Nidec Conversion

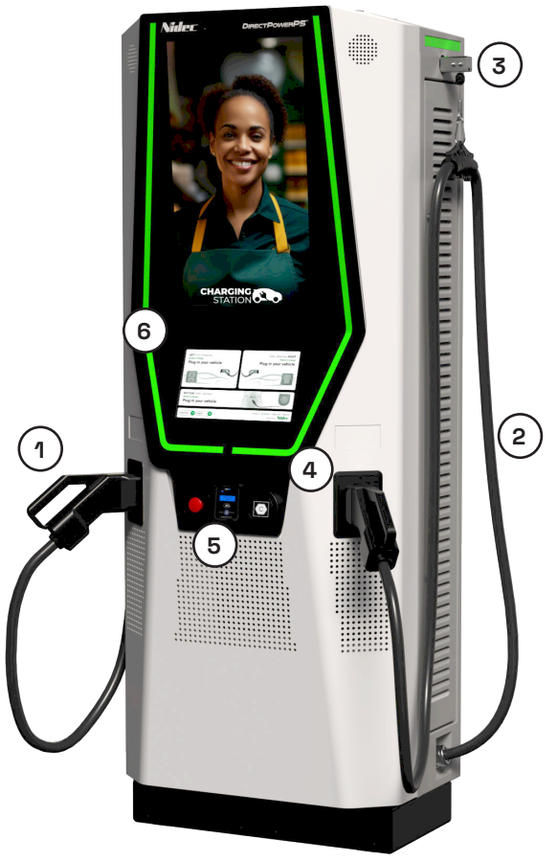
DirectPowerPS™

DC TOWER

160-400kW

- All-in-one architecture is the most compact and the simplest to install charging solution optimizing construction costs while providing an ultra-fast charging experience for the driver
- Small footprint, attractive design and customizable display makes DirectPowerPS ideal for retail applications
- Nidec's history of quality manufacturing paired with best-in-industry service offerings result in high uptime and driver satisfaction

ULTRAFAST CHARGING TAILORED FOR YOU



GENERAL FEATURES

COMPACT – Up to 400kW in just 2236 x 846 x 764 mm footprint
DYNAMIC POWER SHARING – 160kW and 400kW dynamically assigned to each connector
SCALABLE – Modular design up to 160kW or 400kW in 40kW steps
EASY TO REPAIR – Each 40kW power module only weighs 15kg, no special tools required
ANY VEHICLE – Wide output range from 150V to 1000V. Compatible with all EVs
STANDARDS – OCPP1.6j, 2.0.1, CCS2, CHAdeMO, AC Type 2, MID / LNE / Eichrecht, DIN 70121, ISO15118
CONNECTIVITY – 4G Cellular, Ethernet connectivity options

VALUE ADDED SERVICES

DIAGNOSTICS – Nidec By Your Side (BYS) remote diagnostics system for supervision, maintenance and troubleshooting
SERVICE – 24/7 Remote support and on-site service available
SCALABLE – Modular design enables availability of custom power rating from 160kW to 400kW upon request
DYNAMIC LOAD MANAGEMENT – Power management dynamically assigned across all stations on a site
CUSTOMIZATION – Branding colors and logos to match your needs

HARDWARE FEATURES

1. **WIDE CHOICE –** 2 DC Connectors (CCS with and without active cooling or CHAdeMO) and optional AC Type 2
2. **LONG REACH –** Length of cables: 5,7,10 meters
3. **EASY TO USE –** Integrated Cable management
4. **ACCESSIBLE –** Large 15.6" touchscreen for user interaction within easy reach
5. **PAYMENT READY –** Reader accepts RFID, payment cards & mobile payment
6. **VISUAL PRESENCE –** Angled door, large 32" display for messaging & advertising, LED lighting for status & visibility

DYNAMIC LOAD & POWER

Dynamic power sharing enables site owners to reduce capital costs and increase profitability. Rapidly charge more vehicles with fewer chargers while efficiently monetizing all available site power.

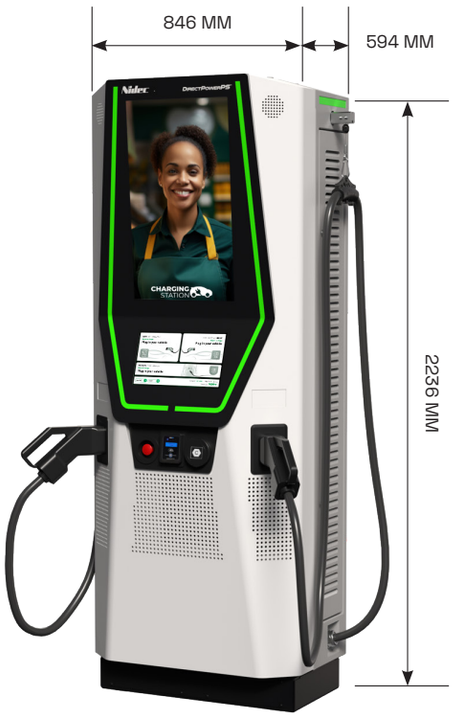
DYNAMIC POWER: SOLO

All power is sent to up to 160kW or 400kW

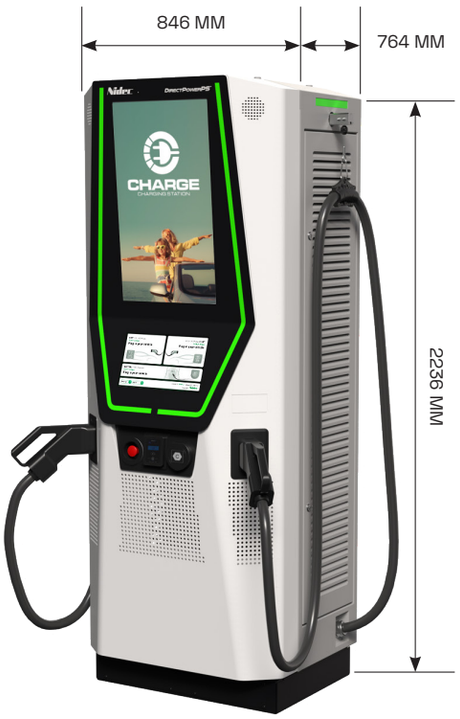
DYNAMIC POWER: DUAL

Simultaneous charging of two vehicles. Power to each vehicle can be adjusted dynamically, for example from 160kW to 400kW in the DirectPowerPS DC Tower 400 model

DC Tower 160kW



DC Tower 400kW



TECHNICAL DATA DIRECTPOWERPS DC TOWER 160KW

INPUT	Earthing systems	TT, TN
	Input voltage	400VAC (±10%), 50/60 Hz (±5%)
	Input current	Up to 250A
	Input power	Up to 170kVA
	Protections	Overcurrent, overvoltage Type I+II, integrated surge protection, overtemperature, ground fault including DC leakage protection (only for optional AC output)
OUTPUT	Charge mode	Mode 4 for DC connectors and Mode 3 for AC connector
	Number of outputs	2 DC + 1 optional AC
	Cable length	5m (up to 10 meters on request)
	Output power	From 80kW to 160kW, expandable with 40kW power modules
	Output voltage	150 V to 1000 V
	Output current	CCS up to 400A CHAdeMO up to 200A Type 2 up to 32A (optional)
	Dynamic power sharing	The available power is shared between the DC connectors during charging
	Efficiency	97% at full load
INTERFACE	Connection	Ethernet, Modbus TCP, 3G/4G (optional)
	User interface display	15.6" 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
	Stop button	Optional
	Connection/service	Nidec By Your Side (BYS) for remote connection
	Additional 32" display	For advertising images and videos
MECHANICAL	Product dimensions (HxWxD)	Base: 2236 x 800 x 409 mm Total: 2236 x 846 x 594 mm
	Weight	Up to 435 kg
	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 (-30°C +50°C as option)
	Installation type	Indoor and Outdoor
	Installation type	Floor mounted
	Protection class	IP54
	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, ISO15118

TECHNICAL DATA DIRECTPOWERPS DC TOWER 400KW

INPUT	**Input connection**	3 phases N+PE
	Frequency	50/60 Hz (±5%)
	Earthing systems	TT, TN
	Input voltage	400VAC (±10%)
	Input current	Up to 620A
	Input power	Up to 430kVA
	Overvoltage category	Type I+II
	Protections	Overcurrent, overvoltage, integrated surge protection, overtemperature, ground fault including DC leakage protection (only for optional AC output)
OUTPUT	**Charge mode**	Mode 4 for DC connectors and Mode 3 for AC connector
	Number of outputs	2 DC + 1 optional AC
	Cable length	5m (up to 10 meters on request)
	Output power	From 80kW to 400kW, expandable with 40kW power modules
	Output voltage	150 V to 1000 V
	Output current	DC Tower: up to 500A CHAdeMO: up to 200A Type 2 up to 32A (optional)
	Dynamic power sharing	The available power is shared between the DC connectors during charging
	Efficiency	97% at full load*
INTERFACE	**Connection**	Ethernet, Modbus TCP, 3G/4G (optional)
	User interface display	15.6" 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*
	Stop button	Optional
	Connection/service	Nidec By Your Side (BYS) for remote connection
	Additional 32" display	For advertising images and videos
MECHANICAL	**Product dimensions (HxWxD)**	Base: 2236 x 800 x 567 mm Total: 2236 x 846 x 764 mm
	Weight	Up to 750 kg*
	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 (-30°C +50°C as option)
	Installation type	Indoor and Outdoor
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Nidec

All for dreams

DirectPowerPS DC Tower 160kW and 400kW - REV-002

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