

Factsheet

# Grid-eMotion™ Fleet

Robust, reliable,  
scalable and easy  
to deploy charging  
solution for fleet  
electrification



Grid-eMotion™ Fleet offers all the advantages of centralized DC distribution when the installation of multiple fast chargers is required. It enables a seamless grid-to-plug connection combined with robust and compact outdoor rated enclosure to ensure easy and rapid deployments in small and large-scale applications.

Designed to electrify large-scale electric vehicle fleets, Grid-eMotion™ Fleet Integrated uses AC/DC centralized rectification and can be configured to charge up to 40 vehicles. The integrated charging system supports a low voltage grid connection up to 1MW charging power resulting in significant space reduction and a higher system efficiency. A direct connection to the medium voltage grid is also available as an option.

Charging points are designed to ensure full interoperability with current and future EV fleets charged in DC via a wide variety of standardized charging interfaces. A cloud-based monitoring tool allows data collection and visualization as well as real-time remote access to multiple charging systems installed on the same site. Furthermore, the digital platform allows fleet operators to connect to advanced energy management and fleet management software.

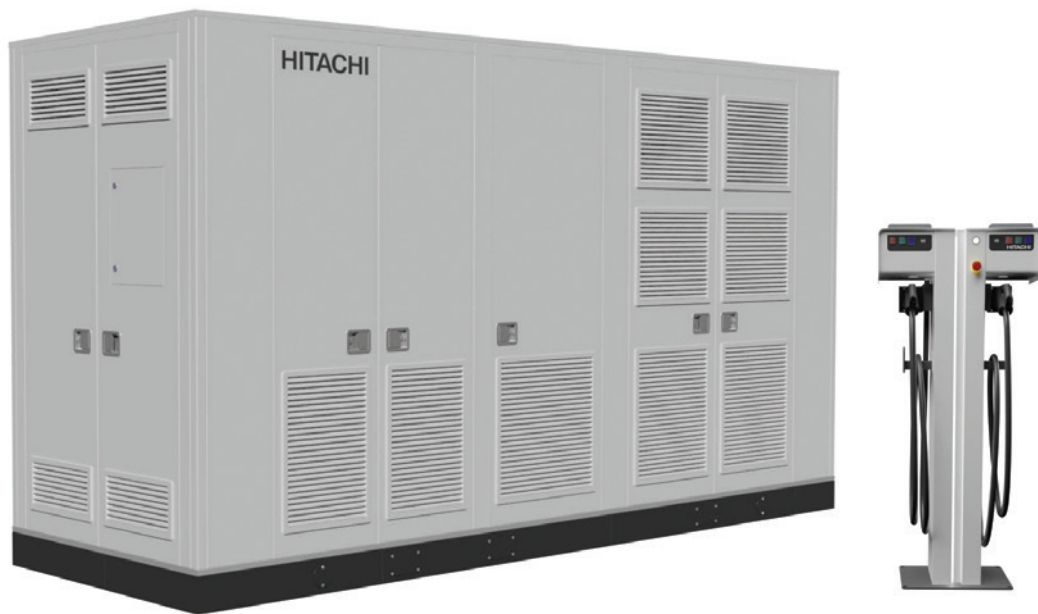
## Designed to electrify large-scale electric vehicle fleets, Grid-eMotion™ Fleet Integrated uses AC/DC centralized rectification

### Advantages

- Plug-and-play concept
- All-in-one design, factory assembled and tested
- Compact design for reduced footprint
- Reduced and simplified site works
- Top lifting by crane or bottom lifting by forklift for easy relocation
- Robust industrial grade design
- Relocatable, expandable
- Remote monitoring and control, on-cloud and on-premise through edge intelligence

### Available options

- Direct, sequential, or simultaneous charging
- Direct connection to MV grids
- Cloud-based remote monitoring
- Energy Management System via OCPP, Modbus/TCP or OPC UA communication
- Connectivity to back-end monitoring, control, fleet scheduling or asset management systems



# 1 MW

total charging power  
and scalable up to 2.5 MW

# 60%

up to  
space reduction






# 40 EVs

charged with direct, sequential  
or simultaneous charging

# 40%

up to  
less cabling required

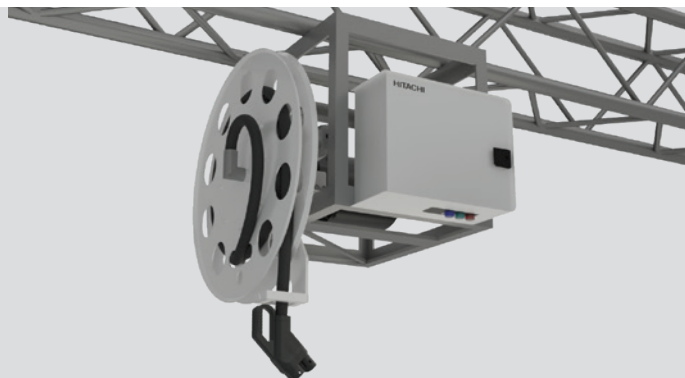


Configurations	Integrated 10 – LV	Integrated 15 – LV	Integrated 20 – LV
			
<b>Output</b>			
Total system maximum power	up to 1 MW		
DC output power level options	75, 100, 150, 200 or 300 kW (subject to vehicle interface limitations)		
Output voltage range	200 – 975 VDC		
DC connection standard	IEC 61851-23 / IEC 61851-23-1 / DIN 70121 / ISO 15118		
<b>CCS Cable Type 2 (ISO 15118)</b>			
Maximum DC Output Current per plug	up to 300 A		
Supported charging modes	Direct, sequential, simultaneous		
Max number of outputs (simultaneous)	10	15	20
Max number of outputs (sequential)	20	30	40
<b>Inverted or roof-mounted pantograph (IEC 61851-23-1)</b>			
Maximum DC Output Current (depot)	up to 400 A		
Maximum DC Output Current (on route)	up to 1000 A		
<b>Input</b>			
AC Input voltage	400 VAC +/- 10 %		
AC Input Topology	3P + PE		
Rated input power	up to 1200 kVA		
Rated input current	up to 1805 A		
AC Input frequency	50 Hz		
Current THD%	THDi < 5.5% (at rated power)		
Power Factor	> 0.95		
Efficiency	94%		
<b>Environmental</b>			
Application	Indoor/Outdoor		
Temperature	Standard: - 25 °C to + 55 °C ; Optional: - 40 °C to + 55 °C (derating above 45°C)		
Altitude	Max. 2500 m (derating applies above 1000 m)		
Humidity	<95% (non-condensing)		
<b>Mechanical</b>			
Cooling	Integrated – Air forced		
Protection	IP54 – IK10		
Dimensions (D x W x H) Standard	5 x 1.5 x 2.5 m	5.8 x 1.5 x 2.5 m	6.8 x 1.5 x 2.5 m
Placement	Front / side access		
Rear access clearance	800 mm		
<b>Miscellaneous</b>			
Network connection	Ethernet or 4G Cellular (standard), WiFi (optional)		
Supported protocols	OCPP 2.0.1, Modbus TCP/IP, OPC UA		

## EV Charging Interfaces



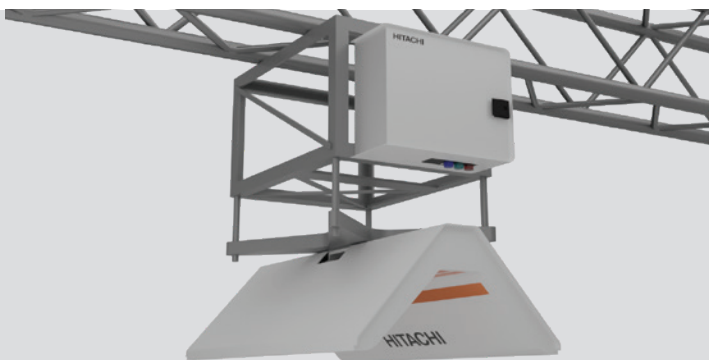
CCS pedestals, up to 300 A



CCS charge boxes, up to 300 A



Inverted Pantograph, up to 400 A



Roof-mounted pantograph, up to 400 A



Inverted Pantograph, up to 1000 A



Roof-mounted pantograph, up to 1000 A

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