Nidec Conversion

DirectPowerPS™

DC SPLIT


Nidec
CHARGING STATION
Nidec
Nidec

EFFICIENT, SCALABLE, AND COST-EFFECTIVE CHARGING SOLUTIONS

A versatile and scalable EV charging solution designed for businesses with diverse and expanding needs. The DC Split offers a distributed architecture, separating the power unit from the dispensers, providing cost-effective, efficient, scalable, and flexible charging infrastructure.

EMPOWERING DIVERSE INDUSTRIES

FUEL STATIONS

Flexibility, Easy Integration, Reliability

Attract and retain EV drivers with a flexible, reliable, and easy-to-integrate charging solution that fits seamlessly into existing infrastructure and integrates with payment systems.

PUBLIC AND PRIVATE FLEETS

Fast Charging, Scalability, Efficiency

Minimize downtime and reduce total cost of ownership with fast, scalable charging solutions. Ideal for public transportation, and light to heavy-duty EV fleets, our system optimizes power consumption while delivering efficient and convenient charging for fleet operations.

COMMERCIAL ACTIVITIES

Compact, Customizable, Sustainable

Deploy a sustainable, compact, and easy-to-install charging solution that enhances customer satisfaction. Our systems are customizable to fit your business needs and support a variety of payment methods, ensuring a user-friendly experience for both operators and customers

THE EDGE YOU NEED IN EV CHARGING

50% COSTS

1 By utilizing our innovative power management system, you can significantly lower your initial investment by half compared to traditional all-in-one charging hubs, while also ensuring high efficiency and reduced installation costs.

Additionally, our system features Intelligent Load Management, which optimizes power distribution among chargers. This not only minimizes operational costs and peak demand charges but also promotes efficient energy use.

SCALE UP YOUR CHARGING HUB

2 Easily expand your charging infrastructure:

- up to 2 power units
- up to 12 charging points even with just 1 power unit
- start with how many charging points you desire and then expand in the future
- add power modules in 40kW increments for precise scalability

1.28MW TOTAL POWER

3 Combine two 640kW converter units for a total output of 1.28MW, ideal for high traffic areas and large Fleets. This scalable solution allows for capacity expansion to meet growing demand. Build a flexible, powerful charging network to maximize performance and future-proof infrastructure.

480KW CONTINUOUS CHARGING

4 Deliver up to 480kW and 600A to each connector (delivered continuously with an additional external cooling unit), ensuring rapid and efficient charging for all vehicle types, from light-duty to heavy-duty commercial vehicles.

2 DISPENSER CHOICES

5 Choose from our range of compact and recognisable dispensers to suit various installation and operational needs. Each option is designed with unique benefits, catering to different environments and business models. 15” & 12” Touch Screen available with Function and Advertisement display

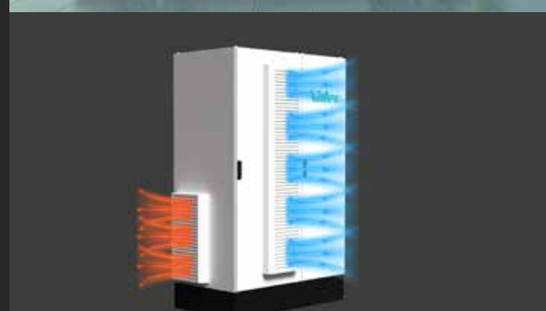
MARKET-LEADING COMPACT DESIGN & EFFORTLESS INSTALLATION

6 Maximize your space without compromising power with our ultra-compact power unit, measuring just 800x800mm and delivering up to 640kW—ideal for limited spaces.

The 400x300mm dispenser offers the highest output current. Designed for rapid installation, both units reduce on-site operation time by up to 50%. The simple maintenance procedure ensures easy management, minimizing downtime and enhanced operational efficiency.

INNOVATIVE COOLING SYSTEM

7 Achieve peak performance with our advanced cooling system, designed for maximum efficiency. It operates quietly while maintaining optimal power output, even in extreme temperatures, ensuring reliable performance without compromise.

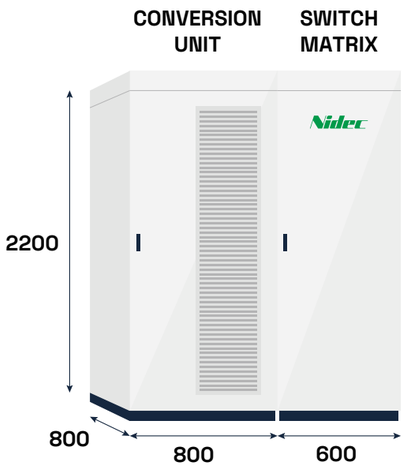


97% CONVERSION EFFICIENCY TO INCREASE YOUR PROFITABILITY

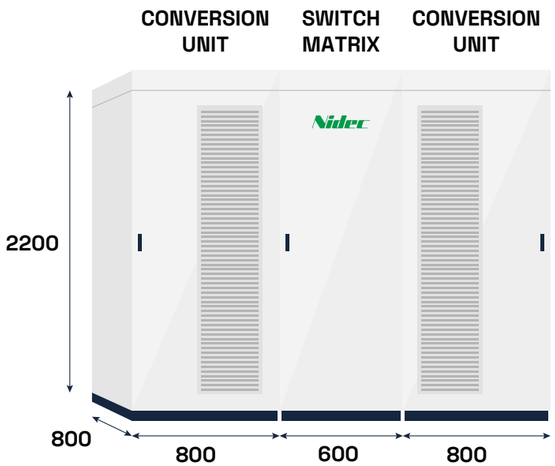
8 Harness cutting-edge technology with our power module, equipped with advanced SiC semiconductors for exceptional efficiency. This high-performance design delivers a peak efficiency of 97%, ensuring optimal energy utilization for your charging solutions.

INOVATIVE COMPONENT & CONFIGURATIONS

POWER UNIT
UP TO 480kW OR 640kW



POWER UNIT
UP TO 1,28MW



CONVERTER UNIT:

The Converter unit is the core of the DirectPowerPS DC Split. Each converter unit comes in two configurations to delivers up to 480kW or 640kW of power, with scalable modules in 40kW increments. Designed for high efficiency and flexibility, these units can be also combined to reach a total output of 1.28MW.

Available configurations include:

- Up to 480kW: Ideal for smaller charging sites and cost-effective solutions.
- Up to 640kW: Perfect for larger charging sites, providing maximum scalability.
- Parallel Configuration: Combine two converter units to reach up to 1.28MW.

SWITCH MATRIX:

With the capability to support up to 12 charging points and scale in increments of 40kW or 80kW by adding power groups, the DC Split Power Unit offers unprecedented scalability. This ensures you can expand your charging infrastructure as demand grows, without overinvesting in unused capacity.

Each connector can deliver up to 480kW and 600A continuously, meeting the most demanding charging requirements. This high-power delivery ensures fast, efficient charging for all connected vehicles.

DISPENSER

The dispenser acts as the vital interface between the Power Unit and the electric vehicle, providing direct power delivery. Engineered for user convenience, it allows for easy maintenance and upgrades, ensuring an enhanced charging experience.

DISPENSERS' FEATURES

1. CCS2 or CHAdeMO
2. Length of cables: 5,7,10 meters
3. Integrated Cable management
4. Advertising screen (32" or 18,5")
5. Intuitive 15"/12" touch user interface
6. LED status of the charging session
7. Payment terminal
8. With or Without Certified meter
9. 2 Modems: OCPP + Nidec BYS

DC TOWER DISPENSER

The DC Tower Dispenser combines striking design with functionality, providing efficient vehicle charging while doubling as a marketing platform. Equipped with an advertising screen, it enhances visibility and creates opportunities for additional revenue generation.

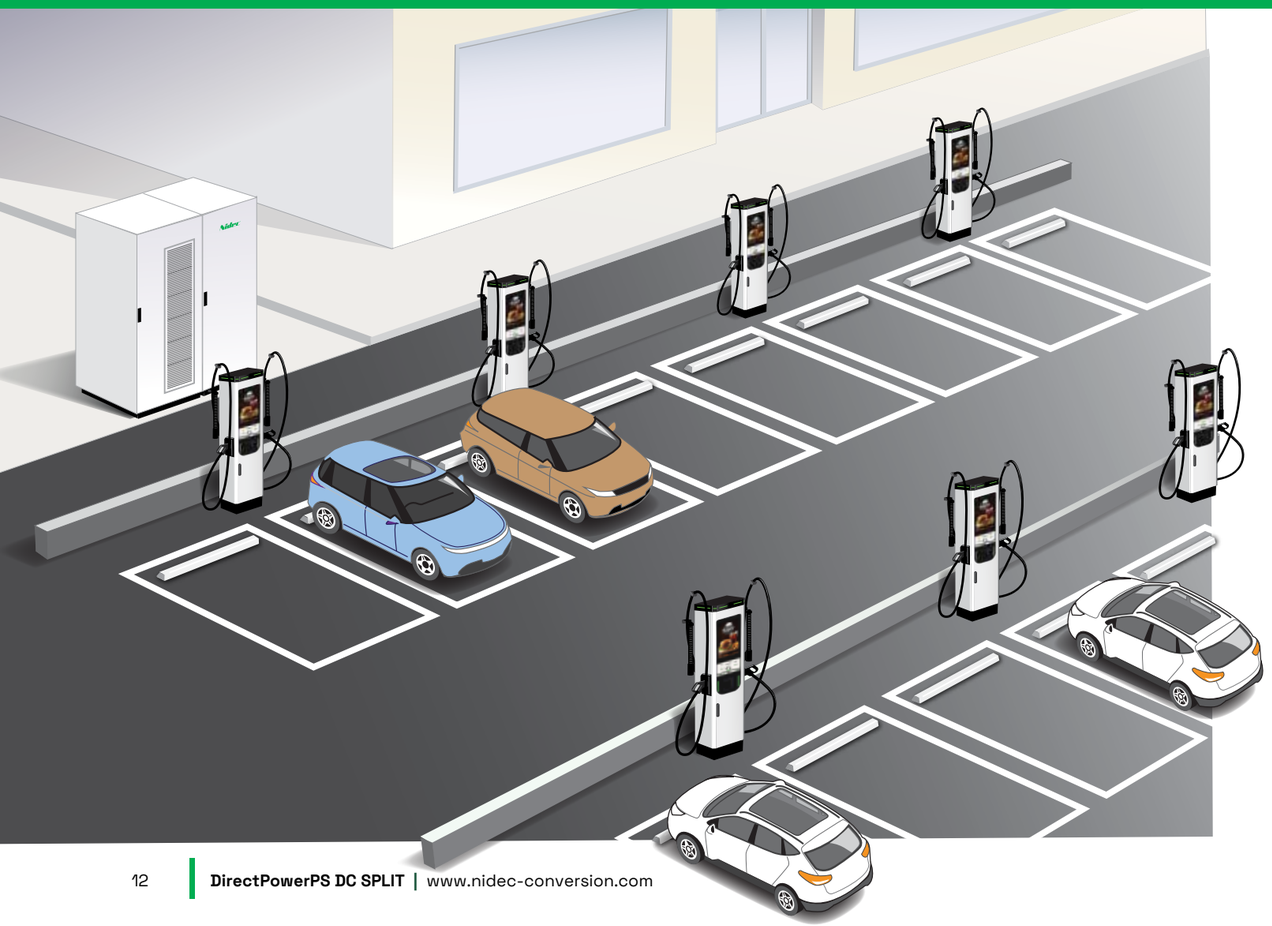
DC COMPACT DISPENSER

The DC Compact Dispenser is engineered for convenience, featuring a sleek, compact design that enables easy installation in space-limited environments. Additionally, it functions as a marketing platform, maximizing visibility and revenue potential.

FLEXIBLE CONFIGURATIONS THAT GROW WITH YOUR CHARGING SITE

Modular Design
Up to 480kW / 640 kW / 1,28MW
From 1 to 12 DC charging points

Experience unparalleled flexibility, efficiency, and cost savings. Elevate your EV charging infrastructure to meet the demands of today and tomorrow. DirectPowerPS DC Split is your partner in powering the future of mobility.



CONFIGURATION:
1 Converter unit + 1 switch matrix + up to 12 Dispensers/Connectors

Converter unit: up to 480 or 640kW
DC Output: up to 480kW for every EV connector
Connectors: up to 12

CONFIGURATION:
2 Converter unit + 1 switch matrix + up to 12 Dispensers/Connectors

Converter unit: up to 1280kW
DC Output: up to 480kW for every EV connector
Connectors: up to 12

DATA SHEET

POWER UNIT		480kW	640kW	1280kW
AC INPUT	Earthing systems	TT, TN		
	Input voltage	400Vac (±10%), 50/60 Hz (±5%)		
	Input current	Up to 750A	Up to 1000A	Up to 2x1000A
	Power Consumption	Up to 515kVA	Up to 688kVA	Up to 1376kVA
	Protections	Overcurrent, overvoltage Type II, integrated surge protection, overtemperature		
DC OUTPUT	Output power	Up to 480kW	Up to 640kW	Up to 1280kW
	Number of outputs	Up to 12 output connectors		
INTERFACE	Connection	Ethernet, Modbus TCP, 3G/4G (optional)		
	Emergency stop button	Optional		
MECHANICAL	Product dimensions (HxWxD)	Converter unit 2200 x 800 x 800 mm Switch Matrix 2200 x 600 x 800 mm		Total 2200x2200x800mm
	Weight	Up to 990 kg		Up to 1700kW
	Material	Corrosion-protected steel		
	Customization	Customizable with end user's colours and logos (optional)		
	Noise level	≤ 65 dB(A) at distance of 1 m at full power		
WORKING AND INSTALLATION CONDITIONS	Operating temperature	-20°C +50°C (over 50°C with derating)		
	Installation type	Outdoor		
	Installation type	Floor mounted		
	Protection class	IP55		
	Protection against Mechanical impact	IK10		
	Humidity	From 5% to 95% without condensing		
	Maximum operating altitude	2000 m		
STANDARDS	Declaration of conformity	CE, UKCA		
	Other standards	IEC 61851-1, IEC 61851-22, IEC 61851-23, IEC 61851-24		

DISPENSER		DC TOWER DISPENSER	DC COMPACT DISPENSER
AC INPUT	Earthing systems	TT, TN	
	Input voltage	400Vac (±10%), 50/60 Hz (±5%)	
	Protections	Overvoltage Type III, integrated surge protection	
DC INPUT	Input voltage	Up to 1000V	
	Input current	Up to 500A	
OUTPUT	Charge mode	Mode 4 for DC connectors and Mode 3 for AC connector	
	Number of outputs	2 DC + 1 optional AC	2 DC or 1 DC and 1 AC
	Cable length	5m (up to 10 meters on request)	
	Output power	Up to 480kW	
	Output voltage	150 V to 1000 V	
	Output current	CCS up to 500A or 600A with additional cooling unit Type 2 up to 32A (optional)	
	Dynamic power sharing	The available power is shared between the DC connectors during charging	
INTERFACE	Connection	Ethernet, Modbus TCP, 3G/4G (optional)	
	User interface display	15.6" touchscreen and status LED lights	12.1" touchscreen and status LED lights
	Authentication method	Free Vending Mode, RFID, App, Payment terminal with Pin pad (optional)	
	Protocol	OCPP 1.6J, OCPP 2.0.1 ready	
	Connection/service	Nidec By Your Side (BYS) for remote connection	
	Advertising screen	32" screen	18,5" screen
MECHANICAL	Product dimensions (HxWxD)	Base: 2236 x 800 x 409 mm Total: 2236 x 846 x 594 mm	Base: 1900 x 400 x 300 mm Total: 1900 x 410 x 310 mm
	Weight	435 kg	100 kg
	Material	Corrosion-protected steel	
	Customization	Customizable with end user's colours and logos (optional)	
	Noise level	≤ 45 dB(A) at distance of 1 m at full power	
WORKING AND INSTALLATION CONDITIONS	Operating temperature	-20°C +50°C (-30°C +50°C as option)	
	Installation type	Indoor and Outdoor	
	Installation type	Floor mounted	
	Protection class	IP55	
	Protection against Mechanical impact	IK10	
	Humidity	From 5% to 95% without condensing	
	Maximum operating altitude	2000 m	
STANDARDS	Declaration of conformity	CE, UKCA	
	Energy metering	MID / LNE / Eichrecht compliant / PTB compliancy DC outlets	
	Other standards	IEC 61851-1, IEC 61851-22, IEC 61851-23, IEC 61851-24, DIN 70121, ISO 15118	

Nidec

All for dreams

DirectPowerPS - DC SPLIT - REV-001

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