

EVs2Scale 2030



EPRI's Vetted Product List for EVSE

Electrify the South Collaborative

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www.epri.com/VPL



440+ PRODUCTS
70+ VENDORS

ELECTRICAL

- NRTL Certificates
- EnergyStar
- CTEP
- Connector Types

PHYSICAL

- NEMA 3R Temperature Ratings
- ADA Compliance

EVSE NETWORK CAPABILITY

- *Hardware-focused*
- OCPP 1.6 / 2.0.1
- OpenADR 2.0b

NETWORK

- *Software-focused*
- OCPP 1.6 / 2.0.1
- Support for Demand Response

STATE REQUIREMENTS

- California State
- Washington State
- State Appliance Standards Database (SASD)

TITLE 23 (NEVI)

- Hardware-side requirements
- Buy America

CUSTOM

- Organization Data Sharing Agreements
- Current Limits for Residential EVSE

EVSE Vendors

- Applying for dozens of individual lists
- Paying many individual application fees
- Limited chances to have product updates reflected

Organizations

- High maintenance costs to stand up and update approved product lists
- Little industry convergence towards common set of standards



ORGANIZATIONS

- *Work with EPRI to develop criteria list*



VETTED PRODUCT LIST FILE



PRODUCT VENDORS

- *Submit application and product information*
- *2-3 week vetting process*



WEB PORTAL

- *Updated roughly monthly*



Georgia Power Approved Product List
Updated December 6, 2023

These EVSE meet the program requirements established by Georgia Power. On-road equipment must be networked.

On-Road Equipment:

Brand	Model	Type	Max Power (kW)	Notes
ABB	6AGCD81291	AC	19.2	
ABB	6AGCD82553	AC	9.6	
ABB	6AGC105902	AC	9.6	
ABB	6AGC105903	AC	19.2	
ABB	6AGC105904	AC	19.2	
ABB	6AGC105905	AC	9.6	
ABB	HVC 150C	DC	150	Modular System, 1x CCS1 or CCS2 connector per dispenser
Autel	UF###101	AC	19.2	Single Port or Dual Port
Autel	AC W12-L-4G	AC	12	Single Port
ABB	Terra 24 DC Wallbox	DC	24	1x CCS1 connector 1x CHAdeMO connector
ABB	Terra 54	DC	50	1x CCS1 connector 1x CHAdeMO connector
ABB	Terra 54 HV	DC	50	1x CCS1 or CCS2 connector
Autel	AC W12-L-4G-40	AC	8.3	Single Port. This is the same model as the W12-L-4G. The charger can be
ABB	Terra HP 175	DC	175	Modular system using liquid-cooled cables, 1x CCS1 connector and 1x CHAdeMO connector per dispenser
ABB	Terra HP 350	DC	350	Modular system using liquid-cooled cables, 1x CCS1 connector and 1x CHAdeMO connector per dispenser
ATG Electronic	ATG-C01-40A	AC	9.6	Single port
ATG Electronic	ATG-C01-48A	AC	11.5	Single port
Autel	UF###1-40	AC	8.3	Dual Port. This is the same model as the UF****01. The charger can be
Autel	DC Compact - UWD40A2501	DC	40	Dual Port.
Autel	UF060A3001	DC	60	1x CCS1 connector 1x CHAdeMO connector
Autel	UF080A3001	DC	80	1x CCS1 connector 1x CHAdeMO connector
Autel	UF100A3001	DC	100	1x CCS1 connector 1x CHAdeMO connector
Autel	UF120A3001	DC	120	1x CCS1 connector 1x CHAdeMO connector
Autel	UF140A4001	DC	140	1x CCS1 connector 1x CHAdeMO connector
Autel	UF160A4001	DC	160	1x CCS1 connector 1x CHAdeMO connector
Autel	UF180A4001	DC	180	1x CCS1 connector 1x CHAdeMO connector
Autel	UF200A4001	DC	200	1x CCS1 connector 1x CHAdeMO connector
Autel	UF220A4001	DC	220	1x CCS1 connector 1x CHAdeMO connector
Autel	UF240A4001	DC	240	1x CCS1 connector 1x CHAdeMO connector
Blink	TP5-120-480-2-300	DC	120	1x CCS1 connector 1x CHAdeMO connector
Blink	TP5-180-480-2-300	DC	180	1x CCS1 connector 1x CHAdeMO connector

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ABB	6AGCD82553	AC	9.6	
ABB	6AGC105902	AC	9.6	
ABB	6AGC105903	AC	19.2	
ABB	6AGC105904	AC	19.2	
ABB	6AGC105905	AC	9.6	
ABB	HVC 150C	DC	150	Modular System, 1x CCS1 or CCS2 connector per dispenser
Autel	UF###101	AC	19.2	Single Port or Dual Port
Autel	AC W12-L-4G	AC	12	Single Port
ABB	Terra 24 DC Wallbox	DC	24	1x CCS1 connector 1x CHAdeMO connector
ABB	Terra 54	DC	50	1x CCS1 connector 1x CHAdeMO connector
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ABB	Terra HP 350	DC	350	Modular system using liquid-cooled cables, 1x CCS1 connector and 1x CHAdeMO connector per dispenser
ATG Electronic	ATG-C01-40A	AC	9.6	Single port
ATG Electronic	ATG-C01-48A	AC	11.5	Single port
Autel	UF###1-40	AC	8.3	Dual Port. This is the same model as the UF****01. The charger can be
Autel	DC Compact - UWD40A2501	DC	40	Dual Port.
Autel	UF060A3001	DC	60	1x CCS1 connector 1x CHAdeMO connector
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Autel	UF100A3001	DC	100	1x CCS1 connector 1x CHAdeMO connector
Autel	UF120A3001	DC	120	1x CCS1 connector 1x CHAdeMO connector
Autel	UF140A4001	DC	140	1x CCS1 connector 1x CHAdeMO connector
Autel	UF160A4001	DC	160	1x CCS1 connector 1x CHAdeMO connector
Autel	UF180A4001	DC	180	1x CCS1 connector 1x CHAdeMO connector
Autel	UF200A4001	DC	200	1x CCS1 connector 1x CHAdeMO connector
Autel	UF220A4001	DC	220	1x CCS1 connector 1x CHAdeMO connector
Autel	UF240A4001	DC	240	1x CCS1 connector 1x CHAdeMO connector
Blink	TP5-120-480-2-300	DC	120	1x CCS1 connector 1x CHAdeMO connector
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CRITERIA DEFINITIONS AND SOURCES

Criterion Definitions
Updated December 6, 2023

This sheet defines each criteria evaluated in the Vetted Product List.

Each section has its own numbered criteria and is grouped with similar technical criterion. Color schemes match those shown in the VPL. Some items have a different qualification criterion for AC vs. DC charging. A suffix of (AC) or (DC) is used to identify these differences.

Category	#	Qualification	Description	Vetting Method/Notes	Applicable Categories	CRITERIA LISTS:					
						Southern California Edison (SCE) Charge Ready Light Duty:	Southern California Edison (SCE) Charge Ready Transport:	Georgia Power (GPC)	National Electric Vehicle Infrastructure (NEVI) - AC Charging:	NEVI - DC Charging at Alternative Fuel Corridor (AFC) Sites:	NEVI - DC Charging at Non-AFC Sites:
EVSE Electrical	1-1(AC)	Safety requirements - Listing	Unit listed by qualified Nationally Recognized Test Lab (NRTL) to UL 2594; will include other UL standards as prescribed by the NRTL; to support criteria 1-3, certification to UL 2231-1 and UL 2231-2 is required; other standards likely to be referenced: UL 1998, UL 2251	Vendor Documentation. Vendor to provide name of NRTL used and a copy of certificate of Compliance. Proprietary information should not be included in provided materials. The information should include a list of the UL standards used to vet the product and models covered by the listing. For batch listed products, information must include serial number range or other product marking data that indicates equipment that falls under the listing. Field listing of equipment is not recognized in this process since it is pre-quality equipment.	Non-Networked EVSE Network Capable EVSE Fully Networked EVSE AC ONLY	✓	✓	✓	✓		
	1-1(DC)	Safety requirements - Listing	Unit must be listed by qualified Nationally Recognized Test Lab (NRTL) to UL 2202; will include other UL standards as prescribed by the NRTL; to support criteria 1-3, certification to UL 2231-1 and UL 2231-2 is required; other standards likely to be referenced: UL 1998, UL 2251	Vendor Documentation. Vendor to provide name of NRTL used and a copy of certificate of Compliance. Proprietary information should not be included in provided materials. The information should include a list of the UL standards used to vet the product and models covered by the listing. For batch listed products, information must include serial number range or other product marking data that indicates equipment that falls under the listing. Field listing of equipment is not recognized in this process since it is pre-quality equipment.	Non-Networked EVSE Network Capable EVSE Fully Networked EVSE DC ONLY		✓	✓		✓	✓
	1-1(WR)	Safety requirements - Listing	Unit must be listed by qualified Nationally Recognized Test Lab (NRTL) to UL 2750; will include other UL standards as prescribed by the NRTL; to support criteria 1-3, certification to UL 2231-1 and UL 2231-2 is required; other standards likely to be referenced: UL 1998	Vendor Documentation. Vendor to provide name of NRTL used and a copy of certificate of Compliance. Proprietary information should not be included in provided materials. The information should include a list of the UL standards used to vet the product and models covered by the listing. For batch listed products, information must include serial number range or other product marking data that indicates equipment that falls under the listing. Field listing of equipment is not recognized in this process since it is pre-quality equipment.	Non-Networked EVSE Network Capable EVSE Fully Networked EVSE Wired ONLY Non-Networked EVSE Network Capable EVSE Fully Networked EVSE			✓			
	1-2A(AC)	Connector and charging interface standard	EVSE charging interface must be compliant with SAE J1772	Vendor to attest that equipment has been tested with a minimum of 10 different makes (automotive brands) of plug-in electric vehicles.	AC ONLY Non-Networked EVSE Network Capable EVSE Fully Networked EVSE	✓	✓		✓		
	1-2B(AC)	Connector and charging interface standard	EVSE charging interface must be compliant with SAE J3066	Vendor to attest to compliance.	AC ONLY						
	1-2C(AC)	Connector and charging interface standard	EVSE charging interface must be compliant with SAE J3400	Not being evaluated. SAE J3400 is a work in progress.	N/A Non-Networked EVSE Network Capable EVSE Fully Networked EVSE DC ONLY						
1-2A(DC)	Connector and charging interface standard	EVSE charging interface must be compliant with SAE J1772 CCS interface	Vendor to attest that equipment has been tested with a minimum of 5 different makes (automotive brands) of plug-in electric vehicles.	AC ONLY		✓			✓	✓	

ORGANIZATION-SPECIFIC REQUIREMENTS

Criterion Definitions

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EVSE Electrical	1-1(AC)	Safety requirements - Listing	Unit listed by qualified Nationally Recognized Test Lab (NRTL) to UL 2594; will include other UL standards as prescribed by the NRTL; to support criteria 1-3, certification to UL 2231-1 and UL 2231-2 is required; other standards likely to be referenced: UL 1998, UL 2251	Vendor Documentation. Vendor to provide name of NRTL used and a copy of the Certificate of Compliance. Proprietary information should not be included in the provided materials. The information should include a list of the UL standards used to vet the product and models covered by the listing. For Batch listed products, information must include serial number range or other product marking data that indicates equipment that falls under the batch listing. Field listing of equipment is not recognized in this process since it seeks to pre-qualify equipment.	Non-Networked EVSE Network Capable EVSE Fully Networked EVSE AC ONLY	✓	✓	✓	✓		
	1-1(DC)	Safety requirements - Listing	Unit must be listed by qualified Nationally Recognized Test Lab (NRTL) to UL 2202; will include other UL standards as prescribed by the NRTL; to support criteria 1-3, certification to UL 2231-1 and UL 2231-2 is required; other standards likely to be referenced: UL 1998, UL 2251	Vendor Documentation. Vendor to provide name of NRTL used and a copy of the Certificate of Compliance. Proprietary information should not be included in the provided materials. The information should include a list of the UL standards used to vet the product and models covered by the listing. For Batch listed products, information must include serial number range or other product marking data that indicates equipment that falls under the batch listing. Field listing of equipment is not recognized in this process since it seeks to pre-qualify equipment.	Non-Networked EVSE Network Capable EVSE Fully Networked EVSE DC ONLY		✓	✓	✓	✓	✓
	1-1(WR)	Safety requirements - Listing	Unit must be listed by qualified Nationally Recognized Test Lab (NRTL) to UL 2750; will include other UL standards as prescribed by the NRTL; to support criteria 1-3, certification to UL 2231-1 and UL 2231-2 is required; other standards likely to be referenced: UL 1998	Vendor Documentation. Vendor to provide name of NRTL used and a copy of the Certificate of Compliance. Proprietary information should not be included in the provided materials. The information should include a list of the UL standards used to vet the product and models covered by the listing. For Batch listed products, information must include serial number range or other product marking data that indicates equipment that falls under the batch listing. Field listing of equipment is not recognized in this process since it seeks to pre-qualify equipment.	Non-Networked EVSE Network Capable EVSE Fully Networked EVSE WiLless ONLY Non-Networked EVSE Network Capable EVSE Fully Networked EVSE			✓			
	1-2A(AC)	Connector and charging interface standard	EVSE charging interface must be compliant with SAE J1772	Vendor to attest that equipment has been tested with a minimum of 10 different makes (automotive brands) of plug-in electric vehicles.	AC ONLY Non-Networked EVSE Network Capable EVSE Fully Networked EVSE	✓	✓		✓		
	1-2B(AC)	Connector and charging interface standard	EVSE charging interface must be compliant with SAE J3066	Vendor to attest to compliance.	AC ONLY						
	1-2C(AC)	Connector and charging interface standard	EVSE charging interface must be compliant with SAE J3400	Not being evaluated. SAE J3400 is a work in progress.	N/A Non-Networked EVSE Network Capable EVSE Fully Networked EVSE						
	1-2A(DC)	Connector and charging interface standard	EVSE charging interface must be compliant with SAE J1772 CCS interface	For SAE J1772 CCS interface: Vendor to attest that each port type offered by equipment has been tested with a minimum of 5 different makes (automotive brands) of plug-in electric vehicles.	DC ONLY		✓			✓	✓

VPL Adoption and Use

Official VPL Partners

- Southern California Edison
- Pacific Gas & Electric
- San Diego Gas & Electric
- Georgia Power Company

In Conversation

- Alabama Power Company (coming early '24)
- 10+ Utilities
- State DOTs
 - PennDOT
 - WashDOT
- NASEO
- State General Service Agencies (GSAs) in charge of fleet electrification plans
- Cities
 - Clean Cities Groups
 - US Climate Mayors
 - US Sustainability Directors Network

EVs2Scale 2030



Thank You