

“Beyond Space. Beyond Charging.”

ENERCAMP EV is an on-demand charging
platform / hardware / service

ENERCAMP



ENERCAMP

ENERCAMP = [ENERgy + baseCAMP]

ENERCAMP provide products and services for everyone to press on to their lives more easily and conveniently.

ENERCAMP is an abbreviation of [Energy Basecamp], A motto that can provide modern people with the benefits of a smart life anywhere.

Our company is leaping from electronic smart battery charger to power pack, ECO & renewable energy.

Through this way, we will become a high-level company with constant customer impressions by improving the quality of life of our customers and building a smart service network.

Footprint

- 2024.01 CES 2024 M2, V2, EO1 launched
- 2023.11 CES 2024 Innovation Award in the Accessibility & Aging Tech category
- 2023.07 Attracted investment of US \$ 200,000 (Simsan Ventures)
- 2023.04 Attracted investment of US \$ 1,200,000 (Muir Woods Ventures, Blue Point Partners)
- 2023.01 CES 2023 V1 launched
- 2022.01 CES 2022 M1 launched
- 2021.01 Participation in CES 2021 online booth
- 2020.01 CES 2020 Power Station E1 (500 Wh) launched
- 2019.06 Participated in CES Asia
- 2019.01 CES 2019 Power Station E1 & E3 (500 Wh) prototype launched
- 2018.11 Attracted US \$ 700,000 in investment in November 2018 (Credit Guarantee Fund, Small and Medium Business Corporation)
- 2018.07 Amazon Deal of the day Enercamp Jump Starter J20C 2,000 units (US \$ 157,000) sold out
- 2018.06 Establishment of corporate research center
- 2018.03 Credit Guarantee Fund 2030 Startup Guarantee US \$ 1,200,000
- 2018.02 Wadiz achieved 115% funding of US \$ 72,000
- 2017.06 Venture business certification
- 2017.01 Establishment of Enercamp Co., Ltd.

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“ Beyond Space,
Beyond Charging. ”

High-output battery and safety device with next-gen safety technology [fire prevention]

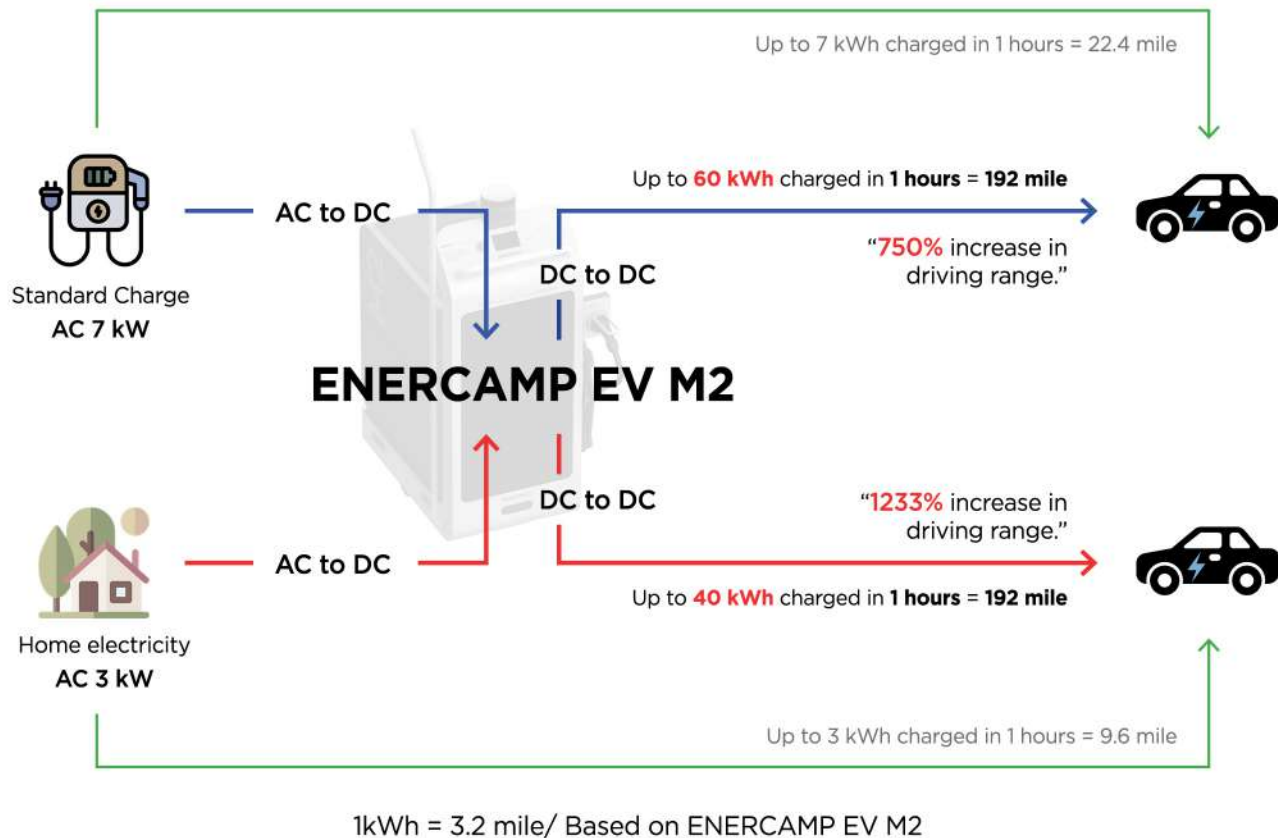
Enercamp battery module solution with new/2nd use battery with various safety technology applied can be used for various affiliated services of our partners.

Owned related patents

- Fire Extinguishing Film for Batteries are used to suppress fire early
- Simultaneous battery charging and discharging patent (No. 10-2483972)
- Battery reverse-charging prevention patent (No. 10-0750197)
- Battery, Inverter, Converter Modulization patent (No. 10-2021-0172732)
- Smart Battery Charging Patent (No. 10-2154614, No. 10-2351648, No. 10-2021-0172419)
- Safety for Battery Charging Patent (No. 10-1353953, No. 10-1441001)

Power boosting battery system

The Power Boosting Battery System significantly enhances charging station output when connected to the ENERCAMP EV, enabling rapid charging even in standard household settings.



“Enercamp EV’s mobile electric vehicle charging system is based on exchangeable modular batteries and is being commercialized under the name ‘MOVE’.”

M (Mobility) Series

[Mobility]

The M series is a cart-type mobile EV charger and is divided into M1, M2, and M3 depending on the capacity and charging speed of the modular battery.

M1 is equipped with four modular batteries and is capable of charging.

As commercial power is provided, it can be used for e-mobility charging and camping.

EO (E-Station & Outbox) Stations

[E-Station & Outbox]

The EO stations can be used to store and recharge the M series and as a separate charging station for modular batteries.

Additionally, renewable energy can be stored and can also be used as a DR (Demand Response) program.

V (Vehicle) Series

[Vehicle]

The V series is a vehicle-mounted product that provides a charging service that goes to the customer’s desired location and provides commercial power so it can be used for e-mobility charging and camping.

M Series

M (Mobility) Series

The M series is a cart-type mobile EV charger and is divided into M1, M2, and M3 depending on the capacity and charging speed of the modular battery.

M1 is equipped with four modular batteries and is capable of charging. As commercial power is provided, it can be used for e-mobility charging and camping purposes.



High-output and Safe Battery

Enercamp battery module solution with various safety technologies applied (fire prevention)



Swappable Battery Solutions

Continuous charging by swapping with a charged battery without having to wait for recharging



Portable Charging Cart

Drag and Plug In, Enercamp EV starts charging

M1

“M1 is a partially public battery charger that can be installed outdoors.”



Battery swapping allows immediate use without recharging.

Can be used after moving anywhere, regardless of parking location.



Power Output
Max 7 kW



Weight
209 lbs



Miles
22 miles

M1 Specification

Charging type

AC Level 2 : Max 7 kW (For one-time use about 7 kWh)

Input type

58 VDC Modular battery pack

Output

220 V, 32 A, Max 7 kW

Charging time

50 min

Recharge time

O1 : 2 hours
EO1 : Available immediately

Environmental conditions

Operating temperature : -13 °F(-25 °C) - 140 °F(60 °C)
Storage temperature : -22 °F(-30 °C) - 149 °F(65 °C)

Operation screen

LCD Touch Screen

User authentication

Application

Control method

Controlled by constant voltage(CV), constant current(CC)

Protection function

Overvoltage, overcurrent, overtemperature, reverse current prevention, surge protection, earth leakage blocking, fusion detection

Installation location

Government offices, apartments, commercial facility parking lots, etc.

Scan the QR code to view detailed specifications.



M2

M2 is an autonomous driving-based mobile charger that can be called and used anywhere, regardless of parking location.

Advertising promotion and guidance using a large LED screen.



“M2 is an autonomous driving-based mobile charger.”



Power Output
60 kW



Weight
661 lbs



Miles
60 miles



M2 Specification

Charging type

DC Level 3 : up to 60 kW (For one-time use about 20 kWh)

Input type

700 VDC Modular battery pack

Output

300 - 800 V, Max 80 A, Max 60 kW

Charging time

20 min

Recharge time

Dedicated charger : 1 hour
EO1 : Available immediately

Environmental conditions

Operating temperature : -13 °F(-25 °C) - 140 °F(60 °C)
Storage temperature : -22 °F(-30 °C) - 149 °F(65 °C)

Operation screen

LED Touch Screen

User authentication

Application

Control method

Controlled by constant voltage(CV), constant current(CC)

Protection function

Overvoltage, overcurrent, overtemperature, reverse current prevention, surge protection, earth leakage blocking, fusion detection

Installation location

Government offices, apartments, commercial facility parking lots, etc.

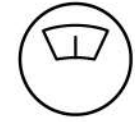
Scan the QR code to view detailed specifications.



“The M3 shows the evolution of the M series.”



Power Output
120 kW



Weight
1,322 lbs



Miles
120 miles



The M3 can fast charge to 80% in 25 minutes.



M3 Specification

Charging type

DC Level 3 : up to 120 kW (For one-time use about 50 kWh)

Input type

800 VDC Modular battery pack

Output

300-1000 V, Max 150 A, Max 120 kW

Charging time

25 min

Recharge time

Dedicated charger : 2 hours 30 minutes
EO1 : Available immediately

Environmental conditions

Operating temperature : -13 °F(-25 °C) - 140 °F(60 °C)
Storage temperature : -22 °F(-30 °C) - 149 °F(65 °C)

Operation screen

LCD Touch Screen

User authentication

Application

Control method

Controlled by constant voltage(CV), constant current(CC)

Protection function

Overvoltage, overcurrent, overtemperature, reverse current prevention, surge protection, earth leakage blocking, fusion detection

Installation location

Government offices, apartments, commercial facility parking lots, etc.

Scan the QR code to view detailed specifications.



M1

Power output

Level 2 : Max 7 kW

Battery module

basic 4 modules
Samsung SDI battery, 7.168 kWh

Basic dedicated charger

Input : 110 VAC/ 220 VAC, 50 Hz/ 60 Hz
Output : 58.5 V/ 40 A/ Max 2.4 kW

Upgrade options

Input : 110 VAC/ 220 VAC, 50 Hz/ 60 Hz
Output : 58.5 V/ 60 A/ up to 4 kW



M2

Power output

Level 3 : up to 60 kW

Battery module

basic 12 modules
Samsung SDI battery, 21.504 kWh

Basic dedicated charger

Input : 110 VAC/ 220 VAC, 50 Hz/ 60 Hz
Output : 58.5 V/ 40 A/ Max 2.4 kW

Upgrade options

Input : 110 VAC/ 220 VAC, 50 Hz/ 60 Hz
Output : 58.5 V/ 60 A/ up to 4 kW



M3

Power output

Level 3 : up to 120 kW

Battery module

basic 28 modules
Samsung SDI battery, 50.176 kWh

Basic dedicated charger

Input : 110 VAC/ 220 VAC, 50 Hz/ 60 Hz
Output : 58.5 V/ 40 A/ Max 2.4 kW

Upgrade options

Input : 110 VAC/ 220 VAC, 50 Hz/ 60 Hz
Output : 58.5 V/ 60 A/ up to 4 kW

EO Station

EO Station (E-Station & Outbox)

The EO stations can be used to store and recharge the M series and as a separate charging station for modular batteries.

Additionally, renewable energy can be stored and can also be used as a DR (Demand Response) program.



High-output and Safe Battery

Enercamp battery module solution with various safety technologies applied (fire prevention)



Swapable Battery Solutions

Continuous charging by swapping with a charged battery without having to wait for recharging



Battery Charging Station

M1 can be stored and charged and EV charging begins simply by dragging and plugging in an M1.

“E1 is an exchangeable battery charging station.”

E1 is an exchangeable battery charging station that can simultaneously charge 8 basic slots and can be used for expansion.

DR response possible in conjunction with new and renewable energy.

Efficient service can be provided through installation and operation as a base.



Charging speed
Max 15 kW



Weight
551 lbs



Capacity
14,336 Wh



Charging slot
8 Slot

E1 Specification

Charging type

DC charger (2 kW @ each slot)

Input type

Wire : Single pole, AC 110 V/ 220 V, 50 Hz/ 60 Hz

Output

58.8 VDC, Max 30 A, Max 2 kW(each slot)

Charging time

1 hour

Environmental conditions

Operating temperature : -13 °F(-25 °C) - 140 °F(60 °C)
Storage temperature : -22 °F(-30 °C) - 149 °F(65 °C)

Operation screen

LCD Touch Screen

User authentication

Application / RF Card

Control method

Controlled by constant voltage(CV), constant current(CC)

Protection function

Overvoltage, overcurrent, overtemperature, reverse current prevention, surge protection, earth leakage blocking, fusion detection

Installation location

Government offices, apartments, commercial facility parking lots, etc.

Scan the QR code to view detailed specifications.



The O1 stores and recharges the M1.

As a hybrid model, the O1 can be installed with the M1 and a stationary charger on top. It can also be used independently to charge electric vehicles.

“O1 is a charging storage box exclusively for mobile chargers.”



Charging speed
Max 4 kW



Weight
551 lbs



Function
Charging & Locking



Charging slot
1 Bay(M1)

O1 Specification

Charging type

DC charger (4 kW)

Input type

Wire : Single pole, AC 110 V/ 220 V, 50 Hz/ 60 Hz

Output

58.8 VDC, Max 60 A, Max 4 kW

Charging time

2 hours

Hybrid stationary slow charger (AC) (optional)

220 V, 32 A, Max 7 kW

Environmental conditions

Operating temperature : -13 °F(-25 °C) - 140 °F(60 °C)
Storage temperature : -22 °F(-30 °C) - 149 °F(65 °C)

Operation screen

LCD Touch Screen

User authentication

Application

Control method

Controlled by constant voltage(CV), constant current(CC)

Protection function

Overvoltage, overcurrent, overtemperature, reverse current prevention, surge protection, earth leakage blocking, fusion detection

Installation location

Government offices, apartments, commercial facility parking lots, etc.

Scan the QR code to view detailed specifications.



E01

“E01,
an exchangeable
battery
charging
station.”

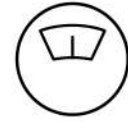


E01, an exchangeable battery charging station, is a base-type exchangeable battery charging station that combines E1 and O1.

It can be operated simultaneously with a portable AC charger, and advertising and usage guidance can be provided using the large LCD screen.



Charging speed
Max 15 kW



Weight
1,102 lbs



Capacity
7,168 Wh
+7,168 Wh



Charging slot
4 Slot(Batt)
+ 1 Bay(M1)

E01 Specification

Charging type

Battery module charging station

Input type

380 VAC

Output

Battery 4 slots : 58.8 VDC, 30 A, 2 kW
M1 1 slot : 58.8 V, 60 A, 4 kW

Charging capacity

14 kWh(All slot)

Charging time

2 hours

Environmental conditions

Operating temperature : -13 °F(-25 °C) - 140 °F(60 °C)
Storage temperature : -22 °F(-30 °C) - 149 °F(65 °C)

Operation screen

LCD Touch Screen

User authentication

Application / RF Card

Control method

Controlled by constant voltage(CV), constant current(CC)

Protection function

Overvoltage, overcurrent, overtemperature, reverse current prevention, surge protection, earth leakage blocking, fusion detection

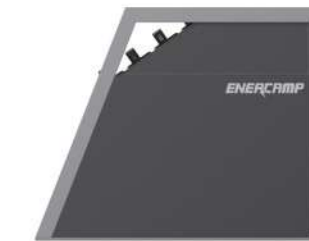
Installation location

Government offices, apartments, commercial facility parking lots, etc.

Scan the QR code to view detailed specifications.



Applications



E1

Power output

Max 15 kW

Battery module

basic 8 modules
Samsung SDI battery, 14.33 kWh

Basic dedicated charger

Input : 110 VAC/ 220 VAC, 50 Hz/ 60 Hz
Output(each slot) :
58.5 V/ 30 A/ Max 2 kW

Upgrade options

(Basic Charger)
Input : 110 VAC/ 220 VAC, 50 Hz/ 60 Hz
Output : 58.5 V/ 60 A/ Max 4 kW
(Battery Slot)
add 4 slot

O1

Power output

Max 4 kW

Battery module

1 bay (for M1)
Samsung SDI battery, 7.168 kWh

Basic dedicated charger

Input : 110 VAC/ 220 VAC, 50 Hz/ 60 Hz
Output : 58.5 V/ 60 A/ Max 4 kW

Upgrade options

(hybrid Standard AC Charger)
Fixed type 7 kW AC Charger

E01

Power output

Max 15 kW (@ each slot :
Max 2 kW, @ bay : Max 4 kW)

Battery module

basic 4 modules, 1 bay
Samsung SDI battery, 14.33 kWh

Basic dedicated charger

Input : 110 VAC/ 220 VAC, 50 Hz/ 60 Hz
Output(each slot) :
58.5 V/ 40 A/Max 2.4 kW
Output(bay) : 58.5 V/ 60 A/ Max 4 kW

Upgrade options

(Basic Charger)
Input : 110 VAC/ 220 VAC, 50 Hz/ 60 Hz
Output(each slot) :
58.5 V/ 60 A/ Max 4 kW

V Series

V (Vehicle-mounted) Series

The V series is a vehicle-mounted product that provides a charging service that goes to the customer's desired location and provides commercial power so it can be used for e-mobility charging and camping purposes.



High-output and Safe Battery

Enercamp battery module solution with various safety technologies applied (fire prevention)



Swapable Battery Solutions

Continuous charging by swapping with a charged battery without having to wait for recharging



Vehicle-mounted charger

On-demand charging service

V1

“V1 is a mobile, pick-up, charger that allows charging service calls within a service radius(6miles).”

As a vehicle-mounted charger, it can be mounted on most vehicles, from small to large vehicles.



Power Output
Max 11 kW



Weight
33 lbs



Miles
20 miles



Capacity expansion
20 kWh

V1 Specification

Charging type

AC Level 2 : Max 7 kW (For one-time use about 7 kWh)

Input type

58 V DC Modular battery pack

Output

220 V, 32 A, Max 7 kW

Charging time

50 min

Recharge time

Own charger : 2 hours 30 minutes
EO1 : Available immediately

Environmental conditions

Operating temperature : -13 °F(-25 °C) - 140 °F(60 °C)
Storage temperature : -22 °F(-30 °C) - 149 °F(65 °C)

Operation screen

LCD Touch Screen

User authentication

Application

Control method

Controlled by constant voltage(CV), constant current(CC)

Protection function

Overvoltage, overcurrent, overtemperature, reverse current prevention, surge protection, earth leakage blocking, fusion detection

How to install

Installed in vehicles such as Ray, Soul, Ioniq, etc.

Scan the QR code to view detailed specifications.



V2

“V2 is a call-type charger that can be used after calling.”

V2 is a call-type charger that can be used after calling from anywhere, regardless of location.

It is a rechargeable type and can be used immediately by battery swapping without recharging.



Power Output
Max 60 kW



Weight
771 lbs



Miles
120 miles



Capacity expansion
80 kWh

V2 Specification

Charging type

DC Level 3 : up to 60 kW (For one-time use about 20 kWh)

Input type

700 V DC Modular battery pack

Output

300 - 800 V, Max 80 A, Max 60 kW

Charging time

20 min

Recharge time

Dedicated charger : 1 hour
EO1 : Available immediately

Environmental conditions

Operating temperature : -13 °F(-25 °C) - 140 °F(60 °C)
Storage temperature : -22 °F(-30 °C) - 149 °F(65 °C)

Operation screen

LCD Touch Screen

User authentication

Application

Control method

Controlled by constant voltage(CV), constant current(CC)

Protection function

Overvoltage, overcurrent, overtemperature, reverse current prevention, surge protection, earth leakage blocking, fusion detection

How to install

Installed in vehicles such as Ray, Soul, Ioniq, etc.

Scan the QR code to view detailed specifications.



Awards, Patents and Government's support

Awards

- 2023.11 Awarded CES2024 Innovation Award in the Accessibility & Aging Tech category
- 2022.12 Awarded Daegu Metropolitan City ICT Excellent Company Citation
- 2021.12 Awarded Daegu Techno Park Local economy revitalization commendation
- 2021.11 Designated as Daegu Star Venture Company by Daegu Creative Economy Innovation Center
- 2021.09 Awarded the 7th Startup Nextcon Excellent Pitching Company Grand Prize
- 2020.09 Awarded Ministry of Science and ICT Research Institute Development Citation

Patents

- 2023.8 METHOD OF CONTROLLING CHARGING AND DISCHARGING OF POWER STATION EQUIPPED WITH MULTIPLE BATTERY PACKS / 11,742,675 (KR,US)
- 2022.09 SMART BALANCING ENERGY CHARGING CONTROL SYSTEM / 11,444,467 (KR,US,JP,AU)
- 2021.12 PORTABLE ENERGY STORAGE SYSTEM FOR RESCUE SYSTEM / 11,197,144 (KR,US)
- 2021.10 ENERGY LEVEL CONVERSION CIRCUIT FOR PORTABLE ENERGY STORAGE APPARATUS / 11,152,801 (KR,US,CN,JP)

Registration KR : 13 / US : 4 / JP : 3 / CN : 1 / AU : 1
 Application KR : 4 / US : 2 / JP : 1 / CN : 3 / EU : 4

Investors



Partners

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Accessibility and Usability

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