Charging Stations

Lightning Systems offers a comprehensive range of AC and DC Fast Charge charging stations for your electric vehicles.

When considering electric fleet vehicles, it's important to plan your charging solution. Lightning Systems makes it easy in two ways:

- We offer charging stations on our price list, so you don't have to find a third-party vendor.
- We can connect you with a partner company which offers in-depth planning, installation and management services for installing and operating charging systems.

Charging stations for commercial EVs fall into two categories: Level 2 AC charging and DC Fast Charge.

Level 2 - AC charging

AC power is delivered to the vehicle, where it is converted to DC power for charging the batteries. This class of charger is lower cost and easier to connect to your building's existing electrical infrastructure. However, charging times for a commercial EV will be long due to the high capacity of the batteries.

DC Fast Charge

The charging station converts AC electricity to DC power which is delivered to the vehicle and is used to charge the batteries. Although more expensive, DC Fast Charge is much faster than Level 2. The high current levels needed for DC Fast Charge may require additional planning and permitting for installation.

All of Lightning Systems' commercial EVs support DC Fast Charge. Level 2 charging is also supported on our lighter vehicles such as the Ford Transit 350 HD and the Ford E-450. Check the specifications of the vehicles to see which charging types are supported.

In some jurisdictions, such as California and Colorado, there may be vouchers or other incentives that may partially or fully cover the cost of charging stations.

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Level 2 AC Chargers

Lightning Systems' comprehensive range of Level 2 AC charging stations provides many options for charging your fleet.

Product Number	Description	Optional Features
LSAC-M7200-32A-CSX	7.2 kW AC Cord, 240V/32A & 120V/15A, J1772, Single 25ft Cable, 2" LCD Display	Adapter Plugs: NEMA 6-20, NEMA 10-30, NEMA 14-40, NEMA 6-50, NEMA 10-50
LSAC-D7200-30A-WSX	7.2 kW AC Wallbox, 240V/30A, J1772, Single 25ft Cable	Pedestal
LSAC-D7200-30A-WSW	7.2 kW AC Wallbox, 240V/30A, J1772, Single 25ft Cable, WIFI & RFID	Pedestal, 3G/4G Modem
LSAC-B7200-30A-WSE	7.2 kW AC Wallbox, 240V/30A, J1772, Single 18ft Cable, Ethernet & RFID, 7" Color Display	Credit Card Reader, Cable Retractor, 3G/4G Modem
LSAC-B7200-30A-PSE	7.2 kW AC Pedestal, 240V/30A, J1772, Single 18ft Cable, Ethernet & RFID, 7" Color Display	Credit Card Reader, Cable Retractor, 3G/4G Modem
LSAC-B7200-30A-WDE	7.2 kW AC Wallbox, 240V/30A (per port), J1772, Dual 18ft Cables, Ethernet & RFID, 7" Color Display	Credit Card Reader, Cable Retractor, 3G/4G Modem
LSAC-B7200-30A-PDE	7.2 kW AC Pedestal, 240V/30A (per port), J1772, Dual 18ft Cables, Ethernet & RFID, 7" Color Display	Credit Card Reader, Cable Retractor, 3G/4G Modem
LSAC-D9600-40A-WSX	9.6 kW AC Wallbox, 240V/40A, J1772, Single 25ft Cable	Pedestal
LSAC-D9600-40A-WSW	9.6 kW AC Wallbox, 240V/40A, J1772, Single 25ft Cable, WIFI & RFID	Pedestal, 3G/4G Modem
LSAC-B9600-40A-WSE	9.6 kW AC Wallbox, 240V/40A, J1772, Single 18ft Cable, Ethernet & RFID, 7" Color Display	Credit Card Reader, Cable Retractor, 3G/4G Modem
LSAC-B9600-40A-PSE	9.6 kW AC Pedestal, 240V/40A, J1772, Single 18ft Cable, Ethernet & RFID, 7" Color Display	Credit Card Reader, Cable Retractor, 3G/4G Modem
LSAC-B9600-40A-WDE	9.6 kW AC Wallbox, 240V/40A, J1772, Dual 18ft Cables, Ethernet & RFID, 7" Color Display	Credit Card Reader, Cable Retractor, 3G/4G Modem
LSAC-B9600-40A-PDE	9.6 kW AC Pedestal, 240V/40A, J1772, Dual 18ft Cables, Ethernet & RFID, 7" Color Display	Credit Card Reader, Cable Retractor, 3G/4G Modem
LSAC-B16800-70A-WSE	16.8 kW AC Wallbox, 240V/70A, J1772, Single 18ft Cable, Ethernet & RFID, 7" Color Display	Credit Card Reader, Cable Retractor, 3G/4G Modem
LSAC-B16800-70A-PSE	16.8 kW AC Pedestal, 240V/70A, J1772, Single 18ft Cable, Ethernet & RFID, 7" Color Display	Credit Card Reader, Cable Retractor, 3G/4G Modem

DC Fast Chargers

Our cost-effective 25kW wallbox chargers offer an accessible way to deploy DC Fast Charge provision at your facility. For the shortest charging times, the 50kW pedestal models are the best bet.

Product Number	Description	Optional Features
LSDC-D25-1-240-WSE-CCS	25 kW DC Wallbox, 240V/165A/1-Phase, CCS-1, Single 13ft Cable, Ethernet & RFID, 2.7” OLED Display	Pedestal; 3G/4G Modem
LSDC-D25-3-208-WSE-CCS	25 kW DC Wallbox, 208V/90A/3-Phase, CCS-1, Single 13ft Cable, Ethernet & RFID, 2.7” OLED Display	Pedestal; 3G/4G Modem
LSDC-D25-3-480-WSE-CCS	25 kW DC Wallbox, 480V/40A/3-Phase, CCS-1, Single 13ft Cable, Ethernet & RFID, 2.7” OLED Display	Pedestal; 3G/4G Modem
LSDC-D25-1-240-WDE-CMB	25 kW DC Wallbox, 240V/165A/1-Phase, CCS-1 & CHAdeMO, Dual 13ft Cables, Ethernet & RFID, 2.7” OLED Display	Pedestal; 3G/4G Modem
LSDC-D25-3-208-WDE-CMB	25 kW DC Wallbox, 208V/90A/3-Phase, CCS-1 & CHAdeMO, Dual 13ft Cables, Ethernet & RFID, 2.7” OLED Display	Pedestal; 3G/4G Modem
LSDC-D25-3-480-WDE-CMB	25 kW DC Wallbox, 480V/40A/3-Phase, CCS-1 & CHAdeMO, Dual 13ft Cables, Ethernet & RFID, 2.7” OLED Display	Pedestal; 3G/4G Modem
LSDC-B50-3-208-PSE-CCS	50 kW DC Pedestal, 208V/166A (FLA)/3-Phase, CCS-1, Single 18ft Cable, Ethernet, RFID & CC Reader, 15” Touch Screen	3G/4G Modem
LSDC-B50-3-480-PSE-CCS	50 kW DC Pedestal, 480V/72A (FLA)/3-Phase, CCS-1, Single 18ft Cable, Ethernet, RFID & CC Reader, 15” Touch Screen	3G/4G Modem
LSDC-B50-3-208-PSE-CHA	50 kW DC Pedestal, 208V/166A (FLA)/3-Phase, CHAdeMO, Single 18ft Cable, Ethernet, RFID & CC Reader, 15” Touch Screen	3G/4G Modem
LSDC-B50-3-480-PSE-CHA	50 kW DC Pedestal, 480V/72A (FLA)/3-Phase, CHAdeMO, Single 18ft Cable, Ethernet, RFID & CC Reader, 15” Touch Screen	3G/4G Modem
LSDC-B50-3-208-PDE-CMB	50 kW DC Pedestal, 208V/166A (FLA)/3-Phase, CCS-1 & CHAdeMO, Dual 18ft Cables, Ethernet, RFID & CC Reader, 15” Touch Screen	3G/4G Modem
LSDC-B50-3-480-PDE-CMB	50 kW DC Pedestal, 480V/72A (FLA)/3-Phase, CCS-1 & CHAdeMO, Dual 18ft Cables, Ethernet, RFID & CC Reader, 15” Touch Screen	3G/4G Modem
LSDC-D100-3-480-PDE-CCS	100 kW DC Pedestal, 480 Vac, 3-Phase, 50 / 60 Hz, L1, L2, L3, N, PE, CCS-1 & CCS-1, Dual 13ft Cables, Ethernet & RFID, 7” Touch Screen	3G/4G Modem, 25ft Cable, Cable Management
LSDC-D100-3-480-PDE-CMB	100 kW DC Pedestal, 480 Vac, 3-Phase, 50 / 60 Hz, L1, L2, L3, N, PE, CCS-1 & CHAdeMO, Dual 13ft Cables, Ethernet & RFID, 7” Touch Screen	3G/4G Modem, 25ft Cable, Cable Management

Level 2 AC Charger - 7.2 kW portable charger

Use any 110V or 240V outlet to charge your vehicle!

- Portable charging solution that can live in your vehicle
- Connects to standard 120V or 240V outlets
- Up to 32A @ 240V charging
- SAE J1772 charging plug with 25-foot cable

	LSAC-M7200-32A-CSX
Output power	7.2 kW
Electrical service requirements	
Input power	120/240 VAC single phase, 32A, 60Hz
Service panel	Standard 120V or 240V outlet
Charging and operational interfaces	
Connector type	SAE J1772
Cable length	Single 25ft cable
Display	Indicators: AC present, Charging, Fault. Display: Charging status
Management connectivity	
Wi-Fi	No
Communication protocol	N/A
Safety and operation	
Electrical protection	Over current, under voltage, over voltage, residual current, surge protection, short circuit, over temperature, ground fault, plug-out detection
Enclosure rating	IP67
Weight	11.9 lbs (5.4 kg)
Options	
Options	Adapter Plugs: NEMA 6-20, NEMA 10-30, NEMA 14-40, NEMA 6-50, NEMA 10-50

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Level 2 AC Chargers - 7.2 kW and 9.6 kW

Cost-effective and space-saving Level 2 chargers

- Compact, stylish design
- Up to 40A @ 240V charging
- Available with 7.2 kW and 9.6 kW outputs
- SAE J1772 charging plug and cable
- Network connectivity (OCPP)
- Type 3R protection and IK08 vandal proof casing

	LSAC-D7200-30A-WSX	LSAC-D7200-30A-WSW	LSAC-D9600-40A-WSX	LSAC-D9600-40A WSW
Output power	7.2 kW (single port)	7.2 kW (single port)	9.6 kW (single port)	9.6 kW (single port)
Electrical service requirements				
Input power	240/208 VAC single phase, 30A, 60Hz		240/208 VAC single phase, 40A, 60Hz	
Service panel	2-pole 40A breaker on dedicated circuit, no GFCI		2-pole 50A breaker on dedicated circuit, no GFCI	
Service wiring	3-wire (L1, L2, earth ground)			
Standby power	< 5 W			
Charging and operational interfaces				
Connector type	SAE J1772			
Cable length	Single 25ft cable			
Display	Indicators: AC present, Charging, Fault			
Card reader	ISO/IEC 14443 compliant RFID card reader			
Management connectivity				
Wi-Fi	No	Yes	No	Yes
Communication protocol	OCPP			
Safety and operation				
Electrical protection	Over current, under voltage, over voltage, residual current, surge protection, short circuit, over temperature, ground fault, plug-out detection			
Enclosure rating	NEMA 3R, IEC 62262 IK08			
Regulatory compliance	UL, cUL, UL2594, UL2231, UL 1998, UL991, NEC Article 625			
Operating temperature	-30°C to 50°C (-22°F to 122°F)			
Storage temperature	-40°C to 80°C (-40°F to 176°F)			
Humidity	< 95% relative humidity, non-condensing			
Dimensions (W x H x D), weight	12.6” x 10.3” x 4.5” (260 x 320 x 115 mm), 5 lbs (2 kg) excluding charging plug and cable			
Options				
Options	Pedestal	Pedestal, 3G/4G modem	Pedestal	Pedestal, 3G/4G modem

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Level 2 AC Chargers - 7.2 kW and 9.6 kW

Flexible family of 7.2 kW and 9.6 kW chargers offering useful options

- Single or dual port, 30A or 40A, Level 2
- SAE J1772
- 7.2 kW or 9.6 kW per port
- NEMA 3R housing
- RFID reader
- OCPP compliance is standard
- 7” color screen

	LSAC-B7200-30A-WSE (wallbox) **LSAC-B7200-30A-PSE** (pedestal)	**LSAC-B7200-30A-WDE** (wallbox) **LSAC-B7200-30A-PDE** (pedestal)	**LSAC-B9600-40A-WSE** (wallbox) **LSAC-B9600-40A-PSE** (pedestal)	**LSAC-B9600-40A WDE** (wallbox) **LSAC-B9600-40A PDE** (pedestal)
Output power	7.2 kW (single port)	7.2 kW (dual ports)	9.6 kW (single port)	9.6 kW (dual ports)
Electrical service requirements				
Input power	240/208 VAC, 30A load with 40A branch circuit	240/208 VAC, 30A load with 40A branch circuit per port	240/208 VAC, 40A load with 50A branch circuit	240/208 VAC, 40A load with 50A branch circuit per port
Service panel	40A breaker (no GFCI)	40A breaker per port (no GFCI)	50A breaker (no GFCI)	50A breaker per port (no GFCI)
Service wiring	3-wire (L1, L2, earth ground)			
Charging and operational interfaces				
Connector type	SAE J1772			
Cable length	Single 25ft cable	Dual 25ft cables	Single 25ft cable	Dual 25ft cables
Display	7” color display, 1000 Nits, 800x400, UV protected			
Card reader	ISO 14443 type A & B, ISO 18092 NFC (optional)			
Management connectivity				
Wireless	2.4 GHz Wi-Fi(802.11 b/g/n)			
Communication protocol	OCPP 1.5 and 1.6 compliant			
Safety and operation				
Electrical protection	20 mA ground fault detection; SAE J1772 plug-out detection			
Enclosure rating	NEMA 3R			
Regulatory compliance	ETL certified for USA and cUL certified for Canada. Complies with UL 2594, UL 2231-1, UL 2231-2 and NEC Article 625. EMC: FCC Part 15 Class A			
Operating temperature	-20°C to 60°C (-4°F to 140°F)			
Storage temperature	-50°C to 80°C (-58°F to 176°F)			
Humidity	< 95% relative humidity, non-condensing			
Options				
Options	Credit card reader, cable retractor (18ft cable), 3G/4G modem			

Level 2 AC Charger - 16.8 kW

A high-output level 2 charger in wallbox and pedestal formats

- Single port, 70A, Level 2
- SAE J1772
- 16.8 kW charging power
- NEMA 3R housing
- RFID reader
- OCPP compliance is standard
- 7” color screen

	LSAC-B16800-70A-WSE (wallbox) **LSAC-B16800-70A-PSE** (pedestal)
Output power	16.8 kW (single port)
Electrical service requirements	
Input power	240/208 VAC, 70A load with 100A branch circuit
Service panel	100A breaker (no GFCI)
Service wiring	3-wire (L1, L2, earth ground)
Charging and operational interfaces	
Connector type	SAE J1772
Cable length	Single 25ft cable
Display	7” color display, 1000 Nits, 800x400, UV protected
Card reader	ISO 14443 type A & B, ISO 18092 NFC (optional)
Management connectivity	
Wireless	2.4 GHz Wi-Fi(802.11 b/g/n)
Communication protocol	OCPP 1.5 and 1.6 compliant
Safety and operation	
Electrical protection	20 mA ground fault detection; SAE J1772 plug-out detection
Enclosure rating	NEMA 3R
Regulatory compliance	ETL certified for USA and cUL certified for Canada. Complies with UL 2594, UL 2231-1, UL 2231-2 and NEC Article 625. EMC: FCC Part 15 Class A
Operating temperature	-20°C to 60°C (-4°F to 140°F)
Storage temperature	-50°C to 80°C (-58°F to 176°F)
Humidity	< 95% relative humidity, non-condensing
Options	
Options	Credit card reader, cable retractor (18ft cable), 3G/4G modem

DC Fast Chargers - 25 kW

Affordable and easy-to-install DC Fast Charging solution

- CCS-1 or CCS-1-and-CHAdeMO charging ports
- Max. output power: 25kW
- RFID card reader for user authentication
- Type 3R protection and IK10 vandal proof casing

	LSDC-D25-1-240-WSE-CCS (240V) **LSDC-D25-3-208-WSE-CCS** (208V) **LSDC-D25-3-480-WSE-CCS** (480V)	**LSDC-D25-1-240-WSE-CMB** (240V) **LSDC-D25-3-208-WSE-CMB** (208V) **LSDC-D25-3-480-WSE-CMB** (480V)
Output power	25 kW	
Efficiency	94%	
Electrical service requirements		
Input power and service wiring	• **240V**: 240/277 VAC, 60 Hz, single phase, L1, L2, PE or L, N, PE • **208V**: 208 VAC, 60 Hz, three-phase, L1, L2, L3, PE • **480V**: 480 VAC, 60 Hz, three-phase, L1, L2, L3, N, PE	
Upstream breaker	• **240V**: 165A • **208V**: 90A • **480V**: 40A	
Charging and operational interfaces		
Connector type(s)	SAE J1772 Combo CCS type 1 (200-500 Vdc, 65 A max, 25 kW Max)	SAE J1772 Combo CCS type 1 (200-500 Vdc, 65 A max, 25 kW Max) CHAdeMO (50-500 Vdc, 60 A max, 25 kW max)
Cable length	Single 13ft cable	Dual 13ft cables
Display	2.7” OLED display	
Card reader	ISO/IEC 14443 type A & B RFID	
Management connectivity		
Network	Ethernet (standard), 3G/4G (optional)	
Protocol	OCPP	
Safety and operation		
Enclosure rating	NEMA 3R, IEC 62262 IK10	
Protection	Over current, under voltage, over voltage, residual current, surge protection, short circuit, over temperature, ground fault	
Regulatory compliance	UL, cUL, UL 2202, UL 2231	
Operating temperature	-30°C to 50°C (-22°F to 122°F)	
Storage temperature	-40°C to 85°C (-40°F to 185°F)	
Humidity	< 95% relative humidity, non-condensing	
Altitude	Up to 6500 ft. (2000 m)	
Dimensions (W x H x D), weight	27 x 17 x 9 in. (680 x 430 x 230 mm) 104 lbs (47 kg), excluding plug(s) and cable(s)	
Options		
Options	Pedestal, 3G/4G modem	

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DC Fast Chargers - 50 kW

Effective charging for your vehicles

- Integrated Cord Retractors
- 15” Outdoor Color Display
- Connector Configuration: SAE J1772 Combo CCS1 and CHAdeMO
- OCPP Network Enabled
- Credit Card Reader & RFID

	LSDC-B50-3-208-PSE-CCS (208V) **LSDC-B50-3-480-PSE-CCS** (480V)	**LSDC-B50-3-208-PSE-CHA** (208V) **LSDC-B50-3-480-PSE-CHA** (480V)	**LSDC-B50-3-208-PSE-CMB** (208V) **LSDC-B50-3-480-PSE-CMB** (480V)
Output power	50 kW		
Efficiency	> 90%		
Electrical service requirements			
Input power and service wiring	• **208V**: 208 VAC, 60 Hz, three-phase, L1, L2, L3, ground • **480V**: 480 VAC, 60 Hz, three-phase, L1, L2, L3, ground		
Upstream breaker	• **208V**: 200A • **480V**: 100A		
Charging and operational interfaces			
Connector type(s)	SAE J1772 Combo CCS type 1	CHAdeMO	SAE J1772 Combo CCS type 1 and CHAdeMO
Cable length	Single 18ft cable	Single 18ft cable	Dual 18ft cables
Display	15” color display, 350 Nits, 1024x768, outdoor rated		
Card reader	ISO/IEC 14443 type A & B RFID		
Management connectivity			
Network	Ethernet (standard), 3G/4G (optional)		
Protocol	OCPP 1.5 / 1.6, BTCP Network		
Safety and operation			
Enclosure rating	NEMA 3R		
Protection	Surge protection 6000 VAC		
Regulatory compliance	ETL listed for USA & Canada: Complies with UL 2202, UL 2231, UL 2594, UL50E, NEC Article 625, CSA STD C22.2 No. 107.1, FCC Part 15 Class A		
Operating temperature	-30°C to 50°C (-22°F to 122°F)		
Humidity	< 95% relative humidity, non-condensing		
Altitude	Up to 6000 ft. (1830 m)		
Dimensions (W x H x D), weight	34 x 86 x 22 in. (864 x 2184 x 559 mm) 850 lbs (386 kg)		
Options			
Options	3G/4G modem		

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DC Fast Chargers - 100 kW

The fastest way to charge your vehicles

- Dual CCS-1 or CCS-1-and-CHAdeMO charging ports with simultaneous charging and configurable dynamic load sharing
- Max. output power: 100kW
- RFID card reader for user authentication
- Type 3R protection and IK10 vandal proof casing

	LSDC-D100-3-480-PDE-CCS (480V)	**LSDC-D100-3-480-PDE-CMB** (480V)
Output power	100 kW	
Efficiency	Efficiency: 94%. Power factor: 0.99 at nominal output.	
Electrical service requirements		
Input power and service wiring	480 VAC, 50/60 Hz, three-phase, L1, L2, L3, N, PE	
Charging and operational interfaces		
Connector type(s)	2 x SAE J1772 Combo CCS type 1	1 x SAE J1772 Combo CCS type 1 1 x CHAdeMO
Cable length	Dual 13ft cables	
Display	7” LCD touch screen	
Card reader	ISO/IEC 14443 type A & B RFID	
Management connectivity		
Network	Ethernet (standard), 3G/4G (optional)	
Protocol	OCPP1.5-S, OCPP1.6-J, upgradable to OCPP2.0	
Safety and operation		
Enclosure rating	NEMA 3R, IEC 62262 IK10	
Protection	Over current, under voltage, over voltage, surge protection, short circuit, over temperature, ground fault	
Regulatory compliance	UL2202, UL 2231, CSA C22.2#107.1:2016 Ed.4, CSA C22.2#281.2 Issued: 2012/09/07 Ed:1	
Operating temperature	-30°C to 50°C (-22°F to 122°F), derating from +122 °F to 140°F (+50 °C to +60 °C	
Storage temperature	-40°C to 80°C (-40°F to 176°F)	
Humidity	< 95% relative humidity, non-condensing	
Altitude	Up to 6500 ft. (2000 m)	
Dimensions (W x H x D), weight	23.2 x 59.1 x 31.5 in. / 772 lb (590 x 1500 x 800 mm / 350 kg)	
Options		
Options	Cable management, 3G/4G modem, 25ft cable	

The information presented here may be subject to change at any time.
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