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ELECTRIC VEHICLE INFRASTRUCTURE

## Product Data

20 kW to 350 kW UL DC Charging Systems  
for North America





Specifications	Terra DC Wallbox	Terra 54	Terra 94	Terra 124	Terra 184	Terra HP 175	Terra HP 350	HVC 100C Depot Box	HVC 150C Depot Box	
<b>Electrical</b>					<b>Environment</b>					
Output power*	1-phase: 19.5 kW at 208V / 22.5 kW at 240V 3-phase: 24 kW peak; 22.5 kW continuous	50 kW continuous	90 kW	120 kW or 60 kW x 2	180 kW or 90 kW x 2	175 kW peak 160 kW continuous	350 kW peak 320 kW continuous	100 kW	150 kW	
AC Input voltage	1-phase: 208-240 VAC +/- 10% (60 Hz) 3-phase: 480Y / 277 VAC +/- 10% (60 Hz)	480Y / 277 VAC +/- 10% (60 Hz)				UL: 3-phase, 480Y/277 VAC +/- 10% (60 Hz) CSA: 3-phase, 600Y/347 VAC +/-10% (60 Hz)		UL: 3-phase, 480Y/277 VAC +/- 10% (60 Hz) CSA: 3-phase, 600Y/347 VAC +/-10% (60 Hz)		
AC input connection	1-phase: L1, L2, GND 3-phase: L1, L2, L3, N, GND	3-phase: : L1, L2, L3, GND (no neutral)				L1, L2, L3, GND (no neutral)		L1, L2, L3, GND (no neutral)		
Nominal input current and input power rating	1-phase: 100 A; 20.8-24 kVA / 3-phase: 32 A; 26.6 kVA - Current limiting options available	64 A, 53.2 kVA	115 A, 96 kVA	153 A, 128 kVA	230 A, 192 kVA	UL: 231 A, 192 kVA CSA: 185 A, 192 kVA	UL: 2 x 231 A, 384 kVA CSA: 2 x 185 A, 384 kVA	117 kVA	170 kVA	
Recommended upstream circuit breaker(s)	1-phase: 125 A 3-phase: 40 A	80 A	150 A	200 A	300 A	UL: 1 x 300 A CSA: 1 x 250 A	UL: 2 x 300 A CSA: 1 x 250 A	UL: 1 x 200 A CSA: 1 x 150 A	UL: 1 x 250 A CSA: 1 x 250 A	
Power Factor*	>0.96	> 0.96				≥ 0.97		≥ 0.97		
Current THD*	5%	< 5%				IEEE 519 Compliant; <8%; option for 5%		IEEE 519 Compliant; <8%; option for 5%		
Short circuit current rating	pending	65 kA; 10 kA optional	65 kA				65 kA		25 kA; 65 kA optional	
DC output voltage	CCS-1: 150 - 920 VDC CHAdEMO: 150 - 500 VDC	CCS1: 150-500 VDC CCS1 HV: 150 - 920 VDC CHAdEMO: 150 - 500 VDC	CCS1: 150 - 920 VDC CHAdEMO: 150 - 500 VDC				CCS-1: 150 - 920 VDC CHAdEMO: 150 - 500 VDC		CCS-1: 150 – 850 VDC	
DC output current	60 A	125 A	CCS1 200 A; CHAdEMO: 200 A			CCS-1: 375 A / CHAdEMO: 200 A	CCS-1: 500 A / CHAdEMO: 200 A	CCS-1: 166 A	CCS-1: 200 A	
Efficiency*	94%	95%				95%		95%		
<b>Interface and Control</b>					<b>Interface and Control</b>					
Charging protocols	CCS-1 and CHAdEMO	CCS1 and CHAdEMO 1.2				CCS-1 and CHAdEMO		CCS-1		
User interface	7" full color touchscreen display	7" high brightness full color touchscreen display				7" high brightness full color touchscreen display option for 15" display		RGB beacon light system indicates: 1) Ready to charge; 2) Handshake; 3) Charging and 4) Error		
RFID system	ISO/IEC14443A/B, ISO/IEC15693, NFC reader mode, Mifare, Calypso	ISO/IEC 14443A/B, ISO/IEC 15393, FeliCa™ 1, NFC reader mode, Mifare, Calypso, (option: Legic)				ISO/IEC 14443A/B, ISO/IEC 15393, FeliCa™1, NFC, Mifare, Calypso (option: Legic)		not applicable		
Network connection	GSM/3G/4G modem, 10/100 Base-T Ethernet	GSM/3G/4G modem; 10/100 Base-T Ethernet				GSM/3G/4G; 10/100 base-T Ethernet		GSM/3G/4G modem; 10/100 Base-T Ethernet		
Communication	OCPP 1.6 Core and Smart Charging Profiles Autocharge via OCPP	OCPP 1.6 Core and Smart Charging Profiles Autocharge via OCPP				OCPP 1.6 Core and Smart Charging Profiles Autocharge via OCPP		OCPP 1.6 Core and Smart Charging Profiles Autocharge via OCPP		
Supported languages	English (others available on request)	English (others available on request)				English (others available on request)		English (others available on request)		
<b>Environment</b>					<b>Environment</b>					
Operating temperature	-35 °C to +45 °C (+45 °C to +55 °C with linear derating)	-35 °C to +55 °C / -31 °F to +131 °F (de-rating characteristics apply at extreme temperatures)				-35 °C to +55 °C / -31 °F to +131 °F (de-rating characteristics apply at extreme temperatures)		-35 °C to +55 °C / -31 °F to +131 °F (de-rating characteristics apply at extreme temperatures)		
Recommended storage conditions	-10 °C to +70 °C / 14 °F to +158 °C (dry environment)	-10 °C to +70 °C / 14 °F to +158 °C (dry environment)				-10 °C to +70 °C / 14 °F to +158 °C (dry environment)		-10 °C to +70 °C / 14 °F to +158 °C (dry environment)		
Protection	IP54, NEMA 3S; indoor and outdoor rated	IP54, NEMA 3R; indoor and outdoor rated				IP54, NEMA 3R; indoor and outdoor rated		Power Cabinet: IP54, NEMA 3R; indoor and outdoor rated Depot Charge Box: IP65 - IK10; indoor and outdoor rated		
Humidity	5% to 95%, non-condensing	5% to 95%, non-condensing				5% to 95%, non-condensing		5% to 95%, non-condensing		
Altitude	2500 m (8200 ft)	up to 2000 m (6560 ft)				2000 m (6560 ft)		2500 m (8200 ft)		
<b>General</b>					<b>General</b>					
Charge cable	7 m (23 ft)	6 m (19.6 ft)				3.8 m (12.5 ft) for CCS-1 standard, 3.2 m (10.5 ft) optional 3.2 m (10.5 ft) CHAdEMO		7 m (23 ft) standard 3.5 m (11.5 ft) optional		
Dimensions (H x W x D)	770 x 584 x 300 mm 30.3 x 23 x 11.8 in	1900 x 565 x 780 mm 74.8 x 22.2 x 30.7 in	1900 x 565 x 880 mm 74.8 x 22.2 x 34.6 in			Power cabinet: 2030 x 1170 x 770 mm / 79.9 x 46.1 x 30.3 in Charge post: 2390 x 620 x 440 mm / 94 x 24.4 x 17.3 in		Power cabinet: 2030 x 1170 x 770 mm / 79.9 x 46.1 x 30.3 in Depot Box (no pedestal): 800 x 600 x 210 mm / 31.5 x 23.6 x 8.3 in Depot Box (w/pedestal): 1914 x 600 x 400 mm / 75.4 x 23.6 x 16.3 in		
Weight	60 kg / 132 lbs excluding backplate (10 kg / 22 lbs) and cables	350 kg / 775 lbs	350 kg / 775 lbs	365 kg / 800 lbs	395 kg / 870 lbs	Power cabinet: 1340 kg / 2954 lbs Charge post: 250 kg / 551 lbs		Power cabinet: 1340 kg / 2954 lbs Depot Box (no pedestal): 61 kg / 134.5 lbs (with 7 m / 23 ft cable) Depot Box (w/pedestal): 181 kg / 398 lbs (with 7 m / 23 ft cable)		
Compliance and safety	UL 2202, CSA No. 107.1-16, NEC Article 625, EN 61851, EN 62196; CHAdEMO 1.2; DIN 70121, ISO 15118; IEC 61000-6-3; EMC Class B (3-ph)	UL 2202, CSA No. 107.1-16; UL 2231-1, UL 2231-2, CSA STD C22.2 No. 107.1; NEC Article 625, EN 61851, EN 62196; CHAdEMO 1.2; DIN 70121, ISO 15118; IEC 61000-6-3; EMC Class B, FCC Part 15				UL 2202, CSA No. 107.1-16, NEC Article 625, EN 61851, EN 62196; CHAdEMO 1.2; DIN 70121, ISO 15118; IEC 61000-6-3 EMC Class B; BA Rule 49 CFR Part 661.5 (optional)		CSA No. 107.1-16 and UL 2202 certified by TUV SAE J1772 - IEC 61851-23 / DIN 70121 - ISO 15118 BA Rule 49 CFR Part 661.5 (optional)		

\*Data shown at nominal output power



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