

18m UC Chariot e-bus

Technical specification.



Sustainable, silent, and green Ultracapacitor e-buses...

...these are the features of innovative Chariot 18m Ultracapacitor (UC) electric buses whose mission is to:

- help make a future better for us all
- help make cities clean and green
- offer reliable zero emission public transport
- offer high energy efficiency and quality

The Chariot Motors Company helps the transition to green public transportation by offering fully electric zero emission non-polluting e-buses. We are helping improve urban life and deliver better and sustainable future for us and our children.

Chariot UC e-buses mean clean, quiet, and greener cities. The future for urban transportation worldwide is electricity. Battery, hybrid, hydrogen, and ultracapacitor electric buses are the future of public transport. Be part of this transition together with us!

UC e-buses by Chariot Motors don't need overnight charging. Cutting-edge technology enables e-buses to reuse braking energy using what is called recuperation, helping it reach previously unattainable ranges. Ultracapacitors overcome the limitations of electrochemical batteries by offering storage that is more reliable, longer-lived and lightweight. UCs advantages are: **longer lifespan**; **greater reliability, excellent performance retention over time**; **greater power output**; **faster charges**; and **greater brake energy regeneration**. These e-buses are also **better protected from fires**.

Our experts are here to help your transition to the future. We at the Chariot Motors Company have acquired deep experience in the electric bus market since incorporation in 2009. We have supplied over 150 electric bus-es to many European and Israeli cities.

Contact us to help you with the transition to sustainability: info@chariot-electricbus.com

In January 2023 UC e-buses had covered more than 85 million kilometres worldlide of roadway.

100% Ultracapacitor, Zero emissions e-bus

4DC

FAC

Thinking about the future of the cities and transport operators Chariot Motors developed UC e-buses. This technology is the future of urban transportation with its highest safety levels and non-polluting electrolyte. E-buses operational cycle availability is 24/7, and recuperation levels are over 38%.

Remote Control System

E-buses have diagnostics, monitoring, and route tracking remote control system. It collects the data including: energy consumed and regenerated in different parts of each electric bus, current ultracapacitor voltage, and subsystems' power consumptions.

CHARIOT E-BUS

TECHNICAL SPECIFICATIONS 18M UC E-BUS					
VEHICLE TYPE					
Vehicle Category & Class	Fast charging, low floor, articulated Ultracapacitor metrobus, Higer				
POWERTRAIN SYSTEM					
Engine	Electric motor, Dana TM4 (3700N·m)				
Maximum Power (kW)	370				
Maximum Torque (Nm)	3700				
PERFORMANCE & ELECTRIC SYSTEM					
Range	Safe 65 km range on a single charge for about 15 minutes. The vehicle can operate 24/7.				
Energy storage system	108 KWh Aowei Ultracapacitor S120V11-K12				
Electric control system	Higer electric control system				
Electrical system	Actia podium 2, CAN bus system				
Charging system	Fast charging CCS2 or/and pantograph (Aowei pantograph 650V, 200A). The bus fleet needs significantly fewer pantograph chargers compared to the number of fleet buses.				
BODY					
Body Type	Self-supporting Carbon Steel: Space Frame Steel Tube Structure; Optional: Stainless steel				
Corrosion Resistance	Cataphoresis & galvanic anti-corrosion coating				
Access ramp	Manual wheelchair ramps, or Electric wheelchair ramps				
Door arrangement	4 double doors; optional: 5 double doors				
SUSPENSION					
Suspension levelling system	ECAS II with kneeling function				
Front axle	ZF RL 82A				
Middle axle	ZF AVN 132				
Rear axle	ZF AV 133				
BRAKE SYSTEM					
Brakes	Disc brake, Wabco EBS, ABS and ASR				
Auxiliary brake	Electric energy recycle system				
Steering	Bosh 8098				
CAPACITY					
Gross Vehicle Weight (kg)	28600				

TECHNICAL SPECIFICATIONS 18M UC E-BUS

DIMENSIONS					
Overall Length (mm)	18090				
Overall Width (mm)	2550				
Overall Height (mm)	3660				
Front Overhang (mm)	2700				
Rear Overhang (mm)	3490				
Wheelbase between front and middle axle (mm)	5900				
Wheelbase between middle and rear axle (mm)	6000				
MANEUVERABILITY					
Maximum external radius (mm)	12575				
Maximum internal radius (mm)	5615				
TIRES					
Size designation(s) Tire	275/70R22.5 (all axles)				
Manufacturer	Michelin/Giti				
COMFORT					
VENTILATION AND AIR-CONDITIONING					
Air-conditioning	Separate climate control system for driver and passengers; Full Spheros one touch climate control system				
Passenger compartment heating system	Valeo electric heater				
Auxiliary heating system	Electric defroster				
Electric defroster	Hongye PFJ-5C/600JL10				
AUDIO & VIDEO SYSTEMS					
Radio + USB Port + Bluetooth Connections	Standard				
Announcement System for Passenger Area - 5 x Passenger Speakers +	Optional				
Multimedia Touchscreen	Standard				
Rear Camera	Standard				
Wi-Fi Router	Optional				

PASSENGER CAPACITY ALTERNATIVES

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SEATED	MAX. STANDING	WHEELCHAIR	MAX. TOTAL PASSENGERS*
39	83	2	124
39	94	2	135
39	78	2	119
47	75	2	124
47	86	2	135
47	70	2	119

* Passenger capacity depends on selected optional features & wheelchair area utilization.

18M UC E-BUS DIMENSIONS





—W = 2550 mm—



Find more information on: www.chariot-electricbus.com

Contact us via e-mail: info@chariot-electricbus.com

All images, tables, and specifications are Chariot Motors Company releases. Some features, applications, and services may vary.