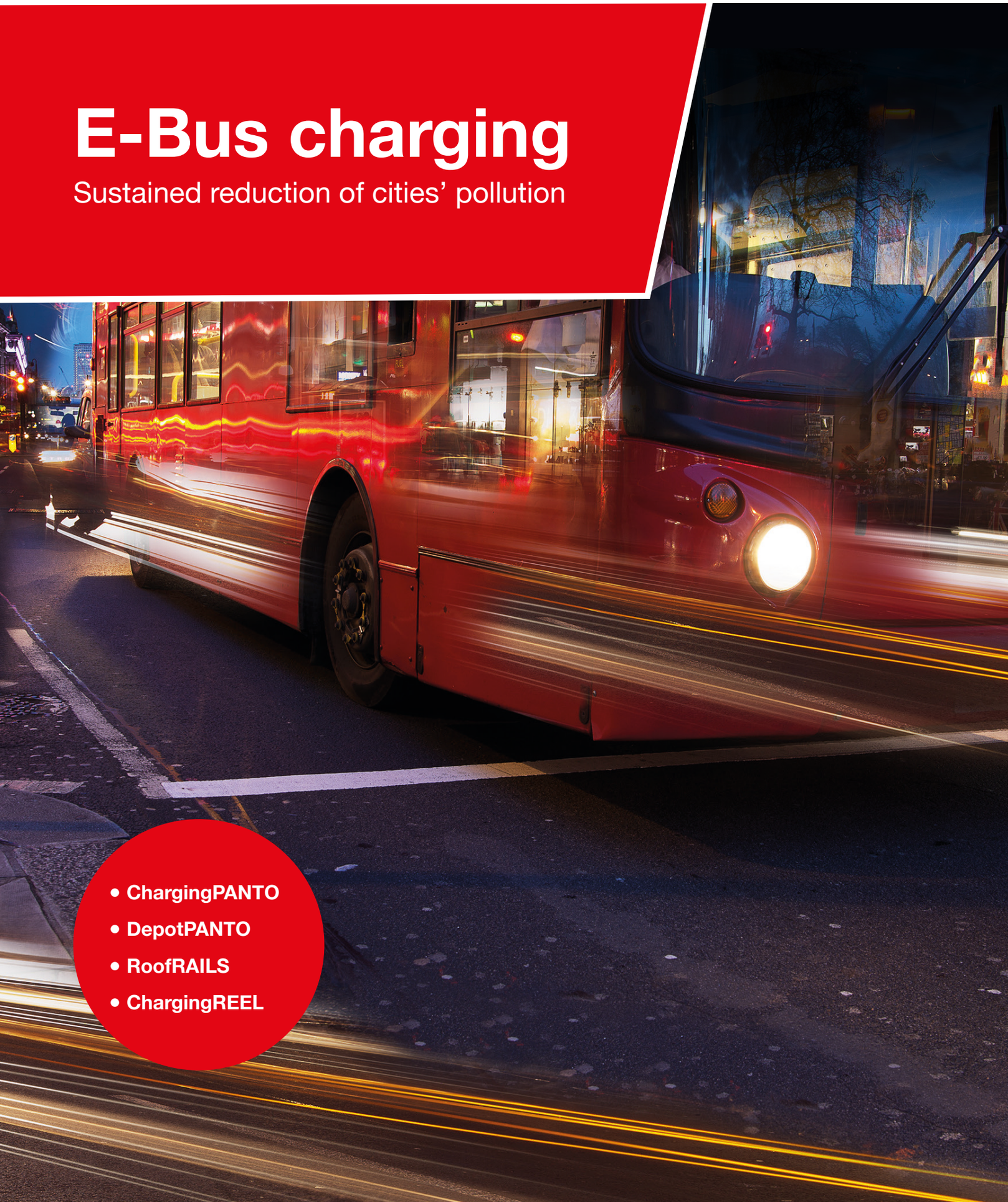
Wabtec CORPORATION

E-Bus charging

Sustained reduction of cities' pollution



- ChargingPANTO
- DepotPANTO
- RoofRAILS
- ChargingREEL

Smart charging solutions

Wabtec electric bus charging solutions are backed by decades of leadership developing the world's most reliable energy transfer components for local municipal transportation providers, sophisticated high-speed rail systems, and on-shore port power supply.

Your benefits

Keeping bus schedule:
fast, high power charging

Higher passenger capacity:
or higher travel distance with light weight RoofRAIL

Cost reduction:
less pantographs for scalable fleets

Increased flexibility:
using different bus types for same charging station

Higher availability:
reducing maintenance effort with no charging equipment on bus

Keeping cities clean:
charging at end stop outside city centre

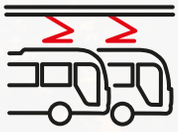
Charging in different cities:
interoperability with OppCharge standard

Easy for drivers:
fail safe and fully automatic operation

The best way to sustainable urban mobility – saving time, weight and up to 50 % of costs while increasing productivity.

Wabtec enables decarbonization of transportation and is creating a more sustainable future. To reach our mission, we deliver high quality, reliable and efficient charging solutions to electrify fleets.
With highest charging power available on the market, we will make sure your busses and trucks are always on schedule. Minimum impact on onboard weight allows for higher passenger or freight capacity or travel distance. With lightweight contact RoofRAILS maintenance is simple and easy, and no advanced mechanism on the roof. Our solutions reduce costs for charging equipment for scalable fleets. The charging stations can be built at the end stops and reduce the number of pantographs per route. This also keeps city centre clean and avoids disruptions during construction works. Proven quality and reliability gives e-busses fleet extended availability. We provide increased flexibility making sure different bus types can charge at the same station. With open OppCharge standard we guarantee interoperability thus same bus can be charged even in different city. ChargingPANTO and DepotPANTO are fully automatic solutions which gives easy operation for drivers, increasing safety and supporting drivers' adoption rate.

ChargingPANTO
E-Bus Top-Down Pantograph
Fastest, Safest Rapid Charging



DepotPANTO
For Indoor Applications
Light weight, automated depot charging

ChargingREEL
E-Bus Depot Cable Management System
Storing cable safely

RoofRAILS
Direct DC Charging System
Light weight and reliable contact on board

Our Promise: As an "OppCharge" solution, Wabtec's ChargingPANTO ensures that any e-bus in your fleet can connect to any charging station. ChargingPANTO is the fastest e-bus charging solution currently available. Compared to roof mounted pantographs, it does not put additional weight on your bus and extends the net service time of your municipal e-bus fleet.

E-Bus Charging Products

ChargingPANTO

E-Bus Top-Down Pantograph

Fastest, Safest Rapid Charging

First to meet OppCharge standards, the fully automatic ChargingPANTO system is designed for fast charging of e-bus fleets and reduced infrastructure life cycle costs.

- Automatic operation eliminates depot personnel resources
- Open standard interoperability
- Independent rails ensure positive contact during charging
- Built in winter heating system

Specifications	ChargingPANTO
Nominal Voltage:	1500 VDC
Nominal Current:	850 A or 600 A
Lowering Time:	6 seconds
Raising Time:	5 seconds
Weight:	Approx 419 lbs / 190 kg
Operation Temp:	–40 °F to +167 °F / –40 °C to +75 °C
Application:	Outdoor/Indoor

DepotPANTO

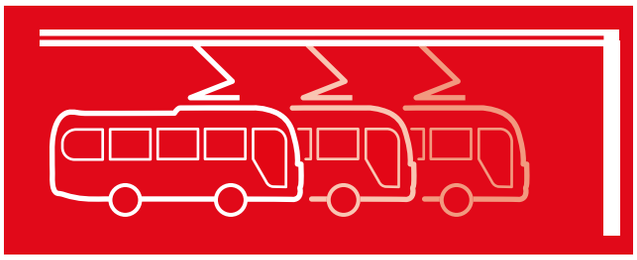
E-Bus Top-Down Pantograph

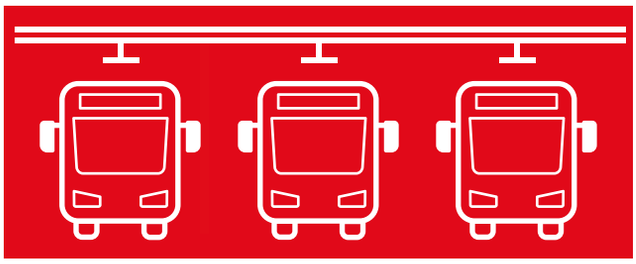
Light weight, automated depot charging

For the fastest overnight DC charging, the DepotPANTO features easy connection to roof-mounted rails and fully automatic loading.

- Ceiling mount increases depot charging throughput and efficiency
- Automatic operation minimizes depot personnel resources
- Lightweight, easy to install, compact design, requires minimal space
- Transfers up to 400 amps for fast charging
- Optional winter heating system

Specifications	DepotPANTO
Nominal Voltage:	1500 VDC
Nominal Current:	up to 400 A
Lowering Time:	9 seconds
Raising Time:	9 seconds
Weight:	Approx 187 lbs / 86 kg
Operation Temp:	–40 °F to +167 °F / –40 °C to +75 °C
Application:	Outdoor/Indoor





E-Bus Charging Products

ChargingREEL

E-Bus Depot Cable Management System

Storing cable safely

ChargingREEL design optimizes cable management for electric buses and other fleet vehicles in depot charging areas, like intralogistic industry. High output power transfer minimizes charging time. Automatically deploys plug to specific heights.

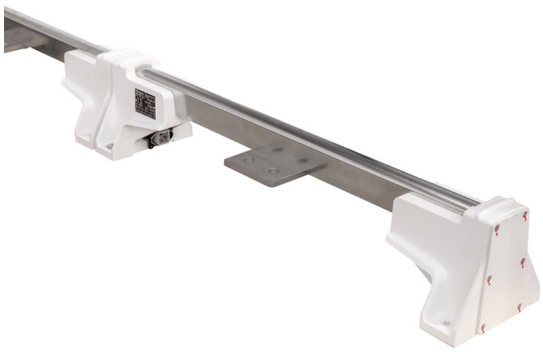
- Fast power transfer for buses, trucks and cars
- Protects connector plug and cable from damage
- Ceiling, wall and under-floor applications
- Emergency crank
- Optional remote control

Specifications	ChargingREEL
Nominal Voltage:	1000 VDC
Nominal Current:	200 A
Lowering Time:	≤ 20 seconds
Raising Time:	≤ 20 seconds
Weight with cable:	Approx 176 lbs / 80 kg
Operation Temp:	+14 °F to +113 °F / –10 °C to +45 °C
Operation Temp:	Outdoor with heater (optional) –4 °F / -20 °C

Compliant to IEC 61851 for electric vehicle charging systems. Field approved by major electrical system integrators.

RoofRAILS

Direct DC Charging System



Light weight and reliable contact onboard

Designed to OppCharge standards for interoperability, the Wabtec Stemmann roof rail system features four lightweight rail strips to ensure safe connection and reliable power transfer. Accommodates up to 1,500 amps for fastest charging and trouble-free, year-round operation. For new and retrofit applications.

- Simple, easy installation
- Built-in winter heating element
- Minimum weight and maintenance need
- Compliant with all North American charging standards

Specifications	RoofRAILS
Nominal Voltage:	Up to 1500 VDC
Nominal Current:	Up to 1500 A
Weight (Set of 4):	67 lbs / 30.4 kg
Operating Temp:	–40 ºF to +167 ºF / –40 ºC to +75 ºC
Operating Voltage:	24 VDC for heating
IP Ingress Protection:	IP65 for heater

Service & Maintenance

Our best performance when things work

Ensuring ongoing availability

We strive to make mobile equipment available at all times in everyday industrial life. For this purpose, we have competent and skilled service technicians at our disposal with standardized tools and equipment. We would be more than happy to compile an individual maintenance proposal for you.

Acting instead of reacting

- Routine, predictable maintenance intervals
- Application of original spare parts
- Ensuring ongoing availability
- Direct costs control

- Expertise from decades of development and production of current supply systems
- High-quality and proven components
- Ideal system design for trouble-free charging operations
- Low-maintenance and reliable components for countless charging cycles

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Interested? Find out more on www.stemmann.com or call us at +49 592381 0

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