

IMC[®] Technology for Milan

MILAN GOES GREEN: FLEET EQUIPPED WITH
IN-MOTION CHARGING TECHNOLOGY



Your advantages

The transit agency ATM Milano has expanded its fleet with an order for 90 new Solaris trolley buses, equipped with KIEPE's patented IMC[®] technology.

IMC[®] e-buses recharge their batteries during travel using electricity from overhead lines and switch to battery mode in areas without overhead lines. This enables highly flexible route planning.

ATM's goal is to fully electrify its bus fleet by 2030 using IMC[®] technology.

The electric systems are exclusively supplied by KIEPE. Each system includes traction inverters, motors, high-performance 45- kWh lithium-titanate-oxide traction batteries, the KIEPE current collector and auxiliary power systems. During operation, the system charges the batteries with a power of up to 200 kW from overhead lines to the modular traction battery, allowing an off-wire range of up to 24 kilo-

metres in battery mode. This eliminates the need for lengthy charging stops at the terminus. IMC[®] e-buses are capable of continuous – potentially 24/7 – operation, effectively achieving „unlimited range.“

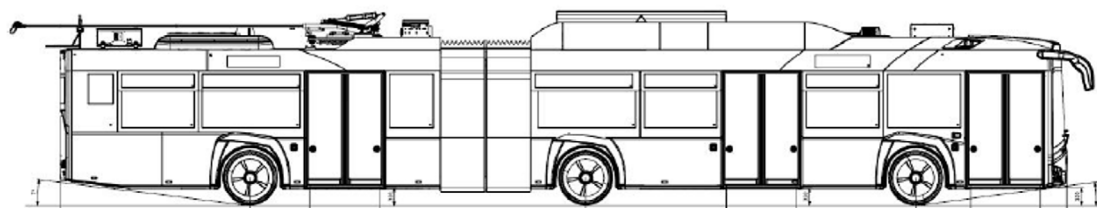
Advantages of IMC[®] technology:

- Emission-free public transit
- Long lifespan for trolley buses
- An off-wire range up to 24 km in battery mode
- Possible 24/7 operation
- Flexibility in route planning
- Charging of the traction battery during travel, requiring fewer batteries
- Optional remote diagnostics capability

Mechanical Data

Model/Type	Solaris Trollino nT18
Vehicle dimensions	18m lenght x 2.55m width x 3.5m height
Passenger capacity	104 passenger + 31 passengers seated (Total: 135 passengers)
Traction motor	2x 160 kW asynchronous motors on the 2nd and 3rd axle
Motor control	patented KIEPE traction control
Energy storage	Lithium Titanate Oxide (LTO) with over 45 kWh installed and 37 kWh usable energy
Battery Charging Concept	IMC® (In-Motion-Charging) 150 kW
Vehicle Energy Consupcion	Up to 500 kW during operation (IMC® 500)
Pantograph system	Automatic and re-wiring
Onboard power supply	10 kW DC 24 V / 35 kW AC 500 V

Technical Drawing



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