utilized at the Incentive Recipient's discretion. Please see the Section above "Bidirectional." for more information.

Brand	Model Number	Model Name	Туре	Max Power Output (kW)	Connector Type	OCPP 2.0.1	Specification Notes
Tellus Power Green	TP-V2G-20-480		DCFC V2G	20	SAE CCS	Operational + Capable	UL 1741-SA certified. Bidirectional charger
Tellus Power Green	TP-V2G-30-480		DCFC V2G	30	SAE CCS	Operational + Capable	UL 1741-SA certified. Bidirectional charger
Tellus Power Green	TP-V2G-40-480		DCFC V2G	40	SAE CCS	Operational + Capable	UL 1741-SA certified. Bidirectional charger