

Green Motion DC EV Chargers

50–150 kW



Product highlights

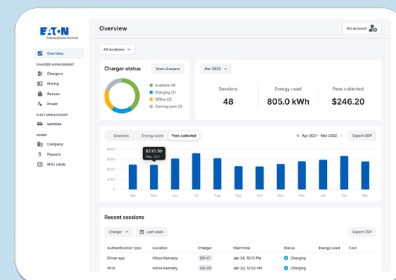
- Support current and future EVs with 200–1000 Vdc charging
- Small footprint at 150 kW
- Up to 300 A cables
- Supports OCPP 1.6j (Open Charge Point Protocol)
- Ethernet and 4G cellular connectivity
- Future ISO 15118 “plug and charge” support



Powering Business Worldwide

High-power fleet depot and industrial charging

- Green Motion 50–150 kW DC EV Chargers are the ideal solution for private fleet owners and facility managers in need of quick, reliable charging
- Each Green Motion DC EV Charger comes equipped with one or two CCS1 cables (up to 300 A); the charger provides full power to one connector and dynamically adjusts when both are used simultaneously
- Compact footprint provides installation flexibility in locations not designed with electric vehicles in mind
- Mission-critical support from Eaton service technicians ensures reliability and supports 98% uptime SLA



Charging Network Manager (CNM) cloud-based software

- **Intuitive dashboard** provides insight into charging locations
- **Custom reporting** provides information needed to meet utility subsidy programs
- **Dependable plug-and-play software** and hardware integration
- **Interoperable design** integrates with virtually any Open Charge Point Protocol (OCPP) compliant technology
- **Mobile access support**; browser compatible with no app download required

Technical specifications:

	GMDC150-CCSX2	GMDC150-CCS	GMDC125-CCSX2	GMDC100-CCSX2	GMDC75-CCSX2	GMDC50-CCSX2	GMDC50-CCS
General							
Product contents (Excluding packaging materials)	EV charger*1 CCS1 charging cable: 300 A *2	EV charger*1 CCS1 charging cable: 300 A*1	EV charger*1 CCS1 charging cable: 300 A*2	EV charger*1 CCS1 charging cable: 300 A*2	EV charger*1 CCS1 charging cable: 200 A*2	EV charger*1 CCS1 charging cable: 125 A*2	EV charger*1 CCS1 charging cable: 125 A*1
Elec input							
AC input voltage	3Ø 480 +10%/-15%	3Ø 480 +10%/-15%	3Ø 480 +10%/-15%	3Ø 480 +10%/-15%	3Ø 480 +10%/-15%	3Ø 480 +10%/-15%	3Ø 480 +10%/-15%
Input amp(s)	192	192	160	128	96	64	64
No. of phases	3	3	3	3	3	3	3
AC input frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
AC frequency range	±10%	±10%	±10%	±10%	±10%	±10%	±10%
AC input protection qty./type/rating	NFB EATON/NZMH2-A250-NA 3P 250 A 480 VAC IC:100 KA	NFB EATON/NZMH2-A250-NA 3P 250 A 480 VAC IC:100 KA	NFB EATON/NZMH2-A200-NA 3P 200 A 480 VAC IC:100 KA	NFB EATON/NZMH2-A160-NA 3P 160 A 480 VAC IC:100 KA	NFB EATON/NZMH2-A125-NA 3P 125 A 480 VAC IC:100 KA	NFB EATON/NZMH2-A100-NA 3P 100 A 480 VAC IC:100 KA	NFB EATON/NZMN2-A100-NA 3P 100 A 480 VAC IC:100 KA
AC input connection type (line cord/hard wire/etc)	3-phase grounded Wye, 3-wire + PE	3-phase grounded Wye, 3-wire + PE	3-phase grounded Wye, 3-wire + PE	3-Phase Grounded Wye, 3-Wire + PE	3-phase grounded Wye, 3-wire + PE	3-phase grounded Wye, 3-wire + PE	3-phase grounded Wye, 3-wire + PE
Input Current T.H.D. (At Full Load)	≤ 5%	≤ 5%	≤ 5%	≤ 5%	≤ 5%	≤ 5%	≤ 5%
Input current THD (at half load)	≤ 10%	≤ 10%	≤ 10%	≤ 10%	≤ 10%	≤ 10%	≤ 10%
Inrush current (A) when input circuit breaker is closed	268 A, 45.8µs	268 A, 45.8µs	268 A, 45.8µs	268A, 45.8µs	268A, 45.8µs	268A, 45.8µs	268A, 45.8µs
Inrush current (A) when AC contractor is closed	116 A, 365µs1	116 A, 365µs	116 A, 365µs	116A, 365µs	116A, 365µs	116A, 365µs	116A, 365µs
Input power Factor at full load	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Input power factor at half load	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Input voltage swell	120% for 5 cycles	120% for 5 cycles	120% for 5 cycles	120% for 5 cycles	120% for 5 cycles	120% for 5 cycles	120% for 5 cycles
Elec output							
DC output voltage	200 to 1000 VDC	200 to 1000 VDC	200 to 1000 VDC	200 to 1000 VDC	200 to 1000 VDC	200 to 1000 VDC	200 to 1000 VDC
DC output amps	12 to 375 A	12 to 300 A	10 to 312.5 A	8 to 250 A	6 to 187.5 A	6 to 125 A	6 to 125 A
Output power rating	150 kW	150 kW	125 kW	100 kW	75 kW	50 kW	50 kW
Metering	+/- 2.5% accurate metering	+/- 2.5% accurate metering	+/- 2.5% accurate metering	+/- 2.5% accurate metering	+/- 2.5% accurate metering	+/- 2.5% accurate metering	+/- 2.5% accurate metering
Connector cooling method	Air-cool	Air-cool	Air-cool	Air-cool	Air-cool	Air-cool	Air-cool
Short circuit protection Y/N (with details)	Y, SCCR=100 kA	Y, SCCR=100 kA	Y, SCCR=100 kA	Y, SCCR=100 kA	Y, SCCR=100 kA	Y, SCCR=100 kA	Y, SCCR=100 kA
Simultaneous charges	2 (Single connector can support full output power rating)	1	2	2	2	2	1
DC charger power output	150 kW	150 kW	125 kW	100 kW	75 kW	50 kW	50 kW
Single connector current limit	CCS1: 300A	CCS1: 300 A	CCS1: 300 A	CCS1: 250 A	CCS1: 185 A	CCS1: 125 A	CCS1: 125 A
Operation							
Efficiency (full load)	> 94%	> 94%	> 94%	> 94%	> 94%	> 94%	> 94%
Efficiency (half load)	≥ 92%	≥ 92%	≥ 92%	≥ 92%	≥ 92%	≥ 92%	≥ 92%
Bidirectional	No	No	No	No	No	No	No
Surge protection (joules) – detail	IEEE C62.41 Category B3/C1	IEEE C62.41 Category B3/C1	IEEE C62.41 Category B3/C1	IEEE C62.41 Category B3/C1	IEEE C62.41 Category B3/C1	IEEE C62.41 Category B3/C1	IEEE C62.41 Category B3/C1
Remote upgrade	Yes, OTA	Yes, OTA	Yes, OTA	Yes, OTA	Yes, OTA	Yes, OTA	Yes, OTA

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Indicators and switches							
Switch functions (number and desc)	1 E-stop	1 E-stop	1 E-stop	1 E-stop	1 E-etop	1 E-Stop	1 E-Stop
LCD display	7" touch screen ddisplay	7" touch screen display	7" touch screen display	7" touch screen display	7" touch screen display	7" Touch Screen Display	7" Touch Screen Display
LCD display languages	English, Spanish, French	English, Spanish, French	English, Spanish, French	English, Spanish, French	English, Spanish, French	English, Spanish, French	English, Spanish, French
Alarms/faults (function)	Charging status indicator	Charging status Indicator	Charging status indicator	Charging status indicator	Charging status Indicator	Charging status Indicator	Charging status Indicator
Status indicator	LED status bar One below LCD and one above each connector. Breathing effect with charging.	LED status bar One below LCD and one above each connector. Breathing effect with charging.	LED Status bar One below LCD and one above each connector. Breathing effect with charging.	LED status bar One below LCD and one above each connector. Breathing effect with charging.	LEDstatus bar One below LCD and one above each connector. Breathing effect with charging.	LED Status bar One below LCD and one above each connector. Breathing effect with charging.	LED Status bar One below LCD and one above each connector. Breathing effect with charging.
Communication							
Charging protocol	CCS (see 'Other certifications' for protocol standards)	CCS (see 'Other certifications' for protocol standards)	CCS (see 'Other Certifications' for protocol standards)	CCS (see 'Other certifications' for protocol standards)	CCS (see 'Other certifications' for protocol standards)	CCS (see 'Other Certifications' for protocol standards)	CCS (see 'Other Certifications' for protocol standards)
Communication protocol	OCPP1.6J	OCPP1.6J	OCPP1.6J	OCPP1.6J	OCPP1.6J	OCPP1.6J	OCPP1.6J
User interface and control							
User access control	RFID, QR code	RFID, QR code	RFID, QR Code	RFID, QR code	RFID, QR code	RFID, QR code	RFID, QR code
Network interface	Ethernet; cellular (4G LTE: AT&T, T-Mobile, Verizon)	Ethernet; cellular (4G LTE: AT&T, T-Mobile, Verizon)	Ethernet; Cellular (4G LTE: AT&T, T-Mobile, Verizon)	Ethernet; cellular (4G LTE: AT&T, T-Mobile, Verizon)	Ethernet; cellular (4G LTE: AT&T, T-Mobile, Verizon)	Ethernet; cellular (4G LTE: AT&T, T-Mobile, Verizon)	Ethernet; cellular (4G LTE: AT&T, T-Mobile, Verizon)
User interface	Charging status Indicator, 7" touch screen display	Charging status Indicator, 7" touch screen display	Charging status Indicator, 7" Touch Screen Display	Charging status Indicator, 7" touch screen display	Charging status Indicator, 7" Touch Screen Display	Charging status indicator, 7" touch screen display	Charging status Indicator, 7" touch screen display
Environment							
Audible noise	<70dB @1m	<70dB @1m	<70dB @1m	<70dB @1m	<70dB @1m	<70dB @1m	<70dB @1m
Humidity	0 to 95% relative humidity, non-condensing	0 to 95% relative humidity, non-condensing	0 to 95% Relative Humidity, Non-Condensing	0 to 95% relative humidity, non-condensing	0 to 95% relative humidity, non-condensing	0 to 95% relative humidity, non-condensing	0 to 95% relative humidity, non-condensing
Storage temperature	-40 to +70 °C	-40 to +70 °C	-40 to +70 °C	-40 to +70 °C	-40 to +70 °C	-40 to +70 °C	-40 to +70 °C
Operating temperature	-35 to +45 °C 55 °C with derating	-35 to +45 °C 55 °C with derating	-35 to +50 °C 55 °C with derating	-35 to +50 °C 55 °C with derating	-35 to +50 °C 55 °C with derating	-35 to +50 °C 55 °C with derating	-35 to +50 °C 55 °C with derating
Operating elevation	Up to 2000m	Up to 2000m	Up to 2000m	Up to 2000m	Up to 2000m	Up to 2000m	Up to 2000m
Conformal coating	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Physical info							
Unit height mm	1823	1823	1823	1823	1823	1823	1823
Unit width mm	834	834	834	834	834	834	834
Unit depth mm	780	780	780	780	780	780	780
Unit weight kgs	425	419	403	388	375	355	355
Output cable length (ft) (measured at exiting from enclosure)	CCS1: 24.6' (7.5m)	CCS1: 24.6' (7.5m)	CCS1: 24.6' (7.5m)	CCS1: 24.6' (7.5m)	CCS1: 24.6' (7.5m)	CCS1: 24.6' (7.5m)	CCS1: 24.6' (7.5m)
Mounting options	Floor mount with concrete anchor points	Floor mount with concrete anchor points	Floor mount with concrete anchor points	Floor mount with concrete anchor points	Floor mount with concrete anchor points	Floor mount with concrete anchor points	Floor mount with Concrete anchor points

Technical specifications:

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Agency							
Approving agency	UL	UL	UL	UL	UL	UL	UL
Safety standards (U.S.)	UL 2202, UL 2231-1, UL 2231-2	UL 2202, UL 2231-1, UL 2231-2	UL 2202, UL 2231-1, UL 2231-2	UL 2202, UL 2231-1, UL 2231-2	UL 2202, UL 2231-1, UL 2231-2	UL 2202, UL 2231-1, UL 2231-2	UL 2202, UL 2231-1, UL 2231-2
FCC/ICES compliant	CLASS A; 47 CFR FCC PART 15 SUBPART B:2018; ICES-003:2016	CLASS A; 47 CFR FCC PART 15 SUBPART B:2018; ICES-003:2016	CLASS A; 47 CFR FCC PART 15 SUBPART B:2018; ICES-003:2016	CLASS A; 47 CFR FCC PART 15 SUBPART B:2018; ICES-003:2016	CLASS A; 47 CFR FCC PART 15 SUBPART B:2018; ICES-003:2016	CLASS A; 47 CFR FCC PART 15 SUBPART B:2018; ICES-003:2016	CLASS A; 47 CFR FCC PART 15 SUBPART B:2018; ICES-003:2016
EMI/EMC standards	UL 2231-2	UL 2231-2	UL 2231-2	UL 2231-2	UL 2231-2	UL 2231-2	UL 2231-2
Energy Star compliant (Y/N)	Y	Y	Y	Y	Y	Y	Y
Salt spray	IEC 60068-2-11	IEC 60068-2-11	IEC 60068-2-11	IEC 60068-2-11	IEC 60068-2-11	IEC 60068-2-11	IEC 60068-2-11
Ingress protection	IP54, NEMA-3R	IP54, NEMA-3R	IP54, NEMA-3R	IP54, NEMA-3R	IP54, NEMA-3R	IP54, NEMA-3R	IP54, NEMA-3R
Seismic rating	AC156 or equivalent	AC156 or equivalent	AC156 or equivalent	AC156 or equivalent	AC156 or equivalent	AC156 or equivalent	AC156 or equivalent
Packaging vibration/drop/shock	ISTA-3B	ISTA-3B	ISTA-3B	ISTA-3B	ISTA-3B	ISTA-3B	ISTA-3B
RoHS	Yes	Yes	Yes	Yes	Yes	Yes	Yes
TAA compliant	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Other certifications	Eaton Cybersecurity Standard, ISO/IEC 15118 ("Plug and Charge" portion only) DIN 70121 (SAE J2847/2) DIN 70122 (Conformance Tests to DIN 70121, no certification) SAE J1772 OCPP1.6j subset certificate OCPP1.6j security certificate	Eaton Cybersecurity Standard, ISO/IEC 15118 ("Plug and Charge" portion only) DIN 70121 (SAE J2847/2) DIN 70122 (Conformance Tests to DIN 70121, no certification) SAE J1772 OCPP1.6j subset certificate OCPP1.6j security certificate	Eaton Cybersecurity Standard, ISO/IEC 15118 ("Plug and Charge" portion only) DIN 70121 (SAE J2847/2) DIN 70122 (Conformance Tests to DIN 70121, no certification) SAE J1772 OCPP1.6j subset certificate OCPP1.6j security certificate	Eaton Cybersecurity Standard, ISO/IEC 15118 ("Plug and Charge" portion only) DIN 70121 (SAE J2847/2) DIN 70122 (Conformance Tests to DIN 70121, no certification) SAE J1772 OCPP1.6j subset certificate OCPP1.6j security certificate	Eaton Cybersecurity Standard, ISO/IEC 15118 ("Plug and Charge" portion only) DIN 70121 (SAE J2847/2) DIN 70122 (Conformance Tests to DIN 70121, no certification) SAE J1772 OCPP1.6j subset certificate OCPP1.6j security certificate	Eaton Cybersecurity Standard, ISO/IEC 15118 ("Plug and Charge" portion only) DIN 70121 (SAE J2847/2) DIN 70122 (Conformance Tests to DIN 70121, no certification) SAE J1772 OCPP1.6j subset certificate OCPP1.6j security certificate	Eaton Cybersecurity Standard, ISO/IEC 15118 ("Plug and Charge" portion only) DIN 70121 (SAE J2847/2) DIN 70122 (Conformance Tests to DIN 70121, no certification) SAE J1772 OCPP1.6j subset certificate OCPP1.6j security certificate



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