



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 it offers 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 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 create a positive passenger experience, Scania buses have independent front suspension that makes the ride more comfortable and a highly efficient climate system that minimises energy consumption and can handle just about all types of climates.

To help prevent accidents and create a safer city environment, Scania buses have 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. Compared to previous models, the new generation of Scania buses can potentially save up to 9% 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. Beyond the powertrain, driving style has a major impact on fuel consumption. The driveability 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 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 advanced driver assistance systems give the driver good control of the vehicle through improved assisted handling, steering and braking. This increases safety and 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.

Powertrains

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

Combustion, Euro 3	Output	Torque	Fuel options
9-litre	250 hp (184 kW) at 1900 r/min	1250 Nm (1000-1350 r/min)	Biodiesel, HVO, diesel
9-litre	310 hp (228 kW) at 1900 r/min	1550 Nm (1000-1350 r/min)	Biodiesel, HVO, diesel
13-litre	360 hp (265 kW) at 1900 r/min	1800 Nm (1000-1350 r/min)	Biodiesel, HVO, diesel

Fuel capacity (usable volumes): 140–360 litres, 180–560 litres (high articulated)

Combustion, Euro 6	Output	Torque	Emissions control	Fuel options
9-litre	280 hp (206 kW) at 1900 r/min	1350 Nm (1000-1400 r/min)	EGR	Biogas, natural gas
9-litre	340 hp (250 kW) at 1900 r/min	1600 Nm (1100-1400 r/min)	EGR	Biogas, natural gas

Fuel capacity: 1260–1875 litres

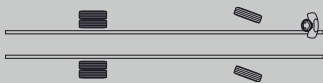
Gearboxes

6-speed fully automatic gearbox (ZF EcoLife 2)
12-speed manual gearbox with Scania Opticruise and retarder

Axles

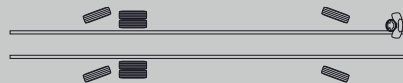
The low entry Scania K-chassis is available in several variants, enabling it to meet different operational requirements.

2-axes, 4x2



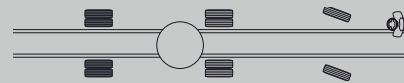
Independent front suspension or rigid front axle.

3-axes, 6x2*4



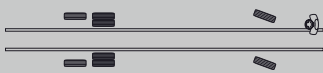
Independent front suspension or rigid front axle.

3-axes (articulated), 6x2/2



Independent front suspension or rigid front axle.

3-axes, 6x2



Rigid front axle.

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.



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.

Driver area

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

- Excellent ergonomics and reachability – pedal placement, leg space, adjustable instrument panel and flexible switch placement due to CAN-functionality.
- Increased safety – advanced driver assistance systems, electropneumatic parking brake system.
- Excellent driveability – great turning radius, advanced driver assistance systems, and improved assisted handling, steering and braking.
- Enhanced climate system – improved climate system with better airflow.

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.

Fuel tanks

Available in several volume options suitable for urban operations. The shape of the 140–360 litre (usable volumes) fuel tanks is optimised for the inner layout to enable seat mounting closer to the wheelhouses. The 450 or 560 litre (usable volumes) tanks can, in high articulation buses, be placed by the centre axle.

Front suspension technology

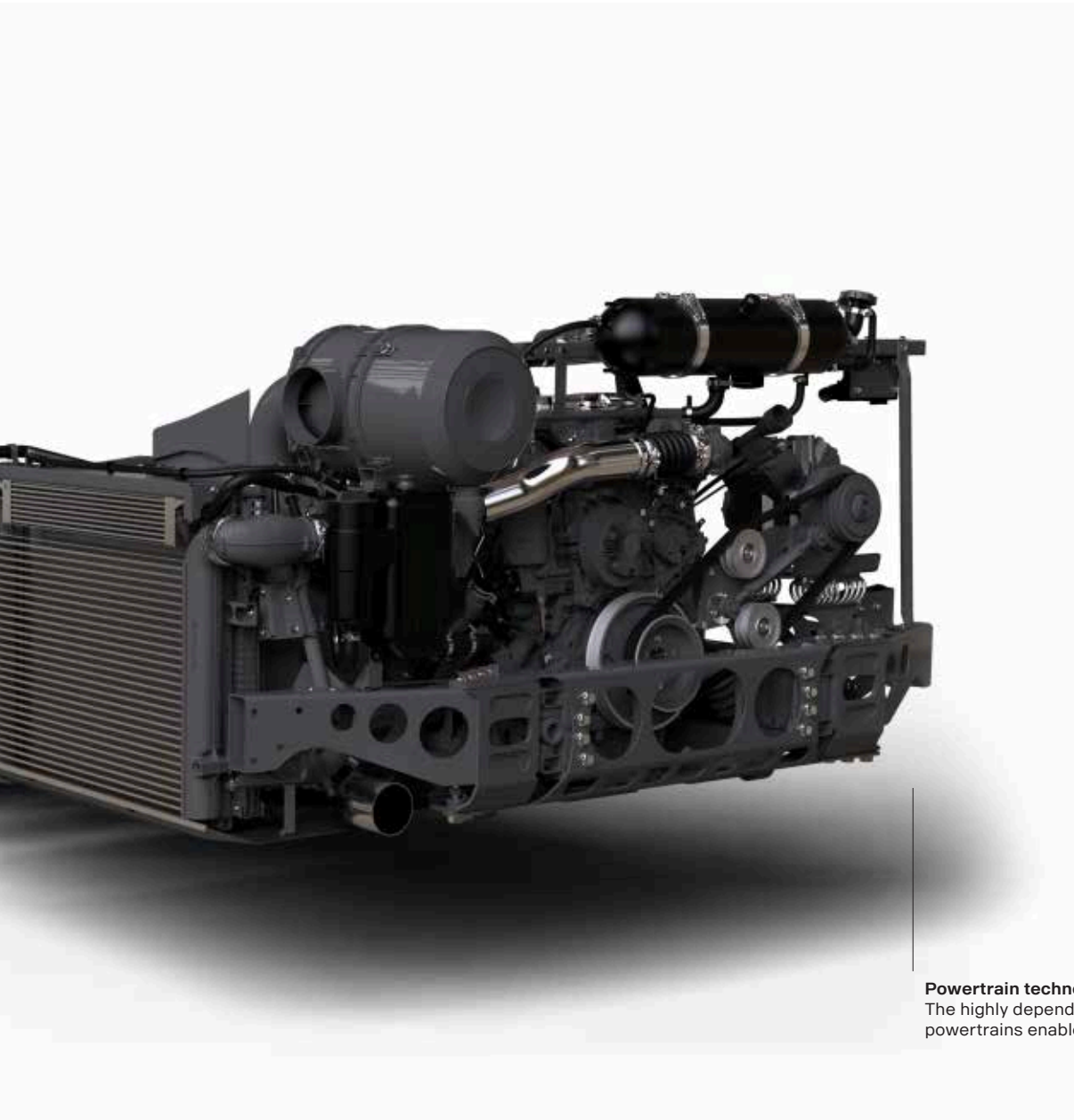
Without compromising on passenger capacity, the new independent front suspension offers excellent passenger comfort and enables a wider aisle (900 mm) – resulting in new layout possibilities, increased passenger flow, space and accessibility.

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

Chassis frame construction

The strengthened front axle, in combination with the ability to now use wider tyres, means that load capacity is increased from 7.1 to 8.2 tonnes (for independent front suspension). This allows higher passenger capacity. It also enables optimised weight distribution between the front and rear axles – especially important for gas vehicles.





Powertrain technology

The highly dependable, durable, and robust powertrains enable fuel savings of up to 9%.

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

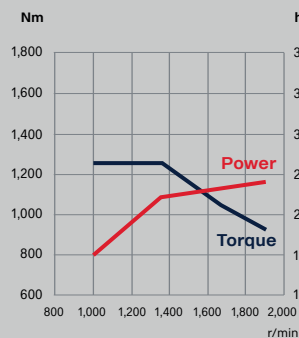
A range of functions support the driver in demanding urban environments.

- Electropneumatic parking brake control – locks the brakes until acceleration is activated, thereby preventing unintentional vehicle motion.
- Adaptive cruise control – assists the driver to keep distance to vehicles in front.
- Vulnerable road user collision warning –

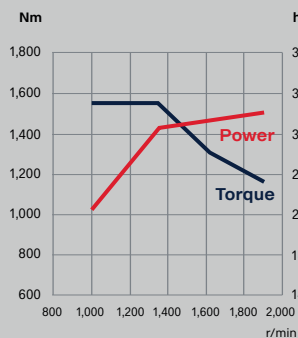
detects cyclist and pedestrians close to the vehicle.

- Blind spot warning – detects other vehicles located in the driver's blind spot area.
- Underrun protection – rigid beams in the rear protects other road users and sensitive components on the chassis.

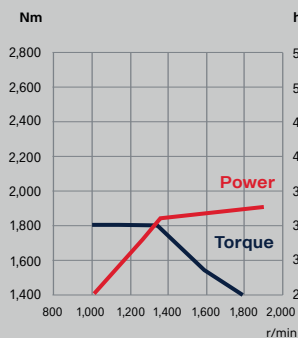
9-litre, 250 hp
Biodiesel, HVO, diesel



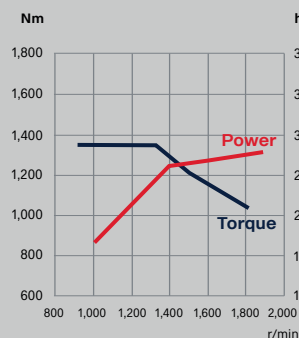
9-litre, 310 hp
Biodiesel, HVO, diesel



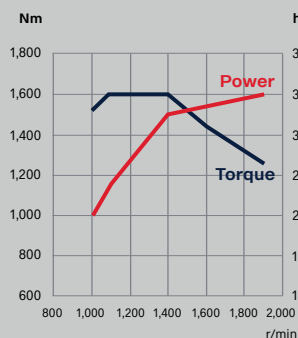
13-litre, 360 hp
Biodiesel, HVO, diesel



9-litre, 280 hp
Biogas, natural gas



9-litre, 340 hp
Biogas, natural gas



Powertrain – Combustion, Euro 3

Biodiesel, HVO, diesel:

9-litre 250 hp (184 kW) 1250 Nm
9-litre 310 hp (228 kW) 1550 Nm
13-litre 360 hp (265 kW) 1800 Nm

Fuel capacity: (usable volumes): 140–360 litres (2- and 3-axle),
450–560 (articulated)

Powertrain – Combustion, Euro 6

Biogas, natural gas:

9-litre 280 hp (206 kW), torque 1350 Nm
9-litre 340 hp (250 kW), torque 1600 Nm

Fuel capacity: 1260–1875 litres

Gearboxes:

6-speed fully automatic gearbox (ZF EcoLife 2)
12-speed manual gearbox with Scania Opticruise and retarder

Axle and suspension

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

Front axle:

Independent wheel suspension or rigid axle
Max. load capacity 8.2 tonnes

Rear axle:

Rigid axle, driven
Max. load capacity 13 tonnes

Centre axle (articulated):

Rigid axle
High floor articulation: max. load capacity 13 tonnes
Low floor articulation: max. load capacity 11.5 tonnes

Tag axle:

Rigid axle, electrohydraulic steered or non-steered
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
Kneeling instep, whole front or whole side

Wheel

Tyre size:

275/70, 275/80, 295/80, 315/60, 315/70, 315/80
Aluminum or steel rims

Electrical system

150, 180, 210 or 230 Ah or dual battery system, 24 V
Alternator 150, 180, 2x150 or 2x180 A

Brakes

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

Support system

Scania driver support, lane departure warning, lane change collision prevention,
adaptive cruise control with active prediction, attention support, advanced
emergency braking, electropneumatic parking brake control, vulnerable road user
collision warning, blind spot warning and Scania Fleet Management which collects,
saves and sends information from the vehicle for analysis.



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 rFSM 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, not only to save energy but even regenerate energy. The training also handles 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

Through the Scania Fleet Management Portal and the Scania Fleet App, operators can gain access to valuable insights into the performance and status of their fleet. The data collected onboard the coach provides valuable insights 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.

Scania Zone

A position-based system for real-time vehicle adjustments in pre-defined zones. It allows operators to ensure that each vehicle stays within the set speed limits, increasing city safety and lowering fuel consumption. Scania Zone is an optional add-on in Scania's fleet management system.

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

Tailored collaboration services designed to facilitate workshop services for the operator by streamlining and quality assuring the workshop and processes to meet Scania's high 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.