



LOW ENTRY

SCANIA K-CHASSIS

FOR URBAN TRANSPORT OPERATIONS



SCANIA

DESIGNED FOR SUSTAINABLE AND EFFICIENT MOBILITY

Based on more than a century of engineering experience, the new generation of Scania buses has been developed to meet the demands of today's and tomorrow's cities; energy efficient, available in a wide range of powertrains and offering the latest technology in everything from safety systems to reduced emission and noise levels. And through excellent uptime, fuel economy and the possibility of high passenger capacity, the new Scania buses allow sustainable mobility to go hand-in-hand with operating economy.

For a better city environment

Having the right vehicle for the operation and using it efficiently is the best way to minimise environmental impact. Scania offers hybrid electric buses and engines running on all commercially viable renewable fuels – biodiesel/FAME, HVO and biogas powertrains, in order to meet the requirements of all urban operations.

Through high quality vehicles and innovative technical solutions, maintenance, and a range of driver services, we address fuel efficiency from all angles, helping operators to reduce emissions and fuel costs.

To help prevent accidents and create a safer city environment, Scania buses offer built-in state-of-the-art safety systems and features. These help the driver by increasing their awareness of other road users, and even help to control the vehicle when required.

Energy efficiency lowers operating cost

Public transport operators know the importance of keeping operating costs to a minimum, and fuel consumption is one of the main contributors to cost. An energy efficient powertrain can therefore offer significant savings in fuel.

Scania develops and offers highly energy efficient powertrains, both traditional and electrified. Compared to previous models, the new generation of Scania buses offer operators the potential to make significant savings in fuel and emissions, without compromising on performance. This is achieved through a number of factors, with the most significant savings coming from improved engine and gearbox efficiency and weight reductions.

Beyond the powertrain, driving style has a major impact on fuel consumption. The drivability of Scania's vehicles and our driver assistance systems, as well as our driver services, can potentially contribute to further fuel savings of up to 10%.

Ensuring availability through reliable solutions

Reducing vehicle downtime and increasing utilisation is essential to making urban operations cost-efficient.

Our buses are built on proven technology and components, resulting in chassis and powertrains that are dependable, durable, and robust. That reliability is the key to minimising time in the workshop and maximising utilisation of the vehicle. Our buses are designed and constructed to make sure that sensitive and expensive components are protected in the event of a collision. Limiting damage and avoiding deformation of components such as the steering and aftertreatment system, is critical for minimising costs, as well as complex and time-consuming repairs.

Additionally, Scania buses are designed to facilitate maintenance and to make it as efficient as possible. Here, Scania offers professional workshop services with excellent parts availability to secure maximum uptime.

A first-class driver area

A bus operating in urban traffic is constantly exposed to the risk of external damage and the work environment for the driver can be very demanding. A quality driver environment can therefore play a crucial role in reducing the risk of collisions, downtime, sick-leave, and improving employee retention.

The driver area in Scania buses is simply first-class and can even be said to be industry leading. A great turning radius, good visibility, and an overall well-balanced vehicle makes for excellent driveability, while optional advanced driver assistance systems (ADAS) gives the driver good control of the vehicle through improved assisted handling, steering and braking. The increased safety helps minimise accidents and the associated costs.

Due to the demanding work environment, operators also face challenges when it comes to sick leave and employee retention; that's why we've designed the best possible work environment for drivers in terms of ergonomics, reachability, climate control, safety features and an overall quality feel.

PRODUCT DESIGN FEATURES

The low entry Scania K-chassis meets the needs of operators on every continent. With total design and production control over chassis and powertrain, Scania delivers unrivalled reliability, durability and performance.

Battery packs

The battery packs for hybrids are placed on the roof, creating a well-balanced bus with excellent driveability and ride comfort.



Battery temperature control

Battery pack temperature is controlled by a closed water cooling system. In very cold or very hot ambient temperatures, the water cooling is assisted by an electric heater or a A/C cooling respectively. The A/C circuit is separated from the climate control system of the bus and will not affect the comfort of the passengers or driver.

Driver area

The driver area has a completely new design with improved ergonomics, safety, comfort, and driveability.

- Excellent ergonomics and reachability
 - pedal placement, leg space, driver height settings, flexible switch placement due to CAN-functionality.
- Increased safety – electro-pneumatically activated parking brakes.
- Excellent drivability – great turning circle, advanced driver assistance systems, and improved assisted handling, steering and braking.

Electric system

The new power supply architecture comes with improved electronic control units (ECUs) and functions that improve performance and facilitate diagnostics for repair and maintenance. It also enables new functionality within ADAS, e-mobility and autonomous transport systems.



Front suspension technology

The new rigid front suspension increases passenger capacity and offers good passenger comfort.

Adblue tank

45 litres (31 litres usable)

Articulation control

Scania buses features an industry-leading control system for its articulated variants. It prevents instability and jack-knifing by using wheelspin control, traction control, articulation damping system and patented sway control. This facilitates handling, manoeuvrability, and safe driving in slippery conditions and during lane changes at high speeds.

Safety features

A range of functions support the driver in demanding urban environments.

- Electro-pneumatically activated parking brake – locks the brakes until acceleration is activated, thereby preventing unintentional vehicle motion.
- Vulnerable road user collision warning – detects cyclist and pedestrians close to the vehicle.
- Blind spot warning – detects other vehicles located in the driver's blind spot area.
- Underrun protection – rigid beams in the rear protect passengers and sensitive components to keep distance to vehicles in front.

Powertrain technology

The highly dependable, durable, and robust powertrains enable potentially significant fuel savings as a result of a number of factors such as:

- Gearbox
- Weight reduction

Powertrains

The low entry Scania K-chassis offers a wide range of energy efficient and reliable powertrains optimised for inner-city and suburban traffic.

Hybrid electric (Euro 6)	Output	Torque	Emissions control	Fuel options
9-litre engine Electric motor	320 hp (235 kW) at 1900 r/min 130 kW	1600 Nm (1050–1400 r/min) 1030 Nm	SCR	Biodiesel (B100%), HVO (B7%), diesel
Combustion, Euro 6	Output	Torque	Emissions control	Fuel options
9-litre	320 hp (235 kW) at 1900 r/min	1600 Nm (1050–1400 r/min)	SCR	Biodiesel (B100%), HVO (B7%), diesel

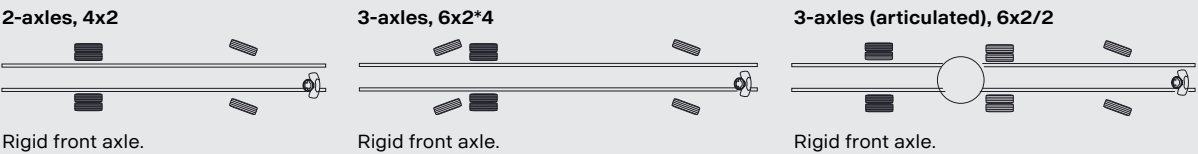
Gearboxes

6-speed fully automatic gearbox (ZF EcoLife 2)

12-speed manual gearbox with Scania opticruise

Axles

The low entry Scania K-chassis is available in several variants, enabling it to meet different operational requirements.



Floor level

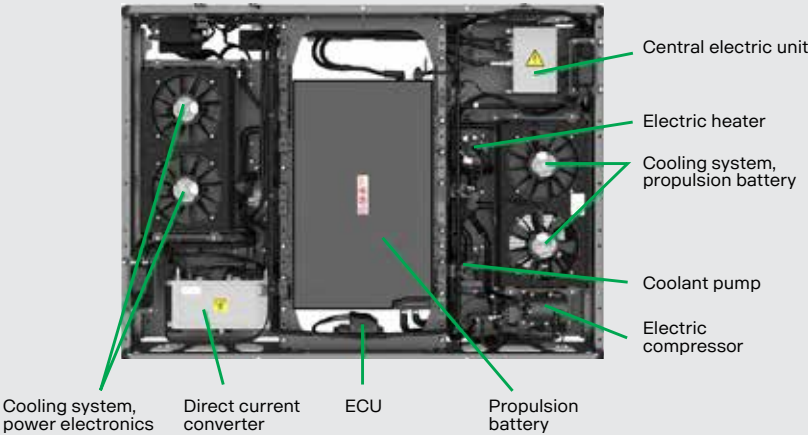
The low entry point and flat floor up to the central doors area offer the same accessibility as for the low floor version in the front and middle sections. In the rear section a higher floor creates better view for passengers. The widened aisle contributes to increased accessibility, comfort and passenger flow.



Hybrid Specifications

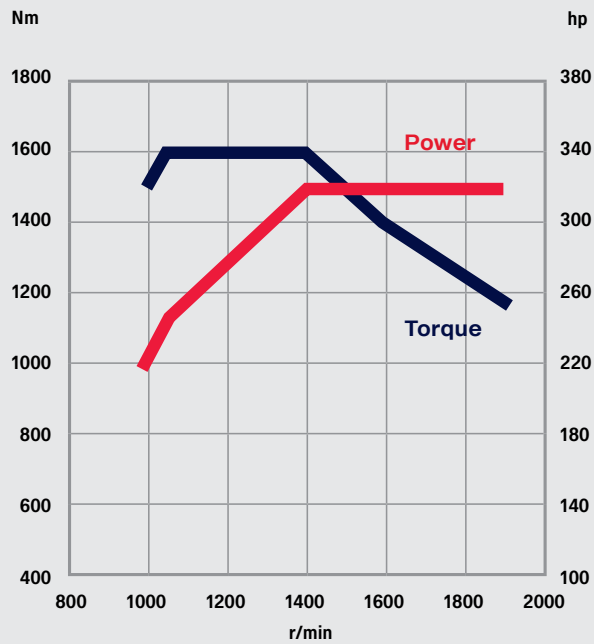
- Max Power 130 kW (177hp)
- Max Torque 1030 Nm
- DCC 650V-24V Converter
- Permanent Magnetizing Synchronous Electric Machine
- Brake performance of electric machine is 1000 Nm
- Fully charged battery 7.9 kW can provide up to 10 km EV mode up to 45 km/h

Battery Roof Unit



9-litre, 320 hp

Biodiesel (B100%), HVO (B7%), diesel



Powertrain – Hybrid electric

Hybrid – Biodiesel (B100%), **HVO** (B7%), **diesel**: 9-litre engine 320 hp (235 kW), torque 1600 Nm Electric motor 130 kW, torque 1030 Nm

Gearbox:
12-speed with Scania opticruise

Powertrain – Combustion, Euro 6

Biodiesel (B100%), **HVO** (B7%), **diesel**: 9-litre 320 hp (235 kW), torque 1600 Nm

Addblue: 45 litres (31 litres usable volume)

Gearbox:
12-speed with Scania opticruise
6-speed fully automatic with acceleration control

Axle and suspension

Configurations: 2-axle, 3-axle with tag axle (steered), 3-axle articulated

Front axle:
Rigid axle
Max. load capacity 8.2 tonnes, articulated 8.0 tonnes

Rear axle:
Rigid axle, driven
Max. load capacity 13 tonnes

Centre axle (articulated):
Rigid axle
Max. load capacity 13 tonnes

Tag axle:
Rigid axle, steerable, non-driven
Max. load capacity bogie 19 tonnes (11.5 + 7.5 tonnes)

Full air suspension with electronic level control system (ELC)
Total raising or lowering of chassis height in the front or the whole side

Wheel

Tyre size: 295/80 Continental (Including spare)
Aluminium or steel rims

Electrical system

230A battery, 24 V
Alternator 2 x 150

Brakes

Disc brakes, electronic brake system (EBS), anti-lock brake system (ABS), traction control (TC), bus stop brake, hill-hold, pad wear indicator, pipes manufactured from either rust-protected steel or high impact synthetics, seperate air tanks for each circuit, exhaust brake with automatic control

Support system (optional)

Scania Driver Support, vulnerable road user collision warning, blind spot warning



SERVICE OFFERING

Our offering consists of a number of services for minimising emissions, increasing safety, and improving operating economy, focusing on areas like fuel efficiency and uptime. These services allow us to provide solutions to each operators' individual challenges and needs. Scania's data services generates insight and create business value through anything from position and speed to performance and driving style. Scania's data API's comply with the FSM standards 1.x and 2.x.

Driver services

Enables drivers to drive safer and more efficient, and can reduce the need for maintenance.

Scania Driver Training

Combines theory and practice, covering topics such as safe and efficient driving, especially important when it comes to electrical vehicles, not only to save energy but even regenerate energy by optimal driving. Handles also other aspects of professional driving, always with a focus on profitability, fuel economy and reduced emissions.

Scania Driver Evaluation

An on-board device that assesses the driving style by comparing it to that of drivers operating in similar conditions. The result, which can be used to achieve long term improvements, is visible in the Scania Fleet Management Portal and Scania Fleet App.

Fleet management services

The data collected on board the buses provides valuable insight into driving styles, productivity and economy. This level of tracking and diagnostics can bring significant benefits in terms of increased uptime, improved safety and reduced operating costs. Through the Scania Fleet Management Portal and the Scania Fleet App, operators can gain access to valuable insights and reap the benefits.

Repair and maintenance services

Having access to professional workshops and quality spare parts is key to keeping the vehicles in prime condition. Scania offers a range of repair and maintenance services:

Scania Flexible Maintenance

Uses real-time vehicle data to produce maintenance plans tailored to each vehicle's actual operation, meaning no underserving and no overserving. This is done by continually monitoring and analysing operational data to ensure maximum uptime and schedule maintenance customised to the operations, thus increasing productivity and decreasing disruptions.

Scania Fleet Care

The fleet operator receives a dedicated Fleet Manager from Scania equipped with advanced tools and systems, to optimise maintenance and prevent breakdowns based on operational data and vehicle data analysis.

Customer workshop services

A tailored collaboration service designed to facilitate for the operator by streamlining and quality assuring the workshop and workshop processes to meet Scania standards.

Financial services

Flexible financing and insurance solutions that suit the operational needs, tailored to provide predictable costs and manageable risks – over the entire lifecycle of the vehicles.

Scania Financing

Tailored solutions for financing an expansion or a fleet renewal. Handled with professional knowledge of financial of the transport business and optimised for the local tax and legal environment.

Scania Insurance

Tailored solutions that, together with claims support service and Scania Assistance, will help get the vehicle back on the road quicker, safeguarding uptime – and peace of mind.