

DS SERIES



90kW / 120kW / 150kW / 180kW
Free Standing



FEATURES



Multi-standard: CCS, CHAdeMO and GB/T ; simultaneous 2 DC Charging
Optional non-Liquid-cooled 300A charging connector.*



Network or standalone operation



User authentication



Optional cable management accessories



Supports smart charging and load balancing



Efficiency > 94%



PF > 0.99(APFC)



Custom available



7-inch LCD screen with user friendly interface



IK10/NEMA 3R (Not including screen and RFID module), IP55



OCPP 1.6 JSON

*300A to 500A duty cycle is following charging connector's instruction



Cable Management



For information on the optional cable management, please refer to the accessory section on page 77.

INDUSTRY



Commercial
Building



Shopping Center
/Hospitality



Outdoor Parking



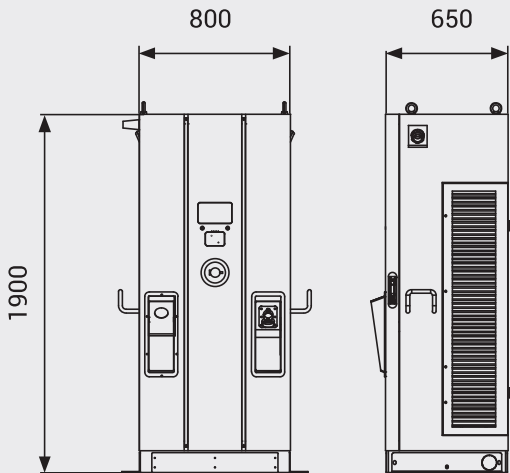
Gas Station



Fleets

FAST CHARGER

SPECIFICATION

Model Name	CE, DS 90 Series	UL, DS 90 Series
Safety	CE/CB (Europe)	NRTL – cETLus (USA/Canada)
Picture		

Power Specification

AC Input	Input Rating	3 Φ _380~415Vac ($\pm 15\%$)	3 Φ _480Vac (+10%, -15%)
	Input Current	3P+N+PE (Wye configuration), TN/ TT	3P+N+PE (Wye configuration), TN/TT
	Max. Input Current	DC System:3 Φ 173A	DC System:3 Φ 137A
	Frequency	50Hz/60Hz	
	Power Factor	>0.99	
	Efficiency	>94%, at Optimize V/I Point	
DC Output	Output Voltage Range	CCS2:150~950Vdc CHAdEMO:150~500Vdc GBT:150~750Vdc	CCS1:150~950Vdc CHAdEMO:150~500Vdc
	Max. Output Current	CHAdEMO:120A@500Vdc CCS2:200A@450Vdc GBT:250A@360Vdc	CHAdEMO/CCS1:120A@500Vdc CCS1:200A@450Vdc
	Max. Output Power	DC 90kW	DC 90kW
	Voltage Accuracy	$\pm 2\%$	
	Current Accuracy	$\pm 2\%$	

User Interface & Control

Display	7" LCD	
Push Buttons	Operation Buttons / Emergency Stop Button	
User Authentication	RFID: support ISO 14443A/B, ISO 15693, FeliCa Lite-S (RCS966) OCPP, 2D Barcode, APP, Mobile Payment	
Meter	AC MID Meter , DC PTB Meter	N/A

Communication

External	Ethernet, Wi-Fi & 3G/4G	
Internal	CAN Bus/RS485	

Environmental

Operating Temperature	-30° C~50° C, Will Derating From 50° C And Above	
Humidity	5%~95% RH, Non-Condensing	
Altitude	≤ 2000m	
IP/IK Level	IP55 IK10(not including screen & RFID module)	NEMA 3R IK10 (not including screen & RFID module)
Cooling Method	Fan Cooling	

Mechanical

Cabinet Dimension	800 x 650 x 1900mm ±1%	
Weight	≤ 390 kg±1%	
Cable Length	4m	

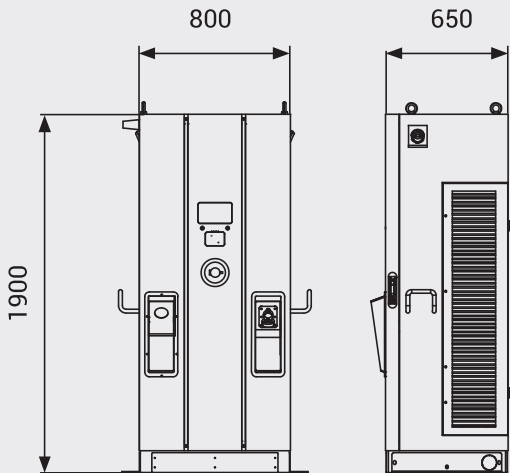
Protection

Input Protection	OVP, OCP, OPP, OTP, UVP, RCD, SPD	
Output Protection	OCP, SCP, OVP, LVP, OTP, IMD	

Regulation

Certification	IEC 61851-1, IEC 61851-23, IEC 61851-21-2	UL2202, UL2231 FCC Part 15 subpart BANSI C63.4 ; ICES-003
Charging Interface	CHAdEMO, DIN 70121, ISO15118, GB/T 27930	

SPECIFICATION

Model Name	CE, DS 120 Series	UL, DS 120 Series
Safety	CE/CB (Europe)	NRTL – cETLus (USA/Canada)
Picture		

Power Specification

AC Input	Input Rating	3 Φ _380~415Vac ($\pm$ 15%)	3 Φ _480Vac (+10%, -15%)
	Input Current	3P+N+PE (Wye configuration), TN/ TT	3P+N+PE (Wye configuration), TN/TT
	Max. Input Current	DC System:3 Φ 230A	DC System:3 Φ 183A
	Frequency	50Hz/60Hz	
	Power Factor	>0.99	
	Efficiency	>94%, at Optimize V/I Point	
DC Output	Output Voltage Range	CCS2:150~950Vdc CHAdEMO:150~500Vdc GBT:150~750Vdc	CCS1:150~950Vdc CHAdEMO:150~500Vdc
	Max. Output Current	CHAdEMO:120A@500Vdc CCS2:200A@600Vdc, optional 300A GBT: 250A@480Vdc	CHAdEMO/CCS1:120A@500Vdc CCS1:200A@600Vdc, optional 300A
	Max. Output Power	DC 120kW	DC 120kW
	Voltage Accuracy	$\pm$ 2%	
	Current Accuracy	$\pm$ 2%	

User Interface & Control

Display	7" LCD	
Push Buttons	Operation Buttons / Emergency Stop Button	
User Authentication	RFID: support ISO 14443A/B, ISO 15693, FeliCa Lite-S (RCS966) OCPP, 2D Barcode, APP, Mobile Payment	
Meter	AC MID Meter , DC PTB Meter	N/A

Communication

External	Ethernet, Wi-Fi & 3G/4G	
Internal	CAN Bus/RS485	

Environmental

Operating Temperature	-30° C~50° C, Will Derating From 50° C And Above	
Humidity	5%~95% RH, Non-Condensing	
Altitude	≤ 2000m	
IP/IK Level	IP55 IK10(not including screen & RFID module)	NEMA 3R IK10 (not including screen & RFID module)
Cooling Method	Fan Cooling	

Mechanical

Cabinet Dimension	800 x 650 x 1900mm ±1%	
Weight	≤ 420 kg±1%	
Cable Length	4m	

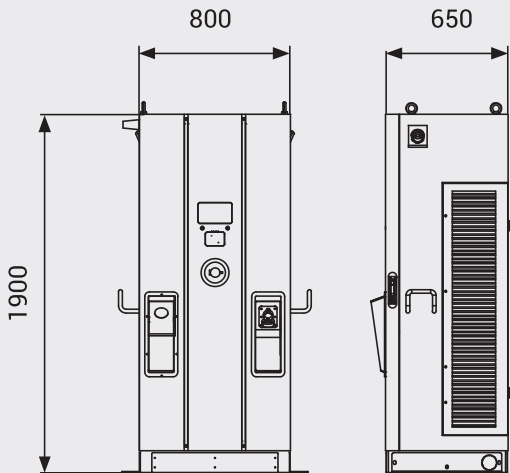
Protection

Input Protection	OVP, OCP, OPP, OTP, UVP, RCD, SPD	
Output Protection	OCP, SCP, OVP, LVP, OTP, IMD	

Regulation

Certification	IEC 61851-1, IEC 61851-23, IEC 61851-21-2	UL2202, UL2231 FCC Part 15 subpart BANSI C63.4 ; ICES-003
Charging Interface	CHAdEMO, DIN 70121, ISO15118, GB/T 27930	

SPECIFICATION

Model Name	CE, DS 150 Series	UL, DS 150 Series
Safety	CE/CB (Europe)	NRTL – cETLus (USA/Canada)
Picture		

Power Specification

AC Input	Input Rating	3 Φ _380~415Vac ($\pm 15\%$)	3 Φ _480Vac (+10%, -15%)
	Input Current	3P+N+PE (Wye configuration), TN/ TT	3P+N+PE (Wye configuration), TN/TT
	Max. Input Current	DC System:3 Φ 289A	DC System:3 Φ 229A
	Frequency	50Hz/60Hz	
	Power Factor	>0.99	
	Efficiency	>94%, at Optimize V/I Point	
DC Output	Output Voltage Range	CCS2:150~950Vdc CHAdEMO:150~500Vdc GBT:150~750Vdc	CCS1:150~950Vdc CHAdEMO:150~500Vdc
	Max. Output Current	CHAdEMO:120A@500Vdc CCS2:200A@750Vdc, optional 300A GBT: 250A@600Vdc	CHAdEMO/CCS1:120A@500Vdc CCS1:200A@750Vdc, optional 300A
	Max. Output Power	DC 150kW	DC 150kW
	Voltage Accuracy	$\pm 2\%$	
	Current Accuracy	$\pm 2\%$	

User Interface & Control

Display	7" LCD	
Push Buttons	Operation Buttons / Emergency Stop Button	
User Authentication	RFID: support ISO 14443A/B, ISO 15693, FeliCa Lite-S (RCS966) OCPP, 2D Barcode, APP, Mobile Payment	
Meter	AC MID Meter , DC PTB Meter	N/A

Communication

External	Ethernet, Wi-Fi & 3G/4G	
Internal	CAN Bus/RS485	

Environmental

Operating Temperature	-30° C~50° C, Will Derating From 50° C And Above	
Humidity	5%~95% RH, Non-Condensing	
Altitude	≤ 2000m	
IP/IK Level	IP55 IK10(not including screen & RFID module)	NEMA 3R IK10 (not including screen & RFID module)
Cooling Method	Fan Cooling	

Mechanical

Cabinet Dimension	800 x 650 x 1900mm ±1%	
Weight	≤ 460 kg±1%	
Cable Length	4m	

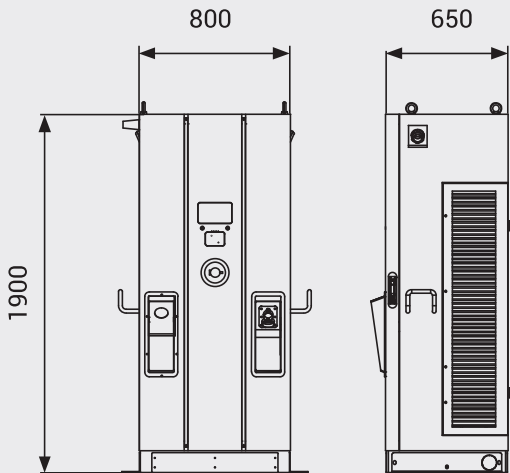
Protection

Input Protection	OVP, OCP, OPP, OTP, UVP, RCD, SPD	OVP, OCP, OPP, OTP, UVP, SPD
Output Protection	OCP, SCP, OVP, LVP, OTP, IMD	

Regulation

Certification	IEC 61851-1, IEC 61851-23, IEC 61851-21-2	UL2202, UL2231 FCC Part 15 subpart BANSI C63.4 ; ICES-003
Charging Interface	CHAdEMO, DIN 70121, ISO15118, GB/T 27930	

SPECIFICATION

Model Name	CE, DS 180 Series	UL, DS 180 Series
Safety	CE/CB (Europe)	NRTL – cETLus (USA/Canada)
Picture		

Power Specification

AC Input	Input Rating	3 Φ _380~415Vac ($\pm 15\%$)	3 Φ _480Vac (+10%, -15%)
	Input Current	3P+N+PE (Wye configuration), TN/ TT	3P+N+PE (Wye configuration), TN/TT
	Max. Input Current	DC System:3 Φ 345A	DC System:3 Φ 274A
	Frequency	50Hz/60Hz	
	Power Factor	>0.99	
	Efficiency	>94%, at Optimize V/I Point	
DC Output	Output Voltage Range	CCS2:150~950Vdc CHAdEMO:150~500Vdc GBT:150~750Vdc	CCS1:150~950Vdc CHAdEMO:150~500Vdc
	Max. Output Current	CHAdEMO:120A@500Vdc CCS2:200A@900Vdc, optional 300A GBT: 250A@720Vdc	CHAdEMO/CCS1:120A@500Vdc CCS1:200A@900Vdc, optional 300A
	Max. Output Power	DC 180kW	DC 180kW
	Voltage Accuracy	$\pm 2\%$	
	Current Accuracy	$\pm 2\%$	

User Interface & Control

Display	7" LCD	
Push Buttons	Operation Buttons / Emergency Stop Button	
User Authentication	RFID: support ISO 14443A/B, ISO 15693, FeliCa Lite-S (RCS966) OCPP, 2D Barcode, APP, Mobile Payment	
Meter	AC MID Meter , DC PTB Meter	N/A

Communication

External	Ethernet, Wi-Fi & 3G/4G	
Internal	CAN Bus/RS485	

Environmental

Operating Temperature	-30° C~50° C, Will Derating From 50° C And Above	
Humidity	5%~95% RH, Non-Condensing	
Altitude	≤ 2000m	
IP/IK Level	IP55 IK10(not including screen & RFID module)	NEMA 3R IK10 (not including screen & RFID module)
Cooling Method	Fan Cooling	

Mechanical

Cabinet Dimension	800 x 650 x 1900mm ±1%	
Weight	≤ 500 kg±1%	
Cable Length	4m	

Protection

Input Protection	OVP, OCP, OPP, OTP, UVP, RCD, SPD	OVP, OCP, OPP, OTP, UVP, SPD
Output Protection	OCP, SCP, OVP, LVP, OTP, IMD	

Regulation

Certification	IEC 61851-1, IEC 61851-23, IEC 61851-21-2	UL2202, UL2231 FCC Part 15 subpart BANSI C63.4 ; ICES-003
Charging Interface	CHAdEMO, DIN 70121, ISO15118, GB/T 27930	