



Ultra-Fast Charging for a Zero-Carbon Transport Future

Spyros Kalos

**EV Charging Network & Smart PV
Business Development
Southeast Europe**



Huawei: Leading provider of ICT infrastructure and smart devices



Vision and mission

Bring digital to every person, home and organization for a fully connected, intelligent world



208,000

employees



54%

of employees work in R&D



170+

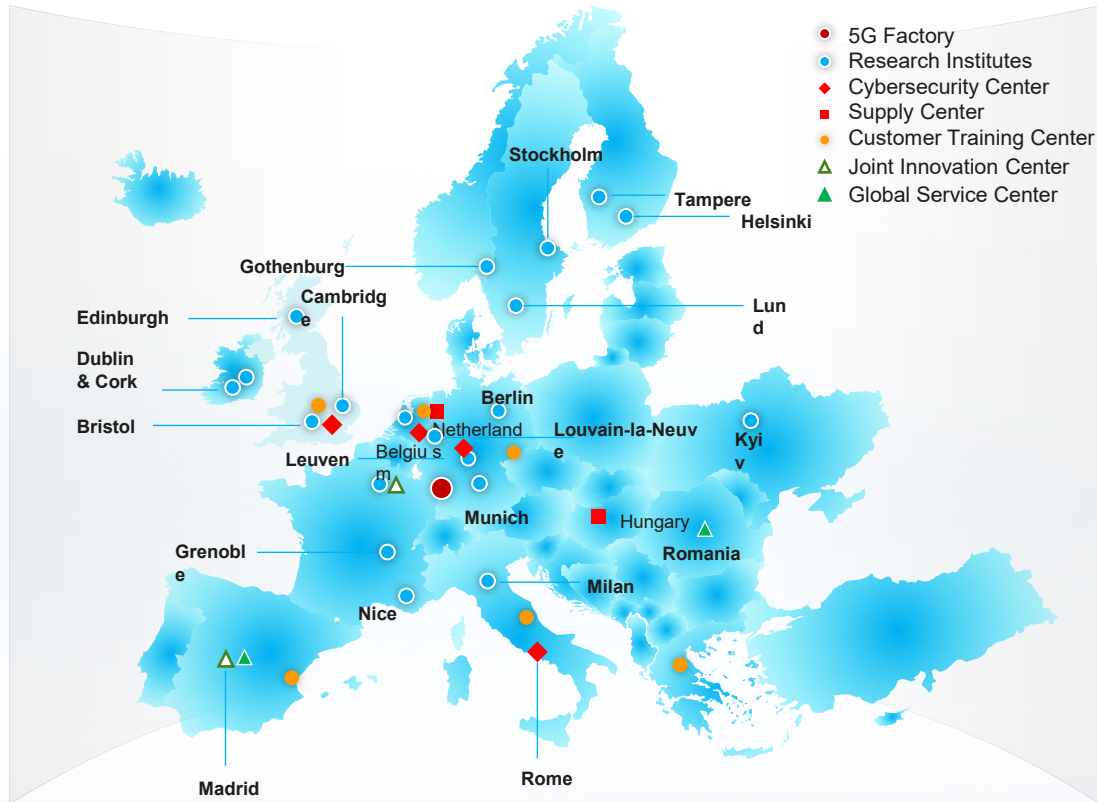
countries and regions



3 bn+

people served

In Europe, For Europe



13,000+

Employees in Europe

3,400+

Researchers in 27 R&D centers in 13 countries

230+

Partnership agreements with universities and institutes

10,000+

Patents at the European Patents Office (EPO)

(production workshop, automated warehouse, office area, canteen, exhibition hall, parking lot, etc.)

- Investment: **€200M**
- Area: **80,000m²**
- Capacity: **oriented to Europe**
- Operation starts in **2026 Q1**



Inverter production plant in Koppelberg, Hungary, which will be over 30,000m².



Supply Centers

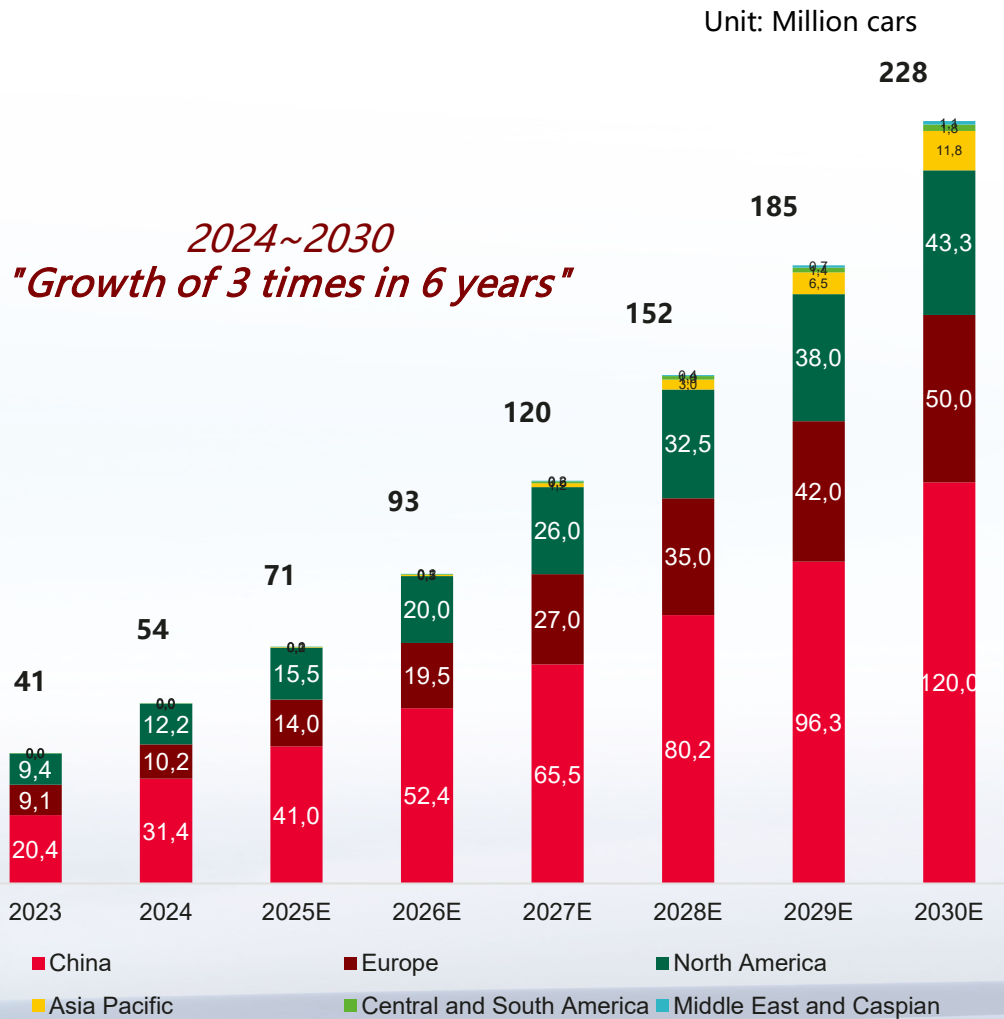
Source: The economic contribution of Huawei in Europe in the year 2021



Trends and Challenges

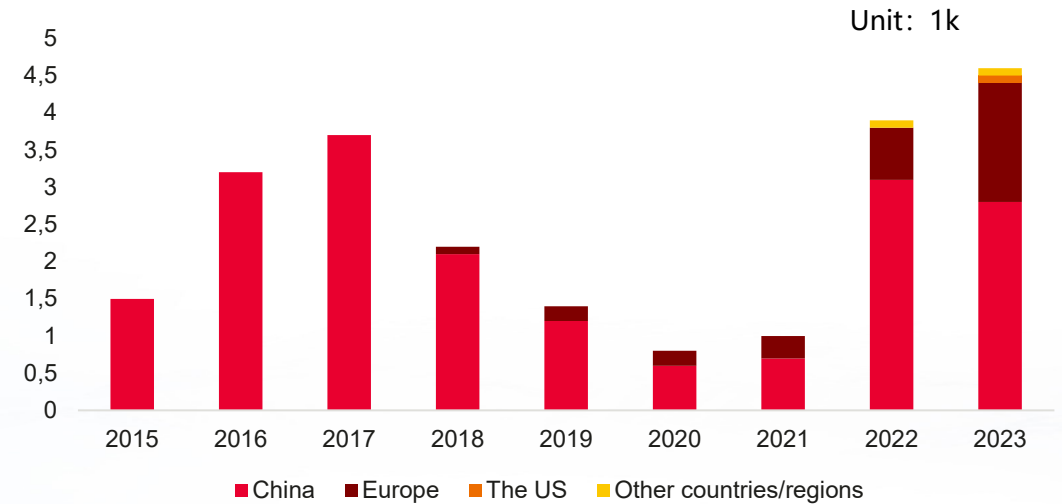
New electric vehicles and EV Trucks

NEV@2030: 228Million, CN52%, EU22%

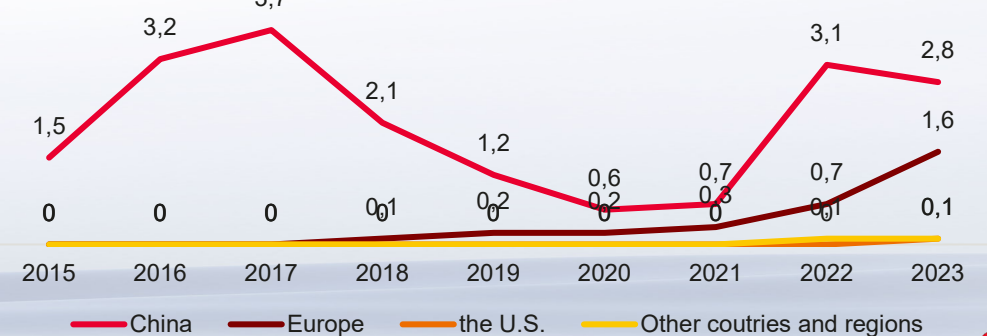


Source: IEA

Global EV truck registration number, 2015-2023

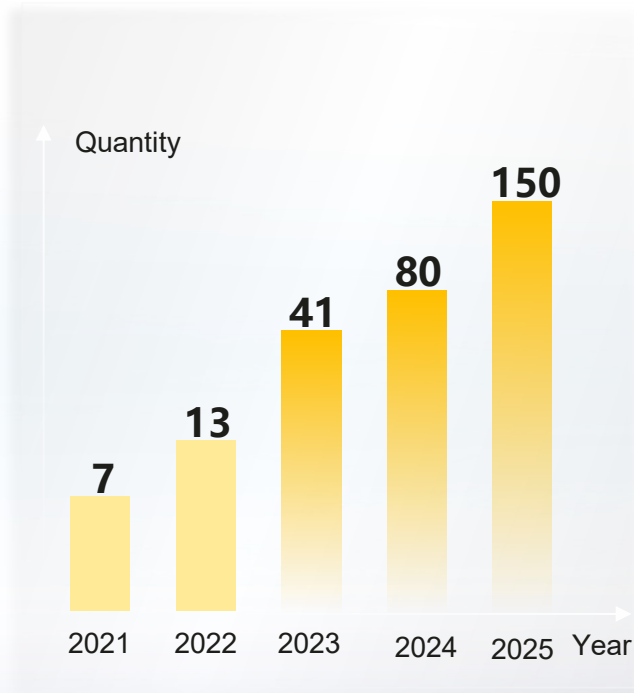


Electric trucks account for truck market share worldwide (%), 2015-2023



Types of Evs and number of charging connector is booming

OEMs Accelerate Launching the Ultra-fast Charging EVs

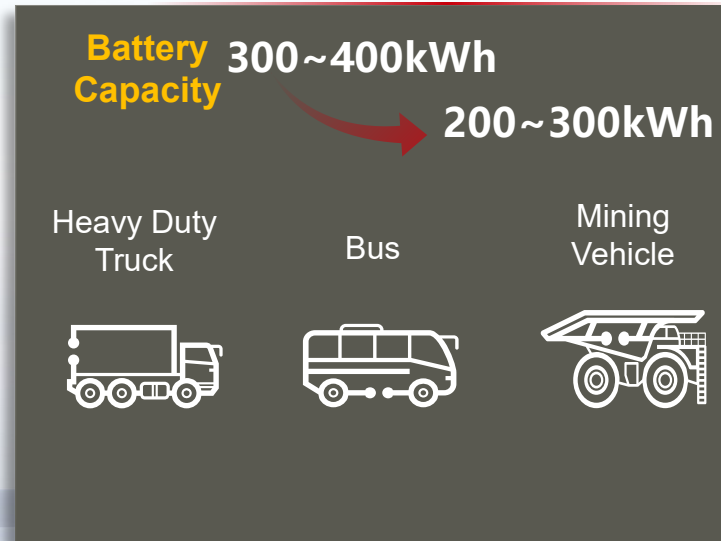


60+ Models with 800V High-Voltage Ultra-Fast Charging Platform in Guangzhou Car Show

High-Voltage System Extends to Compact EVs Due to Cost Reduction

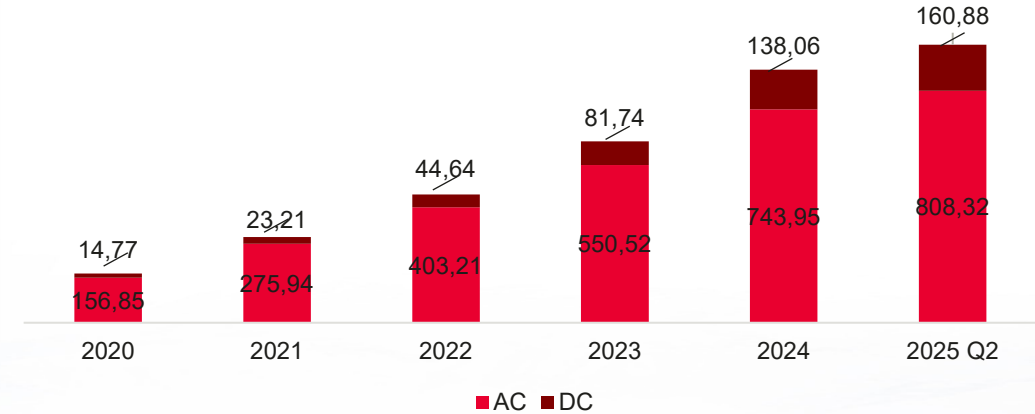


High-Voltage System Extends to Commercial EVs, Reducing Battery Cost

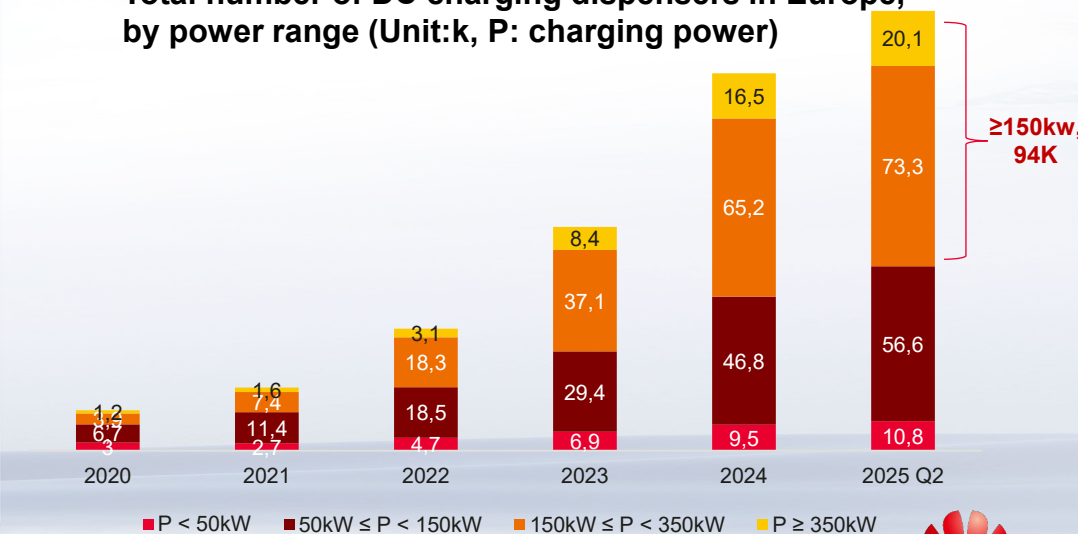


≥150kW charging dispensers towards 100K

Total number of charging dispensers in EU (Unit:k)



Total number of DC charging dispensers in Europe, by power range (Unit:k, P: charging power)



Source: European Commission

Fusion Charge DC Liquid Solution

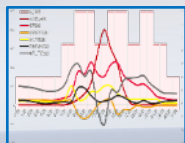
Business Compatibility: support PV, ESS and Unified operation & management platform

End to end solution managed by one cloud platform: ultra safety, better revenue, high quality

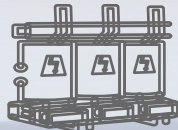


4 Business models

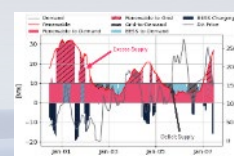
Electricity price optimization



Site power addition



Input power self-adjustment



Maximum solar self-usage



Unified platform architecture, One Investment for different scenarios and EV models

One investment



Return 1:
Passenger EV charging



Return 2:
Heavy-duty truck charging



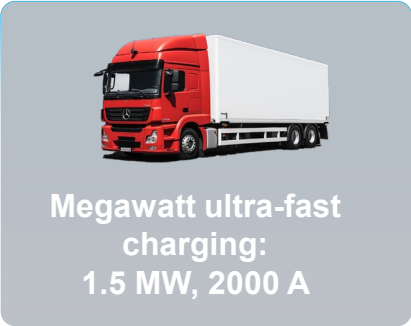
Return 3:
Megawatt charging



Ultra-fast
charging: 480 kW,
500 A



Dual-connector
charging: 720 kW,
1200 A



Megawatt ultra-fast
charging:
1.5 MW, 2000 A



DS720-720LEUA4: 600kW+720kW
DS720-720LEUA4: 240kW+360kW

Applicable to multiple scenarios

Scenario 1: **Enroute**



Highway service area



City Public

Scenario Features : On the go, charging time 10-30min,
typical scenarios of ultra-fast charging

Scenario 2: **Fleet**



Logistics Park



Bus



Mining area



Port

Scenario Features: Dedicated vehicle model, Charging time 1~2 hours

Scenario 3: **Destination**



Shopping Mall



Campus



Residential area

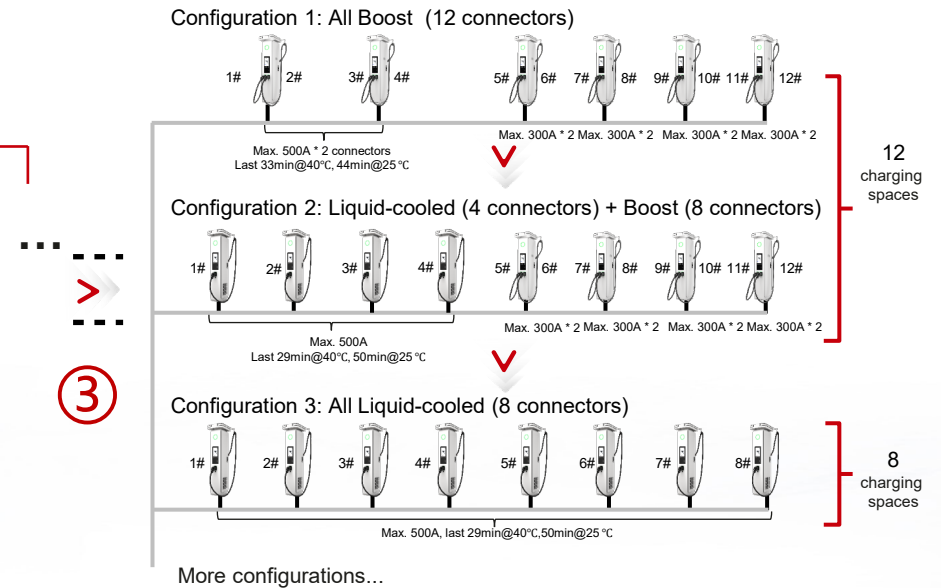
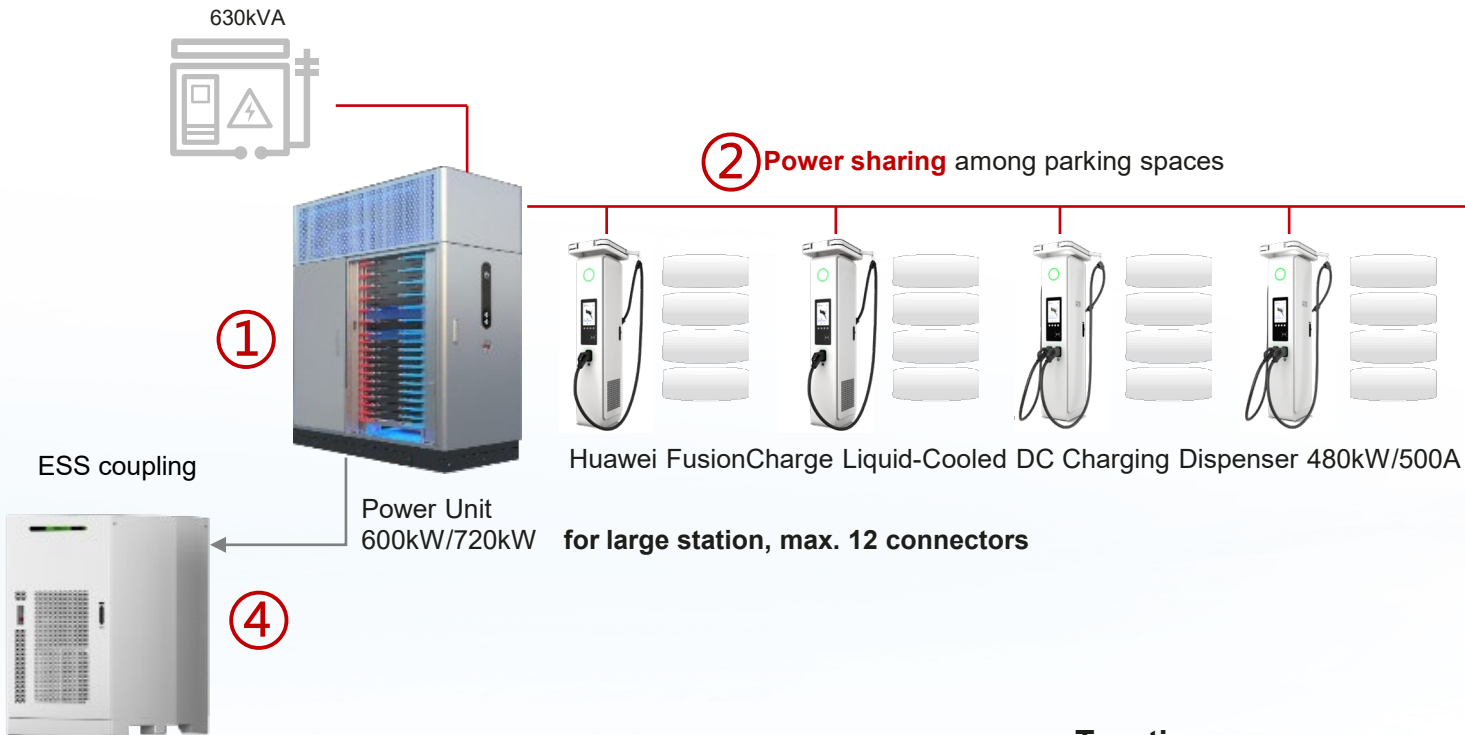


Leisure park

Scenario Features : Charging time 2-4 hours



Future-Proof EV Charger Solution for High Grid Capacity Site



① Superior quality

Die-casted power modules, ceramic contactors
IP55 liquid-proof level
Annual failure rate < 0.2%(module)
Noise<50 dB@25°C, 1m

Great reliability

② Two-tier power pooling

AC/DC+DC/DC module Architecture,
Saving cost on transformer reconstruction
(around €700K/630KVA@EU)

Higher Grid utilization

Smooth Evolution

③ Support charging up to 12 cars
Support max 8x500A ultra-fast charging

④ Support PV/ESS/PV+ESS integration

Protecting

Investment

Altitude of 4285 meters

Liquid-Cooled Ultra-fast Charging Station at Mount Qomolangma

Max. 4 ultra-fast + 16 fast charging spots

Work perfectly in thin air, huge day/night
temperature difference, and harsh
environments

10+ years of service life

Easy maintenance

Lower operations pressure and costs



Hot as Fire:
45°C, Turpan

Maximum power of **600 kW**

30x↑ cooling achieved by
cutting-edge liquid-cooled modules

3000-ton integrated die-casting,
perfect collaboration of electrical and cooling
components for efficient heat dissipation

Long-term stable running



Extreme Cold:
–35°C, Yakeshi

Fully enclosed liquid cooling
circulation

Core components isolated from the
outside

Outstanding thermal insulation,
effective temperature control

Reliable Stable

Long-term stable running in
extremely cold conditions



On April 22, Huawei launched a new megawatt charging solution for heavy-duty truck in China



SOC 10%-90%
350+kWh battery



15 min

Continuous current



2400 A

Digital Power: Your Best Partner for a Better, Greener Future

By the end of March 2025, Huawei Digital Power has helped customers

generate green power

1,608.1 billion kWh

save power

96.2 billion kWh

reduce carbon emissions

810 million tons

equivalent to planting

1.1 billion trees

Conversion note:

Note 1: Conversion coefficient of electricity carbon emissions – 1 kWh electricity is equivalent to 475 g CO₂ (global average).
Source: IEA Global Energy & CO₂ Status Report 2018

Note 2: Lifetime CO₂ absorption of trees (equivalent number of planted trees) – A tree absorbs 18.3 kg of CO₂ a year, and each tree has a 40-year lifespan.
Source: Open data of the North Carolina State University website

Thank you.

把数字世界带入每个人、每个家庭、
每个组织，构建万物互联的智能世界。

Bring digital to every person, home, and
organization for a fully connected,
intelligent World.

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