

Products 2020



**BOSCH**

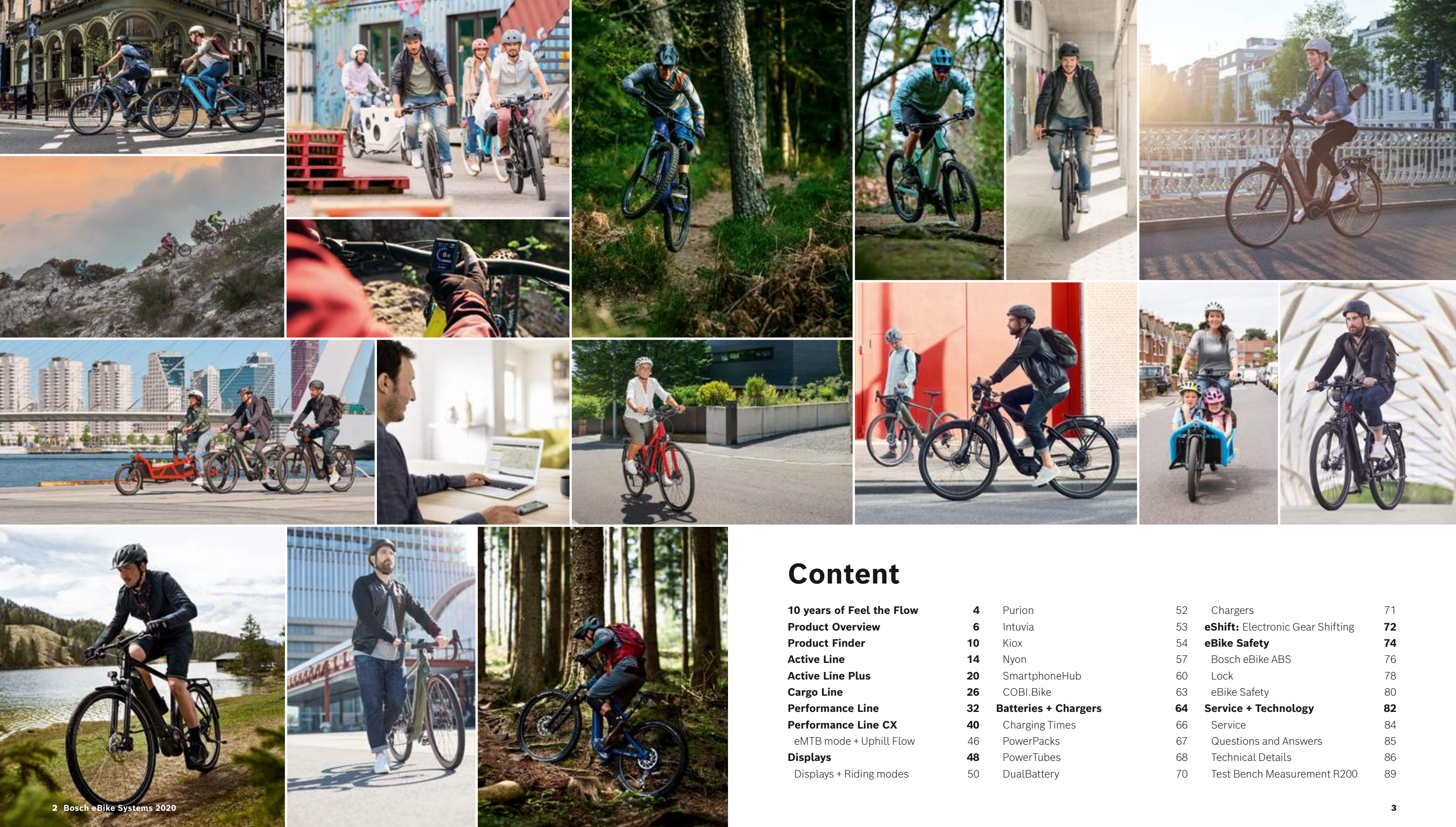
Invented for life

# TAKING RIDING ENJOYMENT TO A WHOLE NEW LEVEL

## FEEL THE FLOW

Bosch eBike Systems | EN  
[bosch-ebike.com](https://www.bosch-ebike.com)





# Content

10 years of Feel the Flow	4	Purion	52	Chargers	71
Product Overview	6	Intuvia	53	eShift: Electronic Gear Shifting	72
Product Finder	10	Kiox	54	eBike Safety	74
Active Line	14	Nyon	57	Bosch eBike ABS	76
Active Line Plus	20	SmartphoneHub	60	Lock	78
Cargo Line	26	COBI.Bike	63	eBike Safety	80
Performance Line	32	Batteries + Chargers	64	Service + Technology	82
Performance Line CX	40	Charging Times	66	Service	84
eMTB mode + Uphill Flow	46	PowerPacks	67	Questions and Answers	85
Displays	48	PowerTubes	68	Technical Details	86
Displays + Riding modes	50	DualBattery	70	Test Bench Measurement R200	89



# SETTING THE STANDARD FOR THE MOBILITY OF THE FUTURE

## #FeelTheFlow

For 10 years, we have been setting the standard with drive systems and innovative solutions for pedelecs. We are driven by our love of the eBike experience every day. A modern, flexible and sustainable form of mobility – a unique lifestyle. We are already thinking of the mobility of tomorrow today: Let's take the flow to the next level!



"Our goal for the future is to continue to develop innovative solutions for bicycle mobility and to inspire people. To this end, we aim to continue to develop pioneering products and services that promote a 'connected biking' experience."

**Claus Fleischer**  
CEO of Bosch eBike Systems

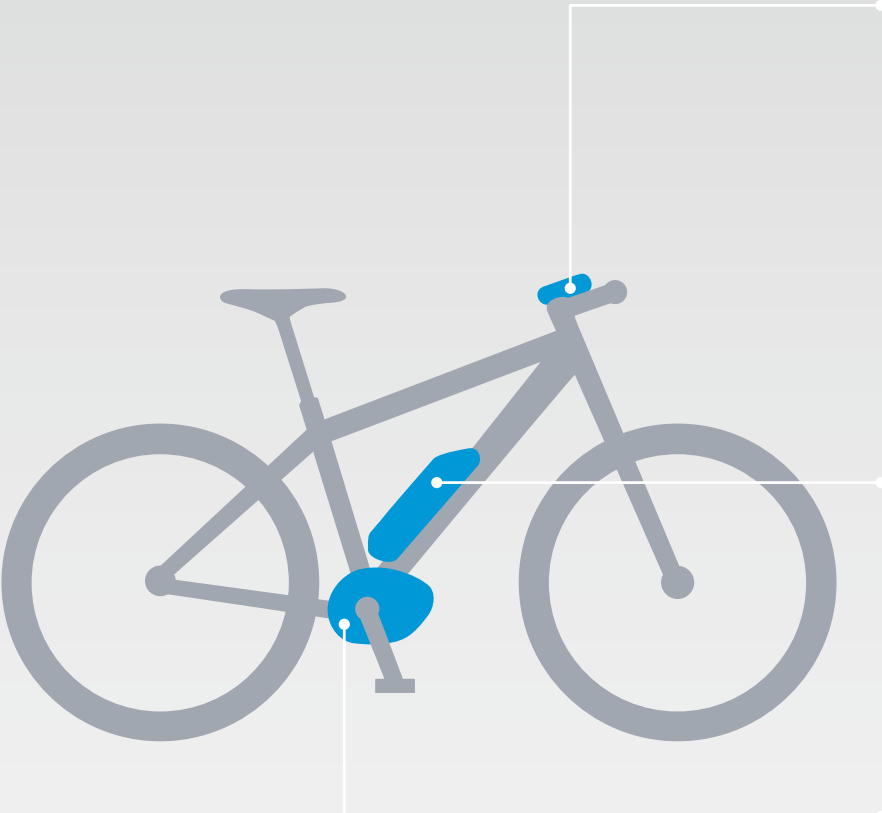




# Bosch eBike Systems

## Overview

Drive units, displays and batteries: The individual components have been developed so that they are perfectly matched and work together in harmony. This results in maximum efficiency and comfort – for a unique riding sensation. Feel the Flow.



### Displays

Exactly the amount of information you need. Purion displays all the basic information at the click of a thumb. Intuvia guarantees you easy and intuitive control of your eBike and gives you a view of all riding data at all times. The new compact and connected Kiox provides ambitious, sporty riders with the perfect companion on every trail. In conjunction with the eBike Connect app and the online portal, Nyon offers next generation connected biking. The new SmartphoneHub, in conjunction with the COBI.Bike app, also connects your eBike to the digital world.



### Batteries

Whether for relaxed cruising, your daily commute to work or ultimate Uphill Flow – Bosch rechargeable batteries deliver power for every task. PowerTube and PowerPack impress with their high energy density, great mileage, long service life, light weight and they are all easy to handle. In addition to the PowerTube 500, the PowerTube is now available in two other versions: the PowerTube 400 and PowerTube 625, giving you the option for even longer ranges and higher altitudes.



### Drive Units

The Drive Unit of the Bosch eBike system is available in Active, Active Plus, Cargo, Performance and Performance CX variants. The Cargo and Performance Drive Units are also available in a Speed variant that delivers support up to 45 km/h. Regardless of whether you are in the flow as you ride across the city, carrying cargo, or negotiating trails or alpine terrain: with the right Drive Unit, every bike ride will be your very own, enthralling eBike experience.

### Pedelecs, eBikes, etc.: Definitions

The terms "electric bicycle", "pedelec" and "eBike" are often used interchangeably to refer to two-wheelers with electric drive. The most common examples are pedelecs with motor support of up to 25 km/h and a rated continuous output of 250 watts.

These "Pedelec 25s" only provide support while the rider is pedalling and are uniformly defined in Europe as EPACs (Electrically Power Assisted Cycles). Under traffic law they are defined as bicycles with all the associated rights and obligations. On the other hand, the legal requirements for S-pedelecs (up to

45 km/h) or eBikes with throttle grip are quite different. Bosch eBike Systems uses the term "eBike" almost exclusively to refer to a "Pedelec 25" and is committed to responsible, lawful and compliant eBiking – for even more cycling enjoyment.

### Drive Units



NEW



NEW



NEW



### Active Line

Enjoy cycling in the city, even at rush hour: The controlled acceleration and natural riding sensation at over 25 km/h or when switched off turns every trip into an experience. The low-noise Drive Unit fits perfectly inside the bicycle frame and its modest overall weight of 2.9 kg improves the bike's handling.

### Active Line Plus

Brings enjoyment to everyday riding: Quiet, reliable and with a barely noticeable pedal resistance over 25 km/h – it couldn't be easier to increase the radius available to you for spontaneous excursions. The power of the Active Line Plus Drive Unit is delivered smoothly to achieve a natural riding sensation.

### Cargo Line / Speed

Transport made easy: With a separate product line for cargo bikes, Bosch eBike Systems sets new standards in the urban transport sector. The Cargo Line comes in two versions: with support up to 25 km/h for a comfortable ride even when carrying a heavy load. And as Cargo Speed with support up to 45 km/h – ideal for long delivery rounds or when transporting heavy goods on a daily basis.

### Performance Line / Speed

For limitless freedom: The new Performance Line delivers the right support at the right moment. There are two variants: The quiet, lightweight Performance Cruise Drive Unit provides support up to 25 km/h for a natural sporty riding sensation. The Performance Line Speed Drive Unit speeds up your daily routines, even at higher cadences, with even more power and a torque of up to 75 Nm and support up to 45 km/h.

### Performance Line CX

For the perfect Uphill Flow on every trail: At just 2.9 kg, the new Performance Line CX is the most powerful drive from Bosch. Developed for ambitious riders, it is lightweight and compact and offers a natural riding sensation. With up to 340% of perfectly delivered support and the power of eMTB mode, it takes the joy of eMountain biking to the next level.



### Displays



NEW





Purion

All important information at a click of the thumb: The compact on-board computer is a display and control unit in one – perfect for anyone who wants to concentrate on the key information. The display provides a clear overview of the charging status, speed, riding mode, range, trip distance and total distance.

Intuvia

Intuvia offers optimised ease of use: All riding data (speed, distance, trip time and range) can be called up at any time and the display is easy to read even in bright sunlight. The separate control unit enables the Intuvia to be operated with ease using just your thumb.

Kiox

The perfect choice for riders with sporty ambitions: robust, compact and connected. The colour display combines the classic functions of an on-board computer, while at the same time giving you access to the digital world via the eBike Connect smartphone app. Remote Compact offers comfortable and ergonomically efficient operations.

Nyon

The all-in-one on-board computer. Together with the online portal and the eBike Connect smartphone app, Nyon opens up access to the connected eBike world. As part of an intelligent system, Nyon accompanies the eBiker from route planning and the ride itself, through to analysis of activities.

SmartphoneHub

For fully connected eBikes: Thanks to the smartphone and the COBI.Bike app, the new SmartphoneHub becomes an intelligent control centre for navigation, activities and other services. The integrated display shows the most important riding data, even without a smartphone attached.

COBI.Bike

Transforming the eBike into a smart bike: The fusion of smartphone and eBike links pedelec riders with the digital world on the move and offers an alternative for eBikes equipped with Intuvia and Nyon.

Batteries

PowerPack 300 / 400 / 500

Whatever you are planning – Bosch has the perfect battery for any need. The Bosch PowerPacks 300, 400 and 500 are available as frame or rack batteries. The lightweight lithium-ion batteries are easy to install and remove. The PowerPack can also be charged on the eBike via the charging socket.



PowerTube 400 / 500 / 625

Bosch PowerTubes have the power to drive any ride and, thanks to their compact size and minimalist design, can be integrated with the eBike to ideal effect, either horizontally or vertically. The lithium-ion batteries can be integrated within the frame, ensuring carefree riding enjoyment, while a safety catch prevents the battery from falling out even on challenging terrain. New: The PowerTube 400 and PowerTube 625.



DualBattery 1000 / 1250

Ideal for touring bikers, long-distance commuters and cargo bikers. The combination of two new Bosch PowerTubes 625 batteries delivers up to 1,250 Watt hours. Intelligent energy management control software charges both batteries.



Chargers



Compact, Standard and Fast Chargers

Bosch chargers are handy, lightweight and robust. The housings are designed without vents to protect the chargers from dirt and grime. Wherever your journey may take you: With the 2 A Compact Charger, 4 A Standard Charger and 6 A Fast Charger, Bosch has developed three models that can charge the eBike quickly and reliably.

Product innovations 2020



Performance Line / Speed

For limitless freedom: The new Performance Line delivers the right support for every ride, whether on sporty mountain rides or when commuting to work. It always offers a natural sporty riding sensation up to 25 km/h and, in the dynamic Speed variant, up to 45 km/h.



Cargo Line / Speed

For cargo transport: The new Cargo Line is specially designed for cargo bikes and makes goods easy and comfortable to transport. Whether laden or unladen, it allows controlled acceleration – up to 25 km/h and, with Cargo Line Speed, up to 45 km/h.



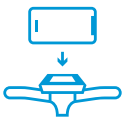
Performance Line CX

For the perfect Uphill Flow: The new Performance CX Drive Unit for eMountain bikes is the powerhouse among the drives. Weighing 2.9 kg and with a maximum torque of 75 Nm, it brings more riding enjoyment to the trail, despite its particularly compact size. The design is a recipient of the Red Dot Design Award.



Kiox

Small, robust and now connected too: All relevant riding data is recorded by Kiox and automatically transmitted via Bluetooth to the eBike Connect app to allow all activities to be checked and evaluated.



SmartphoneHub

Connected eBiking: Thanks to the smartphone and the COBI.Bike app, the new SmartphoneHub becomes an intelligent control centre that navigates, records activities and connects them to other services. The integrated display shows the most important riding data, so that you can start off and get riding even without a smartphone.



PowerTubes

Stylish riding enjoyment: The integrated rechargeable batteries provide enough power for any ride. Now available in two new variants: PowerTube 400 and PowerTube 625 – with even more power for maximum range and altitudes.



Lock

For an even greater feeling of security: The new premium function from Bosch is the ideal complement to a mechanical lock. Lock enables motor support to be deactivated by removing the Kiox on-board computer.



eSuspension

eSuspension for the Performance Line CX is the first time Bosch eBike Systems has teamed up with FOX to offer eMountain bikers an electronically controllable suspension designed for maximum comfort and fun on challenging terrain.



Tuning protection

Guaranteed Bosch original: The software of the Bosch eBike system closes the door on tuning. If manipulation is detected, the pedelec switches to emergency mode and powers down support. This protects the system and discourages manipulation.

# Product Finder

Which is the best Bosch eBike system for which rider?

## 1. Riding style

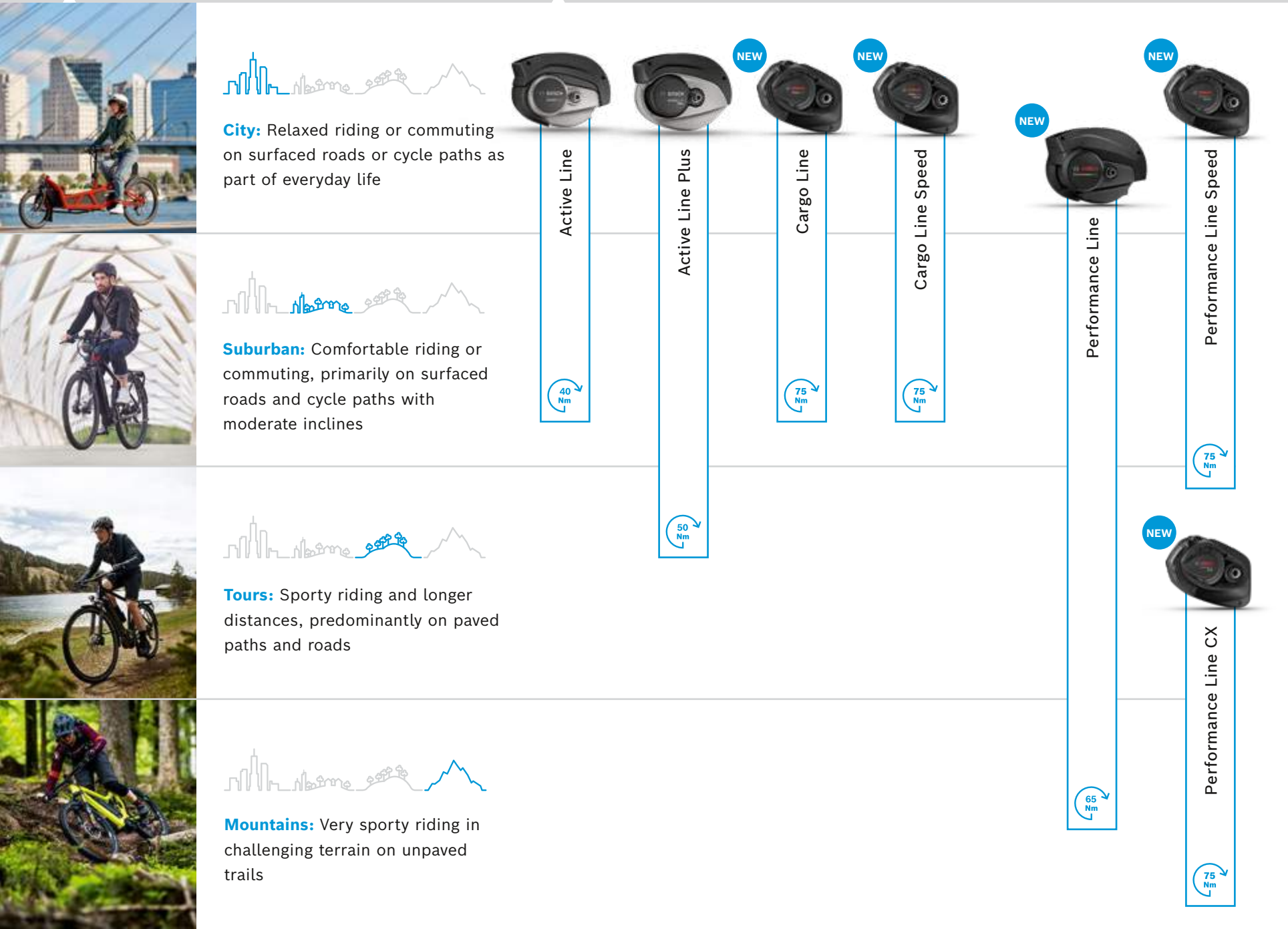
What is your usual riding style and on what type of terrain do you usually use your eBike?






## 2. Product line

Which product line suits you best?




## 3. Displays

Which display offers the right functions?



					
5 riding modes	●	●	●	●	●
Shift recommendation	○	●	○	●	○
Walk assistance	●	●	●	●	●
High resolution display	○	○	●	●	○
Integrated display	●	●	●	●	●
USB charging option	○	●	●	●	●
Splash-proof	●	●	●	●	●
Navigation	○	○	○	●	●*
Fitness tracking	○	○	●	●	●*
Compatible with eShift	○	●	●	●	○
Compatible with DualBattery	●	●	●	●	●
Third-party apps	○	○	●	●	●*
Theft protection	○	○	●	○	○

\*Only in conjunction with a smartphone and the COBI.Bike app.



### eBike Connect smartphone app

The eBike Connect app enables you to connect Nyon or Kiox with the smartphone using Bluetooth technology. Settings can be changed and planned routes can be transferred to Nyon. Kiox records GPS data, which is then combined with the riding data – for an overview and analysis of all activities in the app or in the eBike Connect online portal.



### COBI.Bike smartphone app

The SmartphoneHub uses the COBI.Bike app to connect to the smartphone via Bluetooth. The app provides the eBiker with a fully integrated control centre – with real-time fitness data, ride planning and recording options, as well as voice output.



## Additional features

### eMTB mode

eMTB mode replaces the Sport mode of the Performance Line CX and can now also be used on eMountain bikes with Performance Line. It continuously switches between the Tour and Turbo riding modes for a natural riding sensation and maximum performance on the trail.

### eShift

eShift is the integrated electronic gear shifting solution for anyone who wishes to focus on the essentials while eBiking.

### Lock

The new premium function Lock for Kiox enables motor support to be deactivated by removing the on-board computer. The lock only unlocks again when the same on-board computer is re-connected. The service is installed and billed by means of an app.

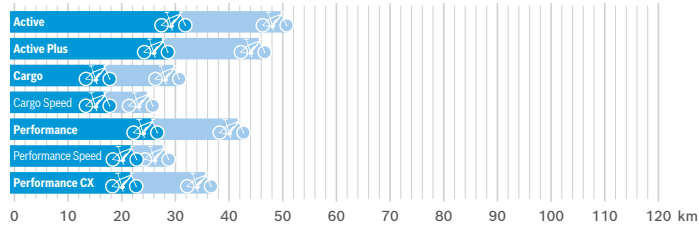
### eSuspension

Perfect coordination every time: E-Live Valve for the new Performance Line CX is the first time FOX offers eMountain bikers an electronically controllable chassis with Bosch eBike systems, which is designed for maximum fun on challenging trails.

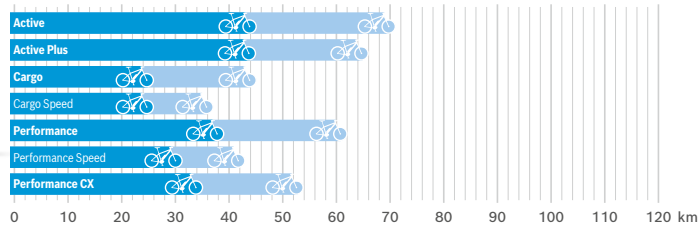
## 4. Batteries and range\*

The charts below provide an overview of battery range in relation to varying conditions:

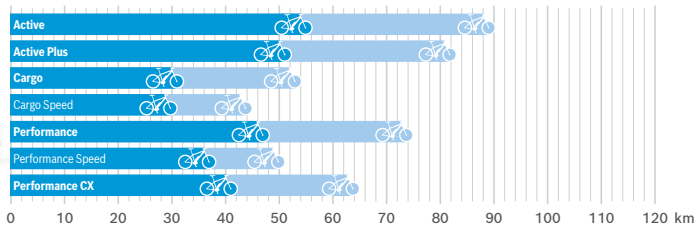
PowerPack 300



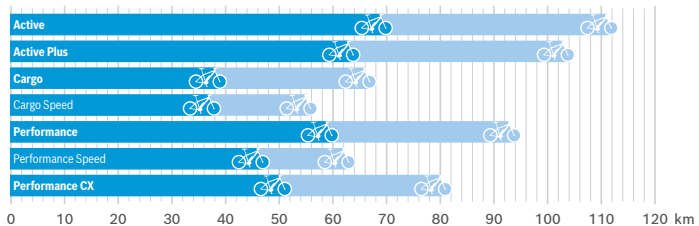
PowerPack 400 or PowerTube 400



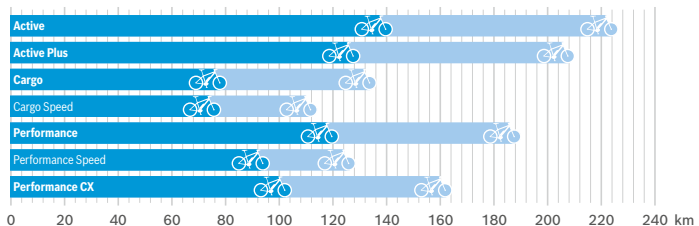
PowerPack 500 or PowerTube 500



PowerTube 625



DualBattery 1250



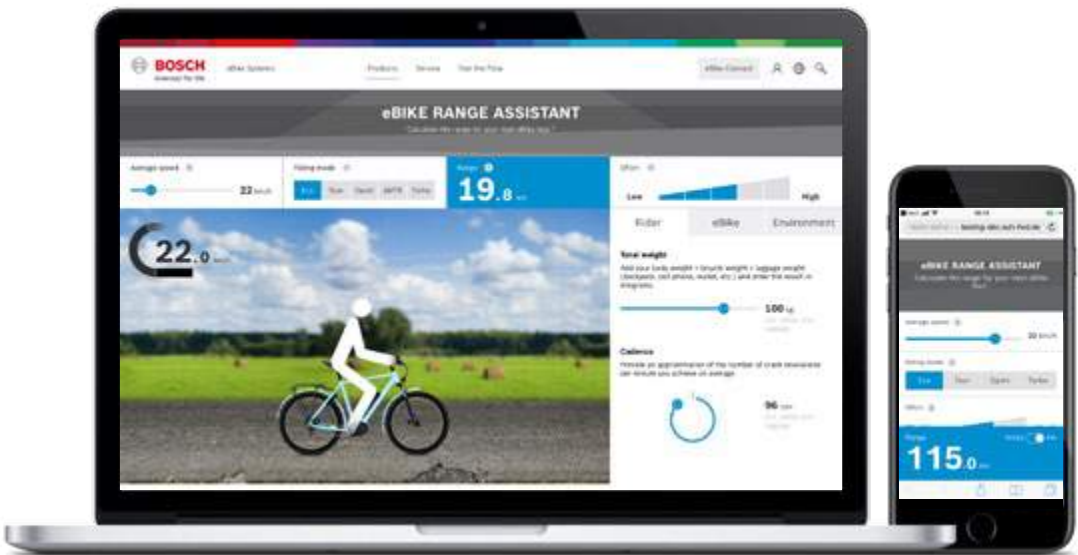
= Difficult conditions\*\* = Favourable conditions\*\*

\* Average of combined use of all four modes in difficult and favourable conditions.

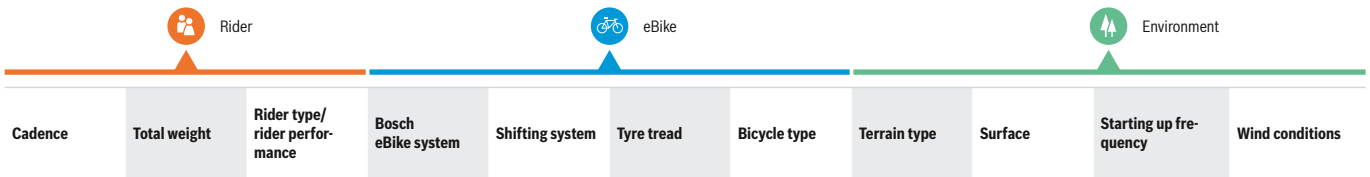
## Range Assistant

The range of Bosch rechargeable batteries depends on numerous different factors. Range is influenced by the rider and the chosen support mode, as well as the drive or battery installed in the eBike. In addition, environmental factors such as temperature, wind conditions

and riding surface also play a key role in support range. Our range assistant enables eBikers to estimate a typical range under various parameters. The online tool will show important information on battery range in a visually appealing way.



Calculate the range yourself:  
[bosch-ebike.com/range](https://bosch-ebike.com/range)



\*\* The ranges are typical values for new rechargeable batteries and may decrease if one of the conditions listed above changes. Further details in relation to conditions can be found online.



Active Line 

# TAKING THE PULSE OF THE CITY

## FEEL THE FLOW

When the riding experience is just as relaxed as the feeling when you arrive. The smooth and quiet Active Drive Unit is the ideal companion for getting around town. The compactly designed Active Line supports the rider with up to 25 km/h. The Drive Unit integrates elegantly with the bike frame, making handling easy, thanks to its light weight. The design is a recipient of the Red Dot Design Award. This is the stylish way to get around town – in the flow with the Active Line.

#FeelTheFlow #streetflow







# Active Line

At a glance



## Smart support

Experience a relaxed and safe riding sensation with smoothly delivered support from the quiet Active Line. With up to 40 Nm up to a maximum of 25 km/h. The pedal resistance is barely perceptible even above this speed or when switched off. In addition, weighing only 2.9 kg, the drive unit offers simple and agile handling of the eBike. Relaxed riding enjoyment and maximum comfort.

- Moderate power for relaxed everyday rides and short excursions.
- An elegant Drive Unit enabling new flexibility for everyday and occasional riders.

### Active Line Highlights



#### Maximum torque

For controlled acceleration.



#### Maximum support

Gentle drive, perfect for city trips.



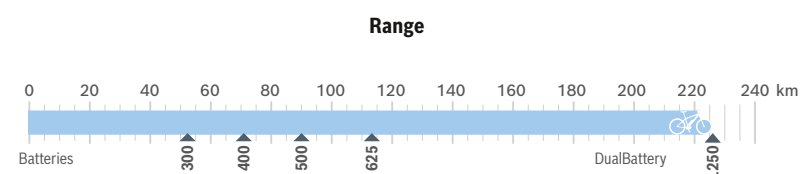
#### Drive Unit

Smooth delivery of support up to a maximum of 25 km/h.



#### Backpedal function

The Active Line is also available with a backpedal function.



Average of combined use of all four modes and favourable conditions. Further details in relation to conditions can be found online.

## The facts

- Helping to reduce traffic noise: The quiet motor provides even more riding enjoyment.
- Carefree cruising: Thanks to the innovative drive concept, the Drive Unit weighs just a modest 2.9 kg.
- Smart riding experience: The controlled acceleration with barely noticeable pedal resistance when switched off or at over 25 km/h ensures a natural riding sensation.
- Clean eBike look: Thanks to its compact size, the Active Drive Unit allows ideal integration within the bicycle frame.
- Easy handling: The modest weight and low centre of gravity of the Drive Unit enhances riding comfort.
- Relaxation on tour: The multi-sensor concept behind the Drive Unit takes more than 1,000 measurements per second to ensure a smooth power characteristic. The Active Line is also available with a backpedal function.
- Award-winning design: The flowing shapes and a pleasing linear design set new standards. The Active Line Plus has won the Red Dot Design Award.



The Active Line is also available with a backpedal function.

Technical details on page 86



## Active Line + Purion + PowerPack 300

The relaxed way to get  
from A to B



Comfort on all trips: The Active Line delivers moderate support while providing a particularly enjoyable riding sensation. It is the smooth-running, smart drive for anyone who enjoys riding on paved roads or bike trails and wants to have care-free everyday excursions. The low weight of the Drive Unit makes the eBike lighter overall. The Purion on-board computer gives eBikers all the essential information at a click of the thumb. Both hands remain safely on the handlebar. The PowerPack 300 is the ideal companion on short journeys in town. A drive system for urban adventurers who want effortless, individual mobility.



## Active Line + COBI.Bike + PowerTube 400

City connections



The flexible way to get around town, arriving fresh and relaxed: The Active Line makes a trip to the local café or an evening outing to a restaurant uncomplicated and stress-free. The drive is the ideal choice for city trips, thanks to well-judged acceleration and barely perceptible pedal resistance over 25 km/h. The design blends seamlessly with the bicycle frame and the light weight of the drive makes for easy handling. The COBI.Bike display provides the smart connection between the eBiker and the city: connected app services, route tracking or weather forecasts. The COBI.Bike app can be controlled easily and comfortably using the control unit on the handlebar with optional voice output support. The new PowerTube 400 integrated within the frame makes the stylish city bike a real eye-catcher. This is how urban mobility can be experienced – always in the flow with the city.





Active Line Plus  |  | 

# FOR EVERYDAY ADVENTURES

## FEEL THE FLOW

The desire for new discoveries knows no bounds – even in the city. Active Line Plus brings mobility to everyday life and extends your boundaries for spontaneous exploratory trips. The quiet, small and powerful drive unit offers a major advantage in riding enjoyment. Lightweight and compact, it allows agile handling and fits perfectly inside the frame. Quiet, reliable and with barely perceptible pedal resistance over 25 km/h – new experiences and discoveries await you.

#FeelTheFlow







# Active Line Plus

At a glance



reddot award 2017  
winner

## The drive unit for explorers

Discover new places and give in to the charms of the great unknown. The especially quiet Active Line Plus eBike drive has been designed for little adventures like this – with barely perceptible pedal resistance over 25 km/h or when switched off. Powerful 50 Nm supports the rider on voyages of discovery. An intelligent multi-sensor concept that records data more than 1,000 times per second is responsible for the smooth riding sensation. This, combined with the lighter weight and compact size, means the drive unit can be integrated perfectly into the bicycle frame. Giving you noticeably more enjoyment from eBiking.

- ▶ Optimal support for excursions – including beyond city limits.
- ▶ This quiet, small yet powerful drive unit offers an advancement in riding enjoyment, as well as improved handling.

### Active Line Plus Highlights



#### Maximum torque

For well-controlled acceleration.



#### Maximum support

The versatile solution for city trips and light touring.



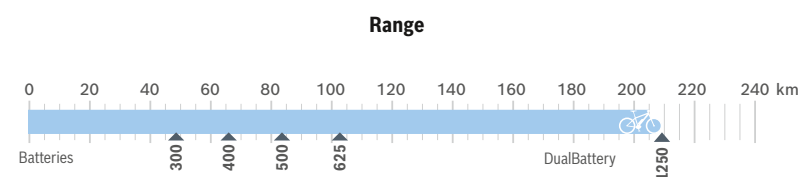
#### Drive Unit

Perfect delivery of support up to a maximum of 25 km/h.



#### Backpedal function

The Active Line Plus is also available with a backpedal function.



Average of combined use of all four modes and favourable conditions. Further details in relation to conditions can be found online.

## The facts

- ▶ Natural riding sensation: Controlled acceleration offers an authentic riding sensation – with barely perceptible pedal resistance at over 25 km/h or when switched off.
- ▶ Pure riding enjoyment: The Bosch motor is very quiet and reliable, enabling you to concentrate on the essentials.
- ▶ Carefree experience: The innovative drive concept of the Active Line Plus helps reduce weight. The drive unit weighs just 3.2 kg.
- ▶ Outstanding support: The intelligent multi-sensor concept ensures optimum power characteristics. The Active Line Plus is also available with a backpedal function.
- ▶ Reduced wear: The gear shift detection feature protects the eBike's components and ensures easy and smooth gear shifts at all times when on the move.
- ▶ Award-winning design: The flowing shapes and pleasing linear design of the Active Line Plus received a Red Dot Design Award.



The Active Line Plus is also available with a backpedal function.

Technical details on page 86



## Active Line Plus + SmartphoneHub + PowerTube 400

Elegant support



Discover new places, even beyond the city boundaries: The lightweight and compact Active Line Plus delivers an enjoyable riding sensation in all situations and supports a torque of up to 50 Nm. The SmartphoneHub keeps the eBiker fully connected through the use of a smartphone and the COBI.Bike app, offering a host of practical functions – from navigation, music streaming and fitness tracking to the integration of apps such as Strava or Komoot. The eBike can also be controlled without a smartphone being connected, as a small display in the SmartphoneHub can show the most important riding data. The new PowerTube 400 can be integrated in the bicycle frame to create a clean look for the eBike. The smart and stylish way for explorers to get around.



## Active Line Plus + Intuvia + ABS + PowerTube 500

Even more options



Whether you're in the town or country – be one step ahead at all times: Active Line Plus brings mobility to everyday life and extends your boundaries for excursions to the surrounding areas. The quiet, small yet powerful drive unit offers significantly more riding enjoyment, as well as barely perceptible pedal resistance over 25 km/h. Bosch eBike ABS delivers greater safety: the anti-lock braking system optimises riding stability, especially in slippery conditions. The front brake can be used more efficiently and so the risk of an accident is reduced. Intuvia gives the eBiker optimised ease of use. Handling is intuitive and the display can be operated conveniently using a separate control unit whilst riding. The PowerTube 500 ensures a sufficient supply of energy. City trips and spontaneous excursions can be enjoyed in a safe and relaxed way.





NEW

Cargo Line   

# TRANSPORT MADE EASY

## FEEL THE FLOW

Making a lot of things much easier. The new Cargo Line which is designed specially for cargo bikes, makes it easy and convenient to make deliveries to customers, get the kids to kindergarten or do the shopping. Whether laden or unladen, the Cargo Drive Unit responds precisely in every situation, always providing the required support at the right moment. It is available in two versions – with support up to 25 km/h or as Cargo Speed for longer distances up to 45 km/h. It unleashes its power even at low cadences, making it easy to reach respectable speeds even when carrying heavy loads. Simply in the flow with the Cargo Line.

#FeelTheFlow #streetflow





NEW

# Cargo Line

At a glance



## The effortless way to transport loads

Specially for cargo eBikes: The new, powerful Drive Unit Cargo Cruise for up to 25 km/h and the Cargo Speed variant for up to 45 km/h are the ideal drives for load transportation. They have a maximum torque of 75 Nm and up to 400% support. The rider receives the required support always at the right moment. The efficient motors maximise the range – so that the destination is reached, even when fully loaded.

- The easy and comfortable solution for deliveries and shopping or even for carrying the kids.
- The mighty Cargo Line even enables heavy loads to be transported uphill.

### Cargo Line Highlights



#### Maximum torque

The easy way to transport heavy loads.



#### Maximum support

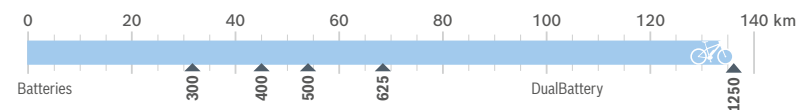
Powerful even under heavy loads.



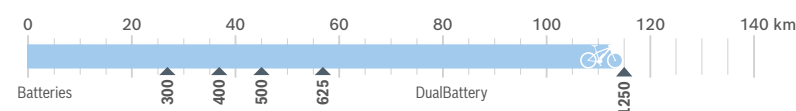
#### Drive Unit

Support up to 25 km/h – or with Cargo Speed up to 45 km/h.

### Cargo Cruise range



### Cargo Speed range



Average of combined use of all four modes and favourable conditions. Further details in relation to conditions can be found online.

## The facts

- Riding performance: With a separate product line for cargo bikes, Bosch eBike Systems sets new standards in the urban transport sector – for comfortable riding even when carrying a load.
- Powerful: With a torque of up to 75 Nm, the Cargo Line offers full support even at a low cadence. Controlled acceleration is possible, even when carrying a heavy load.
- Flexible: Whether laden or unladen, the new Cargo Line offers up to 400% of powerful support for cargo bikes with a permissible total weight of up to 250 kg.
- Economical: The powerful motor works very efficiently, with or without cargo. This allows for long ranges and is also ideal in combination with DualBattery.
- Nippy: The Drive Unit Cargo Speed provides support up to 45 km/h. This allows riders to get their cargo to its destination quickly and comfortably.
- Smart control: The multi-sensor concept, in combination with innovative control and fast information processing, ensure perfect interaction between riders and their eBikes.
- Packed with power: The Cargo Line with DualBattery offers a significant increase in range with up to 1,250 Wh – especially suitable for heavy loads and longer distances.

Technical details on page 86





NEW

# Cargo Line + SmartphoneHub + DualBattery 1000

The easy way to transport goods



For Sunday outings, weekly shopping trips or as a practical alternative to the car: The new Cargo Line is specially designed for cargo bikes and makes goods easy and comfortable to transport. Whether or not you are carrying goods, the Drive Unit will always provide support at the right moment and respond precisely and predictably in every situation. The efficient motor offers controlled acceleration and propels cargo bikes with a powerful 75 Nm. The smartphone and COBI.Bike app turn the SmartphoneHub into an intelligent control centre on the handlebar that gives eBikers optimum connectivity options including navigation, the recording of activities and connection options to other apps and services. DualBattery 1000 provides an extra dose of energy on all journeys and doubles the range, thanks to the combination of two Bosch PowerPacks 500. Low in emissions, the cargo bike is the flexible way to get around, while also enjoying the fresh air.



NEW

# Cargo Line Speed + Kiox + Lock + DualBattery 1250

Keeping a finger on the pulse



Time for the weekly trip to the market: The new Drive Unit Cargo Speed offers support for cargo bikes up to 45 km/h and gets the rider and his/her goods quickly and comfortably from A to B. With up to 400% support, even heavy loads can be transported uphill. The motor is particularly efficient. Kiox can make the trip even smarter: After your trip you can transfer the data to the eBike Connect app via Bluetooth for analysis. Another clever feature: The new premium function Lock deactivates motor support as soon as Kiox is disconnected, making it the ideal complement to a mechanical lock. DualBattery 1250 enables cargo bike riders to go even further: Connecting two PowerTubes 625 delivers up to 1,250 Wh of energy. Always one step ahead in terms of Cargo S-pedelec flexibility.

The product combination described does not correspond to the motifs shown.





Performance Line 

# FOR LIMITLESS FREEDOM

## FEEL THE FLOW

Even more riding enjoyment. The new Performance Line is ready for any adventure – from a relaxing excursion to the countryside, sporty touring or the daily commute to work. The versatile drive system from Bosch delivers exactly the right level of support. It is available in two variants: The Drive Unit Performance Cruise for up to 25 km/h with a natural riding sensation or the Drive Unit Performance Speed up to 45 km/h for long distances at higher speeds. One of the quietest drives in its class, it offers powerful, dynamic acceleration and controlled handling for natural riding enjoyment on any surface. This means double the fun.

#FeelTheFlow







# Performance Line

## At a glance

### Sporty riding

The new Drive Unit Performance Cruise delivers the right support at the right moment, even on extended tours in the mountains. The riding sensation always remains natural; in 'off' mode and over 25 km/h with barely perceptible pedal resistance. The new Drive Unit Performance Speed was developed to provide dynamic support in everyday life or in leisure use. The perfect way to cover long distances effortlessly and to facilitate sporty riding styles even in high cadences.

- ▶ Sufficient power for the city, off-road and in the mountains.
- ▶ A powerful, dynamic Drive Unit for commuters, for example.

### The facts

- ▶ Sporty riding sensation: The efficient and versatile drive provides dynamic acceleration and guarantees a unique riding sensation even without support.
- ▶ Off to a good start: The drive delivers dynamic and sporty acceleration even at low cadences, offering powerful support as soon as you step on the pedals.
- ▶ Perfect interplay: The multi-sensor concept and fast information processing ensure optimum interaction between rider and eBike.

Technical details on page 86



For a natural riding sensation and maximum performance in eMTB mode.



For a fast, dynamic riding sensation at up to 45 km/h.



### The facts about Performance Cruise

- ▶ Unrivalled resilience: The most stringent demands in terms of trekking or eMTB use are met.
- ▶ Quiet enjoyment: The innovative noise-optimised gearbox makes the Performance Line (25 km/h) one of the quietest drives in its class.
- ▶ For off-road adventures: Used mainly on eMountain bikes, eMTB mode offers controlled, comfortable acceleration.

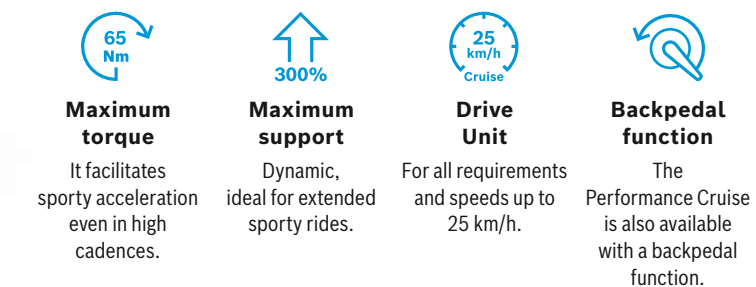


### The facts about Performance Speed

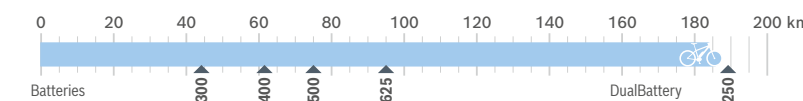
- ▶ Compact, lightweight design: The new drive concept reduces both weight and size. The Drive Unit Performance Speed weighs in at just 2.9 kg.
- ▶ Power for long distances: The Performance Line Speed variant has a powerful motor and a torque of up to 75 Nm for fast speeds. The following principle applies when on the move: The faster you travel, the greater the support from the drive.



#### Performance Cruise Highlights



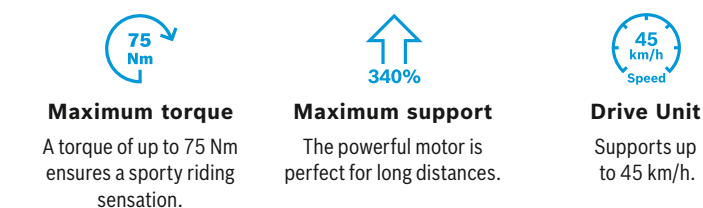
#### Performance Cruise Range



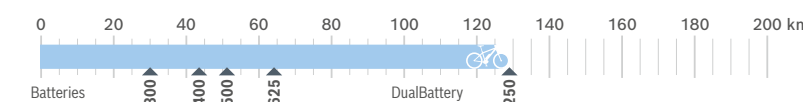
Average of combined use of all four modes and favourable conditions. Further details in relation to conditions can be found online.



#### Performance Speed Highlights



#### Performance Speed Range



Average of combined use of all four modes and favourable conditions. Further details in relation to conditions can be found online.

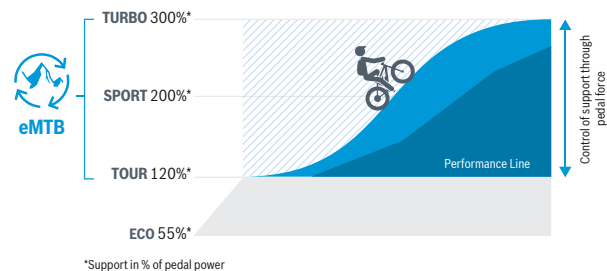


# Performance Line + Kiox + PowerTube 500

Sporty riding



The route to the mountains by hardtail: The new Performance Line is particularly sporty and now includes eMTB mode, which can adapt dynamically to the individual's riding style. The riding sensation always remains natural; in 'off' mode and over 25 km/h, pedal resistance is barely perceptible. The little Kiox on-board computer is your link to the connected eBike world of Bosch. All relevant riding data is recorded by Kiox and transmitted via Bluetooth to the eBike Connect app. The PowerTube 500 allows eMountain bikers to embark on long rides, while the integrated rechargeable battery meets the highest standards in terms of performance and aesthetics. The demands of a sporty ride and relaxed riding enjoyment fun are ideally combined here.



The product combination described does not correspond to the motif shown.



# Performance Line + Kiox + Lock + PowerTube 500

Outdoors in your element



For adventures on paved roads and unpaved trails: The new Performance Line offers a convincingly sporty and dynamic riding sensation. With a torque of up to 65 Nm, the Drive Unit delivers the right level of support at the right moment with barely perceptible pedal resistance over 25 km/h or when switched off. The stylish Kiox on-board computer is the ideal training partner. The robust display shows you your current power, cadence and heart rate, records your trips and sends all relevant data to the eBike Connect online portal via the smartphone, which is connected by Bluetooth. When the Kiox is removed from its mount, the new premium function Lock deactivates motor support and the pedelec can only be unlocked by reconnecting the same on-board computer. PowerTube 500 integrates seamlessly in the eBike's design. The stylish and dynamic way to take your gravel bike on tour.





## Performance Line + Nyon + PowerTube 625

Packed with power on tour



Active leisure cycling through forests, fields and mountains: With a maximum torque of 65 Nm and up to 300% support, the new Performance Line provides sufficient power for sporty riding. The efficient drive provides dynamic acceleration and guarantees an authentic riding sensation with barely perceptible pedal resistance over 25 km/h or when switched off. Nyon, the all-in-one on-board computer, is the ideal companion on long rides and can be relied upon to bring the eBiker to their destination by GPS. Plan your route on your PC, let Nyon navigate for you on the road, then analyse and share the results at home – this is how connected eBiking works. The new PowerTube 625, an integrated lithium-ion battery, which holds around 625 Wh, will enable the eBiker to enjoy full power at all times. Enjoy your time in the saddle while exploring nature with intelligent technology and powerful support.



The product combination described does not correspond to the motif shown.



## Performance Line Speed + Intuvia + DualBattery 1250

The fast and nimble way  
to beat rush hour traffic



Don't waste another moment worrying about congestion, traffic jams or finding a parking space: The new Drive Unit Performance Speed speeds up daily routines and supports S-pedelecs with a maximum torque of 75 Nm and up to 45 km/h. The powerful motor enables high speeds to be reached quickly and long distances can be covered with ease. Weighing only 2.9 kg, this new compact and lightweight Drive Unit improves the agility and handling of the eBike. The Intuvia on-board computer offers even more comfort plus intuitive controls. The display shows you all riding data at a glance, while your hands remain safely on the handlebar thanks to the separate control unit. DualBattery 1250 is the perfect solution for commuters, wherever the road may take them: Combining two Bosch PowerTubes 625 provides twice as much capacity. This is a combination that can make your journey to work an enjoyable experience.





Performance Line CX  |  | 

# FOR THE PERFECT UPHILL FLOW

## FEEL THE FLOW

Made for people who love the trail. The new, light-weight and compact Performance Line CX is the most powerful drive for demanding riders with support of up to 340% and dynamic responsiveness. Thanks to the innovative gear concept, the drive provides a particularly natural riding sensation. In combination with the new PowerTube 625, which can be integrated in the frame, long and mountainous tours can be carried out – bringing maximum ranges and altitudes within reach. The new Performance Line CX makes every uphill ride a pleasure as the ideal warm-up for the subsequent downhill. We call that: double the fun.

#FeeltheFlow #uphillflow







# Performance Line CX

At a glance



reddot award 2019  
winner

## The superlative among Drive Units

The new Performance Line CX is the powerhouse among the drives. For even more riding enjoyment on the trail: with a maximum torque of 75 Nm and weighing 2.9 kg, it is particularly compact in size. The eMountain bike motor with the innovative new gearbox conquers every trail – offering support up to 340% for steep ascents and delivering full power from a standing start. The motor and gearbox decouple at speeds of over 25 km/h, ensuring a natural riding sensation. Specially developed for sporty riding, eMTB mode takes the pleasure of the trail to a whole new level, with complete focus on sporting agility.

- ▶ The strongest drive for the Uphill Flow.
- ▶ Greater riding enjoyment in challenging terrain and when riding uphill.

## Performance Line CX Highlights



### Maximum torque

Powerful acceleration despite compact size.



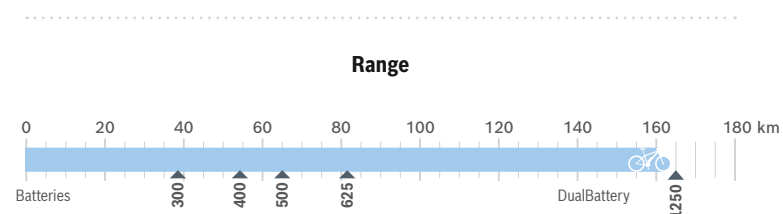
### Maximum support

For powerful propulsion, an extremely sporty riding style and fast sprints.



### Drive Unit

Sustained support up to 25 km/h, even on long mountain rides.



Average of combined use of all four modes and favourable conditions. Further details in relation to conditions can be found online.

## The facts

- ▶ Sporty riding enjoyment: The multi-sensor concept enables a dynamic and responsive Drive Unit response for precise acceleration and a unique trail experience.
- ▶ Always full performance: The motor ensures powerful riding behaviour right from the start. The drive delivers constant power over a very wide cadence range – ideal for fast intermediate sprints and crisp changes of tempo.
- ▶ Innovative gearbox concept: A freewheel completely decouples engine and transmission, so that the eBiker pedals efficiently, even if the system does not provide support at that moment.
- ▶ Compact construction: Weighing just 2.9 kg and with a size reduced by almost 50%, the new drive sets new standards. This allows different frame geometries with shorter chain stays and optimal integration, making eMountain bikes much more nimble and agile.
- ▶ Complete control: In eMTB mode, the progressive motor support automatically adapts to the individual riding style. This prepares the bike for whatever difficulties the terrain may have to throw at it, without even having to change gear. The eMountain biker benefits from significantly better traction.
- ▶ Robust and reliable: The drive will meet the highest eMountain bike requirements and will withstand even extreme loads. Even on long mountain rides, the motor offers impressive performance.
- ▶ Perfect support: With eMTB mode, powerful walk assistance and support for short cranks, Bosch offers eMountain bikers the optimum combination for challenging uphill sections and demanding mountain trails.

Technical details on page 86

Performance Line CX: A maximum torque of up to 75 Nm and sustained power.



## Performance Line CX + Nyon + PowerTube 625

The perfect trail experience



For ultimate alpine riding enjoyment:

The new Performance Line CX offers eMountain bikers plenty of power for the trail. The most powerful drive from Bosch weighs just 2.9 kg and has been reduced in size by almost 50%, making it particularly light and compact. The Drive Unit accelerates extremely powerfully, responds without delay and features convincingly agile handling and even more control. In eMTB mode, the rider always receives the required power at just the right moment. The fully connected Nyon on-board computer accompanies the biker every step of the way, from route planning to the journey itself and the evaluation of activities. The PowerTube 625 brings maximum ranges and altitudes within your grasp. The sophisticated technology of the integrated batteries ensures carefree riding enjoyment. This is the ideal solution for ambitious eMountain bikers and the perfect Uphill Flow.



## Performance Line CX + Kiox + PowerPack 500 + eSuspension

Combination for eMTB professionals



Ready for any challenge: The new Performance Line CX is optimised for sporty, powerful and dynamic riding in challenging terrain. The Drive Unit fits easily and discreetly into the eMTB frame and offers a convincingly natural riding sensation thanks to the freewheel feature. With up to 340% of perfectly delivered support, it brings greater riding enjoyment to the trail, perfectly complemented by the electronically controlled suspension E-Live Valve by FOX, which enables the suspension fork and rear shock to adapt automatically to the terrain in fractions of a second. It can be controlled with the Kiox on-board computer. Made from scratch-resistant glass, the colour display is impervious to dirt and stone chippings and offers all the functions a sporty rider would need. The PowerPack 500 provides enough power for mountain adventures. This takes the eMountain bike experience to a new level.

The product combination described does not correspond to the motifs shown.



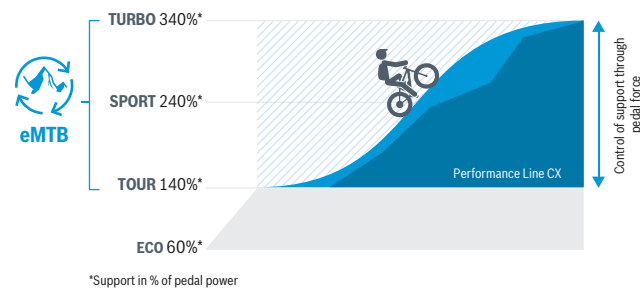


# eMTB mode

## For the ultimate Uphill Flow

For powerful eBiking in the mountains and on rough terrain: The eMTB mode of the new Performance Line CX and Performance Line switches between the Tour and Turbo modes. To control the bike even on difficult sections, the further optimised eMTB mode supports eMountain bikers with maximum sensitivity, allied with progressive power delivery: With a maximum torque of up to 75 Nm and motor support between 140% and 340%. Depending on the pedal pressure applied, the motor dynamically boosts the rider's own performance. The eBiker does not have to change the riding modes manually. Starting on steep slopes is no problem, while riding on mountain trails is noticeably easier and the eMountain biker benefits from significantly better traction. This provides for a natural riding sensation and maximum performance on the trail.

- ▶ Better delivery: maximum traction and control.
- ▶ Sporty starting: perfect start-up behaviour as soon as you step onto the pedals.
- ▶ Improved dynamics: enables effortless riding on technical uphill sections or over obstacles.



"Experiencing technical innovations is quite wonderful! The new, sophisticated sensor technology ensures a dynamic response and the associated intuitive riding sensation creates the ultimate uphill flow feeling, even on tricky uphill."

**Stefan Schlie**

Runner-up Trials World Champion



### Short cranks

Whether you have long or short cranks, Bosch provides the right support in both cases. Short cranks give eMountain bikers extra ground clearance. A specialist dealer will be able to make the corresponding adjustment.

### Powerful walk assistance

Whether you encounter a carpet of roots or mountain slopes: The optimised walk assistance provides even and powerful support in the face of almost any obstacle without any delays. The speed and start-up behaviour of the walk assistance automatically adjust, depending on the gradient.

NEW

### eSuspension

E-Live Valve is the first time FOX offers eMountain bikers a chassis that can be electronically controlled using the Kiox on-board computer with Bosch eBike Systems and that is designed for maximum comfort and fun in challenging terrain. Powered by energy from the Bosch batteries, the FOX-E-Live-Valve system uses a sophisticated system of sensors to determine the conditions of the terrain 1,000 times per second and adjusts the spring fork and damper accordingly within fractions of a second. This means that the eMountain biker can always be sure of the ideal suspension setting and can concentrate fully on the trail with 100% fun.

### SRAM-Eagle gear shifting system

Eagle from SRAM now brings the latest generation of high-tech gear shifting systems to eMountain bikes. The wide range of 12 gears and the smooth running of the two X-Sync chainrings provide a unique and long-lasting riding sensation.



VISIT THE WEBSITE  
[bosch-ebike.com/uphillflow](https://bosch-ebike.com/uphillflow)



Displays

# FULL SUPPORT ON THE HANDLEBAR

## FEEL THE FLOW

Support in all situations: The various Bosch eBike displays will support you – whatever your plans. Purion offers the rider a swift overview that focuses on the essential information. Intuvia is the intuitive way to control the eBike. The sporty, robust and connected Kiox on-board computer has all the classic functions of an on-board computer, while at the same time giving the rider access to the digital world via the smartphone app. Nyon is the ultimate all-in-one on-board computer: With this fully connected all-rounder on the handlebar, eBikers can get support every step of the way, from route planning to the journey itself and the evaluation of activities. Together with the smartphone and the COBI.Bike app, the new SmartphoneHub transforms the pedelec into a fully connected eBike. This provides riders with a suitable and reliable companion on every tour.





# Displays

## At a glance

In order to be able to compare the various displays and to allow the best possible individual choice to be made, it is helpful to differentiate between connected and non-connected displays. Purion and Intuvia are the right choice for riders who want an easy-to-use display: they offer a quick and clear overview of the essential riding data. Anyone who likes to plan their routes and track and analyse riding data by digital means should choose a connected Bosch

display solution – for the perfect Connected Biking experience. Compact, robust and integrated with the Bosch eBike Connect world, Kiox offers all the functions that an ambitious sporty rider could need. Nyon is the ultimate all-in-one display and combines navigation, eBike control and fitness training in a single device. Together with the smartphone and the COBI.Bike app, the SmartphoneHub transforms the pedelec, making it an integral part of digital life.



**Purion**  
Focussing on the essentials: Purion allows you to call up all key information at a click of the thumb.



**Intuvia**  
Easy to use: Intuvia is the intuitive way to control the eBike.



**Kiox**  
This offers all the classic functions a sporty rider could need, while at the same time giving eBikers access to the digital world via the smartphone app.



**Nyon**  
This offers everything an eBiker could ever want, using the smartphone app and eBike Connect online portal to provide a connected riding experience.



**SmartphoneHub**  
The integrated display shows the most important riding data, even without a smartphone attached.



The combination of SmartphoneHub, COBI.Bike app and smartphone creates a completely connected riding experience.

# Riding modes

## At a glance

Bosch eBike displays offer the right riding mode for every situation. There are five support levels. When pushing your bike, a walk assistance feature activated in two stages provides assistance up to 6 km/h.

Purion

Intuvia

Kiox

Nyon

SmartphoneHub

Eco

Tour

Sport

eMTB\*

Turbo

Off

Active walking assistance

Effective support with maximum efficiency for the greatest range.

Uniform support for rides with long ranges.

Powerful support for universal usage for both sporty riding and fast commuting in urban traffic.

Progressive support for a natural riding sensation and optimal control on demanding terrain.

Direct, maximum power support up to the highest cadences for sporty riding.

No support, all display functions are available.

The displays are used to activate the well-controlled support up to 6 km/h . For the greatest possible safety, walk assistance is activated in two stages.

\* Depending on the eBike type, the eMTB mode replaces Sport mode in the Performance Line and the Performance Line CX.





# Purion

Compact purist



Concentration on what really matters with all the key information with a click of a thumb: The Purion on-board computer operates with maximum efficiency and precision.

## The facts

- ▶ Clearly arranged display: Charge status, speed, riding mode, range, trip distance and total distance.
- ▶ Outstanding readability: The backlit, non-glare display allows you to read all riding data clearly, even in direct sunlight.
- ▶ The optional service interval display always provides a reminder when the eBike is next due for a service.
- ▶ Easy diagnostics: Specialist dealers can monitor the status of the Bosch eBike system via the micro USB interface.
- ▶ Focusing on the basics: Five support levels, reliable operation using your thumb, takes up very little space on the handlebar.
- ▶ Light system: If the eBike light was on when the system was switched off, it is automatically switched on the next time the system is started.



# Intuvia

Clever and clearly arranged



Intuvia guarantees the rider easy and intuitive control of their eBike. The display is easy to read in all lighting conditions and, thanks to the separate control unit, the rider's hands remain securely on the handlebar. The shift recommendation ensures you always pedal in the right gear, saving the battery and increasing your range.

## The facts

- ▶ Maximum ease of use: easy operation via the separate control unit.
- ▶ Ideal for travelling: Even when removed from the eBike, all important information, such as the total distance, can be displayed.
- ▶ Good readability under all light conditions.
- ▶ Charging station: Intuvia can charge devices such as smartphones via the micro-USB port while riders are on the move.
- ▶ The optional service interval display always provides a reminder when the eBike is next due for a service.
- ▶ Light system: If the eBike light was on when the system was switched off, it is automatically switched on the next time the system is started.

Compatible with 

Purion +  
Intuvia







Connected biking with



Compatible with 

# Kiox

## Sporty connectivity




▶ Riding modes  
see page 50

Kiox is the on-board computer for ambitious sporty riders – compact, robust, connected. It has all the classic functions of an on-board computer, while at the same time giving the eBiker access to the digital world via the smartphone app. The colour display gives eBikers all riding data at a glance, while the separate control unit on the handlebar allows them to keep everything under control. All relevant riding

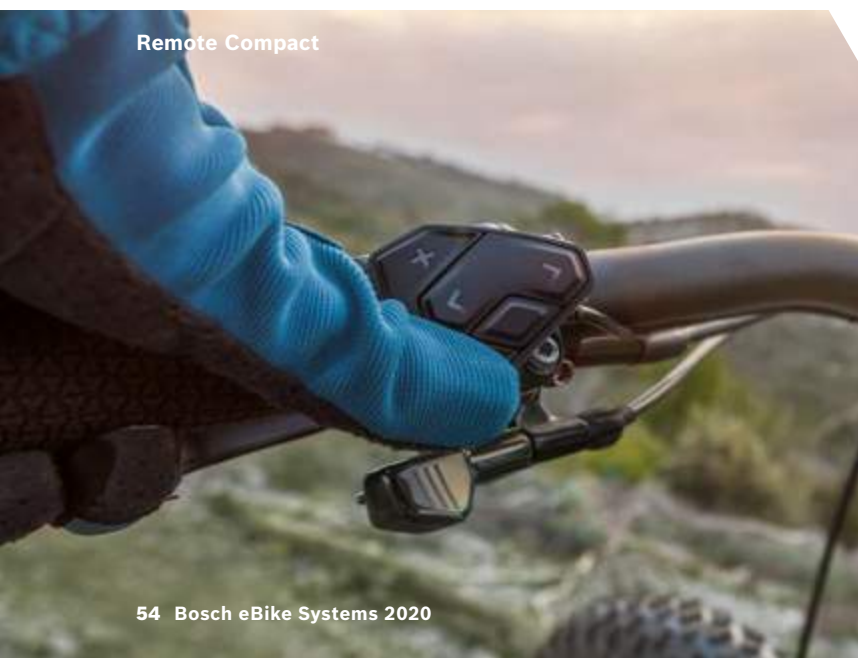
data is recorded by Kiox and transmitted via Bluetooth to the eBike Connect app. Kiox combines the GPS data with the riding data, which can be called up in the app or on the online portal. To ensure that all data is always up to date, the information between Kiox and the app is automatically synchronised and updated. Thus Kiox provides the perfect link to the world of Bosch connected biking.

### The facts

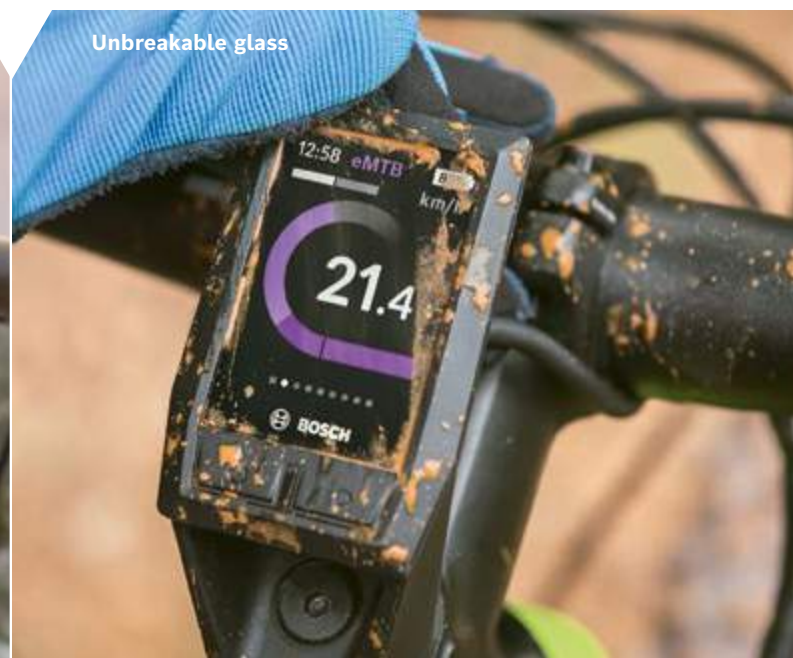
- ▶ **Training:** Kiox can be connected via BLE (Bluetooth Low Energy) to a heart rate monitor to enable you to check your heart rate and optimise your workout.
- ▶ **Motivation:** A display shows you whether you're riding at above or below your personal average speed. This will motivate you to push yourself even harder.
- ▶ **Operability:** Saddle up, switch on, ride off and have fun. The on-board computer can be used immediately and provides the eBiker with all the essential information and data.
- ▶ **Compact but big by design:** Kiox scores points for its stylish appearance. The screen features strong colours and a clearly laid out user interface. The practical magnetic mount likewise lends the handlebar a neat and tidy look.
- ▶ **Remote Compact:** The buttons enable the on-board computer to be operated safely and comfortably using your thumb. The distinct, tactile pressure behind the buttons during operation gives the rider clear feedback.
- ▶ **Unbreakable glass:** Whether dealing with dirt or stone chippings, the scratchproof glass display is a great partner, both on the trail or in the city.
- ▶ **Magnetic mount:** Quickly stowed and safely mounted to withstand jolts on rough terrain. The magnetic mount allows for easy removal and attachment of the on-board computer, as well as a firm hold.
- ▶ **Kiox and eShift:** Kiox also works with eShift, the integrated electronic gear shifting solution that we offer in cooperation with the gear manufacturers enviolo, Rohloff and Shimano – for greater comfort, barely perceptible gear shifts, less wear and tear and more riding enjoyment.

 Technical details on page 87

Remote Compact



Unbreakable glass



Compact and robust



Magnetic mount





### NEW Connected biking with Kiox

The sporty display connects the eBiker to the connected eBike world of Bosch. The eBike Connect app allows riders to connect Kiox via Bluetooth Low Energy with the smartphone, for example, in order to evaluate their own activities – for a very personal and interactive Connected Biking experience. eBikers will have all relevant information in view on a tablet or PC in the ebike-connect.com online portal.

### NEW Secure connection: Kiox and Lock

The new premium function Lock makes Kiox the key to greater safety. When the on-board computer is disconnected, Lock deactivates motor support and only releases

it again when the same on-board computer is reconnected. A clever way to supplement a mechanical lock – for relaxed daily use of the eBike.

### NEW For a safe trip: Kiox and Bosch eBike ABS

Bosch eBike ABS enables controlled braking in critical situations. The intelligent combination of front wheel ABS and rear wheel lift control ensures the optimised riding stability and control of the eBike. The Kiox display now shows the status of the ABS via a corresponding icon. The previous separate ABS light is replaced with the new digital display.



Connected biking with



Compatible with



## Nyon

### Connect your Way



Riding modes  
see page 50

Nyon is more than just an on-board computer for eBikes: Nyon offers eBike connectivity for the next generation in conjunction with the online portal and app. With new map material, features for route plan-

ning, altimeter preview, and an improved display of the rider's performance, Nyon is once again the front runner among eBike on-board computers.

Technical details on page 87

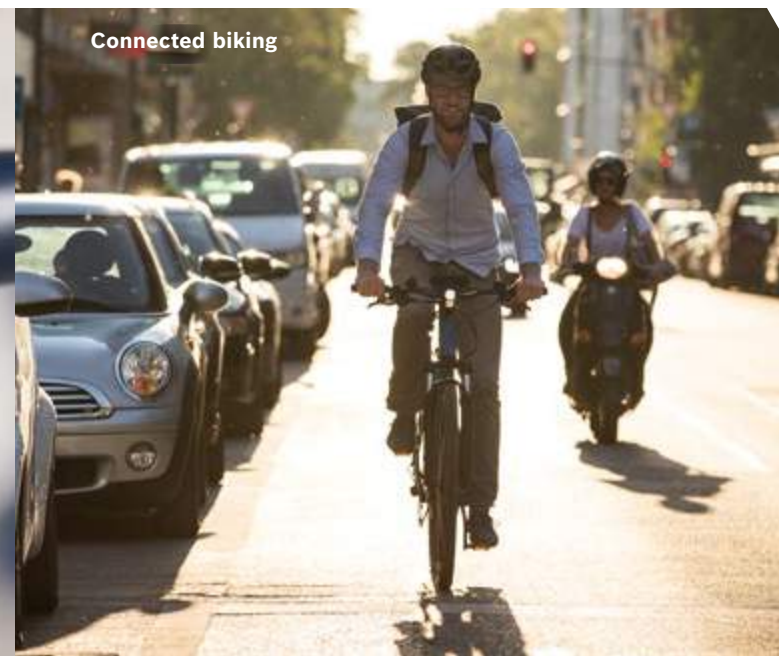
Training



Lock



Connected biking



Magnetic mount







## Ride

### Clear overview

Be it time, speed, gear shift recommendation, range, distance or battery charge level, Nyon shows you all important information at a glance.



## Navigation

### Convenient route planning

Plan your own routes on the online portal with Nyon or the eBike Connect Smartphone App. The integration of Outdooractive content means that exciting routes in more and more regions can be discovered easily and conveniently in the eBike Connect online portal and then transferred to Nyon.



## Smartphone function

### Individualised modifications

Attractive premium functions make the eBike assistant even more individual: It is possible to adjust riding modes or topographical range. Riders can define their own personal cockpit by choosing from almost 30 different options and three suggested designs.



## Fitness

### Training function

Regardless of whether riders are preparing for a competition or training as part of a healthy and active lifestyle: Nyon provides all the relevant data in real time as motivation.

### Fitness check

Nyon measures pedal force and cadence to calculate how much power is generated and how much energy is burned. You can use a heart rate chest strap to obtain even more precise values.

### Online evaluation with eBike Connect

Riders can see how effectively they are training in the ebike-connect.com portal. The portal gives them a perfect overview of their current fitness and training level.

## Always connected

Nyon forms part of an intelligent system. Connected to Bluetooth and Wi-Fi, the intelligent on-board computer synchronises with the eBike Connect smartphone app and the ebike-connect.com online portal to create the ideal conditions

for an interactive Bosch Connected Biking experience. Nyon provides eBikers with many individual options for route planning, the actual journey and evaluation of activities, such as creating your own individual eBike profile.



### eBike Connect smartphone app

Nyon uses Bluetooth technology to connect to the smartphone with the eBike Connect app. Settings can be changed, routes can be transferred or additional premium functions can be used for a very personal, connected and interactive eBike experience.

### eBike Connect online portal

eBikers have all the relevant information in view on their tablet or PC in the eBike Connect online portal. Data is transferred easily between the portal and Nyon via Wi-Fi. Direct link: [ebike-connect.com](http://ebike-connect.com)



Route planning



Navigation





NEW

# SmartphoneHub

Intelligence on your handlebar



▶ Riding modes  
see page 50



The new SmartphoneHub transforms the pedelec into a fully networked eBike and part of digital life: it offers live weather forecasts that allow riders to stay dry when touring the countryside, fitness tracking on the training track and music streaming for the perfect soundtrack. The smartphone and COBI.Bike app turn the SmartphoneHub into an intelligent control centre

that can be used for navigation, recording activities and connection to other services – a major step in the direction of connected biking. The eBike can also be started and ridden without a smartphone. The integrated display in the SmartphoneHub shows the most important riding data. That way eBikers remain flexible at all times – no matter where the route takes them.

## The facts

- ▶ **Connected biking:** The SmartphoneHub and the COBI.Bike app connect the eBike to the digital world – from navigation, music streaming, fitness tracking or making calls to the integration of other services and apps such as Strava or komoot.
- ▶ **Intelligent solution:** The combination of SmartphoneHub, COBI.Bike app and smartphone creates a completely connected riding experience. At the same time, the eBiker enjoys maximum flexibility and can use their eBike with or without a smartphone connected.
- ▶ **Integrated display:** The pedelec can also be controlled without a smartphone using the 1.52-inch LC display integrated in the SmartphoneHub. The display shows the most important riding data.
- ▶ **Navigation:** The COBI.Bike app can act as an expert guide – either with 2D or 3D map view or even in conjunction with the komoot online service. As an option, the navigation instructions are also issued by voice output.
- ▶ **Live weather:** The carefree way to cruise through the countryside – up-to-the-minute weather forecasts and precise weather data ensure that eBikers are always well-informed thanks to the COBI.Bike app.
- ▶ **Training partner:** The COBI.Bike app turns the smartphone into a personal trainer by connecting to fitness and health services like Apple Health, Google Fit and Strava.

Technical details on page 87

Connected with Strava



Connected biking



Intelligent solution



Training partner





- ▶ **Fitness data:** The COBI.Bike app gives eBikers a permanent overview of the most important training data such as performance, cadence and calorie consumption. This information can also be played back at the press of a button. It is also possible to connect a heart rate monitor.
- ▶ **Entertainment:** The easy way to listen to your favourite music or the latest thriller. The COBI.Bike app allows eBikers to access music and audio book streaming services, such as Spotify or Audible, which can be conveniently operated by remote control.
- ▶ **Remote:** The separate control unit enables eBikers to control all functions easily, safely and comfortably from the handlebar.
- ▶ **Charging function:** The smartphone can be connected to the SmartphoneHub and conveniently powered from the eBike battery.
- ▶ **Operability:** The eBike can be operated intuitively with the smartphone and is designed for easy handling thanks to the control unit and voice output.
- ▶ **Readability:** Information is always visible, whether on the smartphone display or on the display integrated in the SmartphoneHub.
- ▶ **Wireless update:** Software updates for the SmartphoneHub can be installed with ease using wireless technology with the help of the COBI.Bike app.



Social media connections



Smartwatch connection

# COBI



## The intelligent smartphone cockpit

The COBI.Bike system connects your bicycle or eBike to your digital world: whether music streaming, fitness tracking, navigating by bike or making calls with Bluetooth headphones. It's all possible – on the move. The weatherproof COBI.Bike finally gives your smartphone a place of its own and supplies it with power. Perfectly positioned and securely held in place – operated via the control unit on the handlebar.



COBI.Bike for bicycles



Plug & play for eBikes

### Advantages at a glance:

- Existing lighting system controllable
- Integrated alarm system and bell
- Connectivity with apps such as komoot, Strava, Spotify and Apple Health
- Fitness monitoring and tracking
- Voice output (also via headphones)
- Regular software updates enhance the system functions
- The COBI.Bike app is specially designed for cyclists, so that all data can be absorbed quickly and intuitively

### Specially for eBikes:

- Plug & Play: Disconnect the Bosch display and connect the COBI.Bike system
- Operation via Bosch control unit
- Motor control even without a smartphone
- Mobile phone charging function from the eBike battery
- Live residual range warning



Further information at  
[bosch-ebike.com/cobibike](https://bosch-ebike.com/cobibike)



Batteries + Chargers  |  | 

# PACKED WITH POWER

## FEEL THE FLOW

Whether you're taking a jaunt through the countryside or a ride through the city – using the PowerPack or PowerTube means there's no limit to riding enjoyment. There is a suitable rechargeable battery for every requirement and every type of eBike, from the rack variant and frame battery to the integrated solution. Thanks to their enormous mileage, long service life, intelligent Battery Management System and easy handling, Bosch lithium-ion batteries are among the most modern on the market. DualBattery is the perfect solution for tourers, long-distance commuters, cargo bikers or eMountain bikers. The combination of two Bosch PowerTubes 625 delivers up to 1,250 watt hours. More power for even more riding enjoyment.



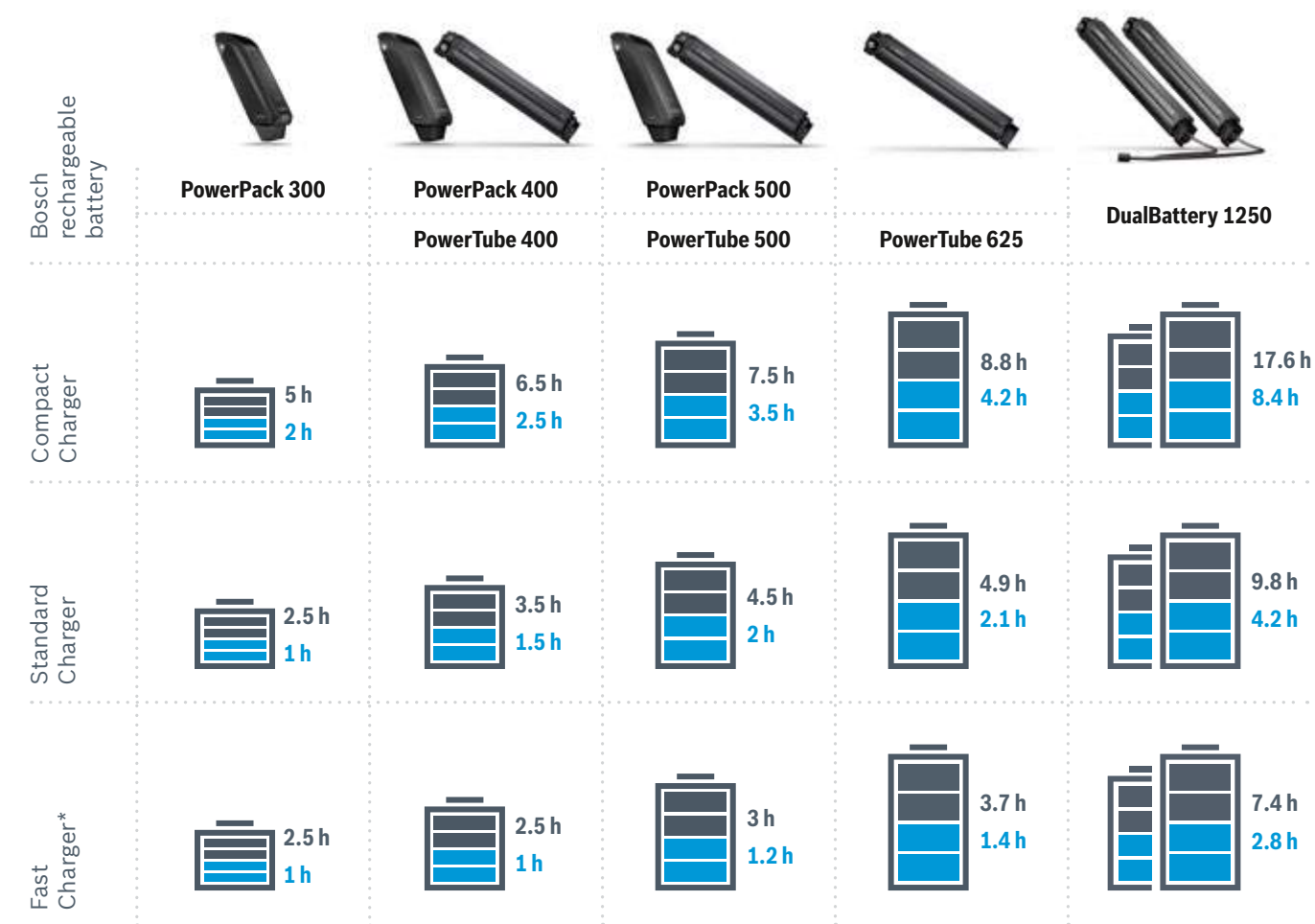
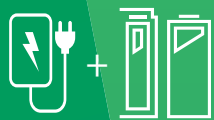


# Charging times

## Charging times at a glance

There is a suitable Bosch battery for every eBike type: the PowerPack as a rack variant or frame battery, the

PowerTube as an integrated solution and the DualBattery with two Bosch batteries for twice the power.



\*The charging current in PowerPack 300 and in rechargeable batteries of the Classic+ Line is limited to 4 A.

■ 50% charge ■ 100% charge

# PowerPacks

## Versatile power sources

Bosch PowerPacks come in a variety of types: The PowerPack 300 is the ideal companion on short, high-speed tours. The power of the PowerPack 400 also gives you greater spontaneity to explore new places. The PowerPack 500 offers even more energy and riding enjoyment, even though it is the same size as the PowerPack 400 and not much heavier. All PowerPacks are available in a number of different versions. Frame batteries are close to the bike's centre of gravity. This has

a positive effect on riding behaviour. The rack variant is ideal for step-through models, offering greater freedom when mounting or dismounting. Charging is very simple in both variants: For charging with a Bosch charger, the PowerPacks can be removed with just one hand movement or conveniently charged on the bike itself. The high-quality, long-lasting eBike batteries from Bosch have the highest energy density with a compact size and light weight.



	PowerPack 300	PowerPack 400	PowerPack 500
Voltage	36 V	36 V	36 V
Capacity	8.2 Ah	11.0 Ah	13.4 Ah
Energy content	approx. 300 Wh	approx. 400 Wh	approx. 500 Wh
Weight			
Frame battery	approx. 2.5 kg	approx. 2.5 kg	approx. 2.6 kg
Rack battery	approx. 2.6 kg	approx. 2.6 kg	approx. 2.7 kg
Size			
Frame battery	325 x 92 x 90 mm	325 x 92 x 90 mm	325 x 92 x 90 mm
Rack battery	372 x 122 x 80 mm	372 x 122 x 80 mm	372 x 122 x 80 mm
Charging time*			
50% charge	approx. 1 h	approx. 1 h	approx. 1.2 h
Full charge	approx. 2.5 h	approx. 2.5 h	approx. 3 h

\*Charging times with the Fast Charger.

**WEBSITE**  
bosch-ebike.com/range



NEW

# PowerTubes

Powerful performers

For the highest demands in terms of performance and aesthetics: Bosch PowerTubes have the power to drive any ride and, thanks to their compact size and minimalist design, can be integrated with the eBike to ideal effect. There are two options for installing the battery: horizontally or vertically. In addition to the PowerTube 500, the PowerTube is now available in two other variants: as a PowerTube 400 and PowerTube 625. The new PowerTube 400 is the right battery for stylish city bikes, while the PowerTube 500

ensures trekking and eMountain bikes are perfectly equipped for longer distances. The new PowerTube 625 brings maximum ranges and altitudes within your grasp on even longer distances and high mountainous trips. The sophisticated technology of the lithium-ion batteries that can be integrated within the frame ensures carefree riding enjoyment. A safety catch prevents the battery from falling out when riding rough terrain, while still allowing the battery to be easily removed.



	<div>NEW</div> PowerTube 400	PowerTube 500	<div>NEW</div> PowerTube 625
Voltage	36 V	36 V	36 V
Capacity	11.0 Ah	13.4 Ah	16.7 Ah
Energy content	approx. 400 Wh	approx. 500 Wh	approx. 625 Wh
Weight	approx. 2.9 kg	approx. 2.9 kg	approx. 3.5 kg
Size			
horizontal	349 mm x 84 mm x 65 mm	349 mm x 84 mm x 65 mm	416 mm x 84 mm x 65 mm
vertical	349 mm x 65 mm x 84 mm	349 mm x 65 mm x 84 mm	416 mm x 65 mm x 84 mm
Charging time*			
50% charge	approx. 1 h	approx. 1.2 h	approx. 1.4 h
Full charge	approx. 2.5 h	approx. 3 h	approx. 3.7 h

\*Charging times with the Fast Charger.



PowerTubes

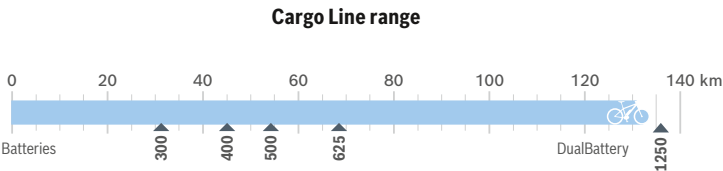


# DualBattery

Twice the power



No journey is too long: DualBattery is the perfect solution for tourers, long-distance commuters, and eCargo bikers. The combination of two Bosch batteries delivers up to 1,250 Wh and can be installed in almost any battery combination\* from the manufacturer. The system switches intelligently between the two batteries both during charging and discharging. DualBattery is suitable for long distances and heavy loads.



Average of combined use of all four modes and favourable conditions. Further details in relation to conditions can be found online.



## More range for long distances

- ▶ Connecting two batteries can double the range of the eBike.
- ▶ DualBattery permits battery capacities of up to 1,250 Wh.
- ▶ Intelligent energy management control software charges both batteries.
- ▶ The following combinations are possible:  
Two PowerTubes, two PowerPacks or a PowerTube and PowerPack.\*
- ▶ The Battery Management System also offers maximum protection for the DualBattery system against overcharging, undervoltage, overheating and short circuits, as well as extending the service life of the batteries.

\* PowerPack 300 and PowerTube 400 will not work in any combination with DualBattery.

# Chargers

Energy in an instant

Bosch chargers are handy, lightweight and robust. The housings are designed without vents to protect the chargers from dirt and grime. Wherever your journey may take you: With the 2 A Compact Charger, 4 A Standard Charger and 6 A Fast Charger, Bosch has developed three models that can charge the eBike quickly and reliably.

- ▶ Functional and silent: An ergonomically shaped charging plug facilitates handling; the compact dimensions allow the device to fit comfortably into the handbag. The enclosed housing gives the charger extra stability, while the battery charges with minimal noise.
- ▶ Easy to handle and compact: A practical Velcro fastener is also helpful when stowing the cable.



## Compact Charger

The Compact Charger is the ideal charger for all eBikers who are constantly on the move. It weighs less than 600 grams and is 40% smaller than the Standard Charger – small enough to fit into any pannier. The Compact Charger can be used with supply voltages of 110 to 230 volts and can also be used in the US and Canada as well as Australia.



## Standard Charger

The robust, functional 4 A Standard Charger is the all-rounder among Bosch chargers. It offers the ideal balance of performance, weight and size and is extremely versatile.



## Fast Chargers

The Fast Charger is currently the fastest eBike charger of its class on the market and will recharge the battery in the shortest possible time. After just three hours, the powerful PowerTube 500 or PowerPack 500 are fully recharged. The Fast Charger needs just over one hour to charge a battery to 50% capacity. This makes it the perfect charger for fast recharging while on a trip. The Fast Charger is ideal for eBikes that are much in use and frequently charged.



# eShift

## Integrated gear shifting, relaxed riding

The integrated, electronic eShift gear shifting solution ensures riding comfort, safety, a longer range and reduced wear. With its partners enviolo, Rohloff and Shimano, Bosch eBike Systems has developed three electronic gear shifting solutions that provide a host

- ▶ The selected cadence or current gear setting are shown on the Bosch display.
- ▶ Brief throttling of the motor during the gear shifting operation allows smooth, synchronised gear changes.

of benefits whether you're on the road or trail: Enviolo Automatic, Rohloff E-14 Speedhub 500/14 and eShift with Shimano Nexus Di2 or Shimano Alfine Di2. eShift always offers the best possible solution for various applications and Bosch product lines.

- ▶ Fast, precise gear shifting and the auto-downshift function automatically shifts to the gear previously defined by the rider when the bike comes to a stop. This makes it easier for the rider to move off again and enhances safety.
- ▶ All eShift solutions are available in combination with a hub gear system.

### enviolo

When the required cadence is selected, the enviolo gear shifting system with eShift automatically switches to the optimum gear ratio – even on inclines. Thus it is possible to ride at a steady pace and in an anticipatory style, without getting out of breath due to an excessively high cadence.

- ▶ Adjustable cadence from 30 to 100 revolutions per minute in increments of 1 rpm or 5 rpm.
- ▶ Adjustment through selection in the menu or by holding down the relevant button to allow quick adjustment while riding.
- ▶ Shifting system: Continuous.
- ▶ Also suitable for Speed pedelecs up to 45 km/h.



A reliable hub gear system that satisfies the most stringent demand and that is designed for maximum mileage. Simply enjoy high gear shifting comfort, as well as fast and precise shifting with the certainty of always being in the right gear.

- ▶ Quick, precise gear changes for a sporty riding sensation.
- ▶ A multi-shift function allows you to change 3 gears at once for fast acceleration.
- ▶ 14 gears and 526% gear spread.
- ▶ Also suitable for Speed pedelecs up to 45 km/h.

### SHIMANO Di2

Di2 is Shimano's platform for electronic gear shifting. The automatic hub gear system models (Shimano Nexus Di2 and Shimano Alfine Di2) are well suited for use in the city or on trekking tours and can be operated manually.

- ▶ Quick, precise gear changes for a sporty riding sensation.
- ▶ Shift recommendation ensures the best gear ratio.
- ▶ Start-up is easier, whether you choose automatic or manual switching.



Compatible with

- ✓ Active Line
- ✓ Active Line Plus
- ✓ Cargo Line
- ✓ Performance Line
- ✓ Performance Line CX

Intuvia Kiox Nyon



# eShift explained

Manual or automatic gear shifting is available according to your preference. The individual solutions and applications are explained below.

## enviolo

### enviolo Automatic

#### Is enviolo the right system for you?

Yes, if you wish to focus completely on the trip with your eBike and not on gear shifting. This system handles automatic gear changes based on the rider's cadence.



Characteristic: Comfortable

Single / Multishift Variable gear ratio Cruise / Speed Automatic gear shifting

## SHIMANO

### Nexus Di2 + Alfine Di2

#### Is Shimano with the hub gear system the right system for you?

Yes, if you wish to focus completely on the trip with your eBike and not on gear shifting. This system handles automatic gear changes according to the rider's cadence and pedal force.



Characteristic: Comfortable / sporty

Single shift Defined gears Cruise Manual / automatic gear shifting



### E-14 Speedhub 500/14

#### Is Rohloff the right system for you?

Yes, if you want to select your gears manually and appreciate the advantages of the quiet, nearly maintenance-free hub gear.



Characteristic: Sporty

Single / Multishift Defined gears Cruise / Speed Manual gear shifting



# RE-INVENTING SAFETY

More than just technology: With the smart Bosch eBike ABS, Bosch has launched the first standard anti-lock braking system for pedelecs on the market.

The new premium function Lock makes Kiox the key to greater security as a clever complement to a mechanical lock. Thus, technology is used in service of a safe and secure riding sensation.







# Bosch eBike ABS

Greater safety, improved stability

Modern and powerful braking systems have optimised braking behaviour and braking distance. The first standard Anti-lock Braking System for eBikes is the logical consequence of this development.

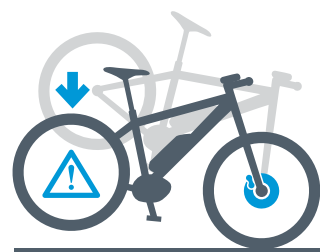
## The safety advantages:

- ▶ More active and efficient use of the front wheel brake.
- ▶ Optimised riding stability and manageability of the eBike during braking, especially when riding on slippery road conditions.
- ▶ When the front wheel brake is applied forcefully, the rear wheel lift control reduces the chances of the rider being thrown over the handlebar.
- ▶ Bosch has been an expert in ABS systems and a market leader in motorbike safety systems for over 40 years. The eBike ABS was developed using the already established motorcycle ABS.
- ▶ In a new feature, the status of the ABS is now shown on the display of the Kiox on-board computer via a corresponding icon. By eliminating the separate ABS warning light, eBikers benefit from an uncluttered handlebar.



## Front-wheel ABS

Wheel speed sensors monitor the speed of both wheels. The Bosch eBike ABS regulates the brake pressure if the front wheel is locked if the brake is applied too forcefully, thus optimising the riding stability and steerability of the eBike – especially on slippery road conditions. Harmonious and sensitive braking behaviour significantly increases control, stability and safety.



## Rear wheel lift control

The rear wheel lift control of Bosch eBike ABS reduces the chances of the rear wheel lifting from the ground. The Bosch eBike ABS is especially effective when the front wheel brake is applied very forcefully, especially on a high-grip surface. This intelligent rear wheel lift control reduces the possibility of the rider being thrown over the handlebars. This enables the front brake to be used more actively and efficiently.



1

ABS control unit (with housing)



2

ABS control light separate or integrated in Kiox



3

ABS wheel speed sensor



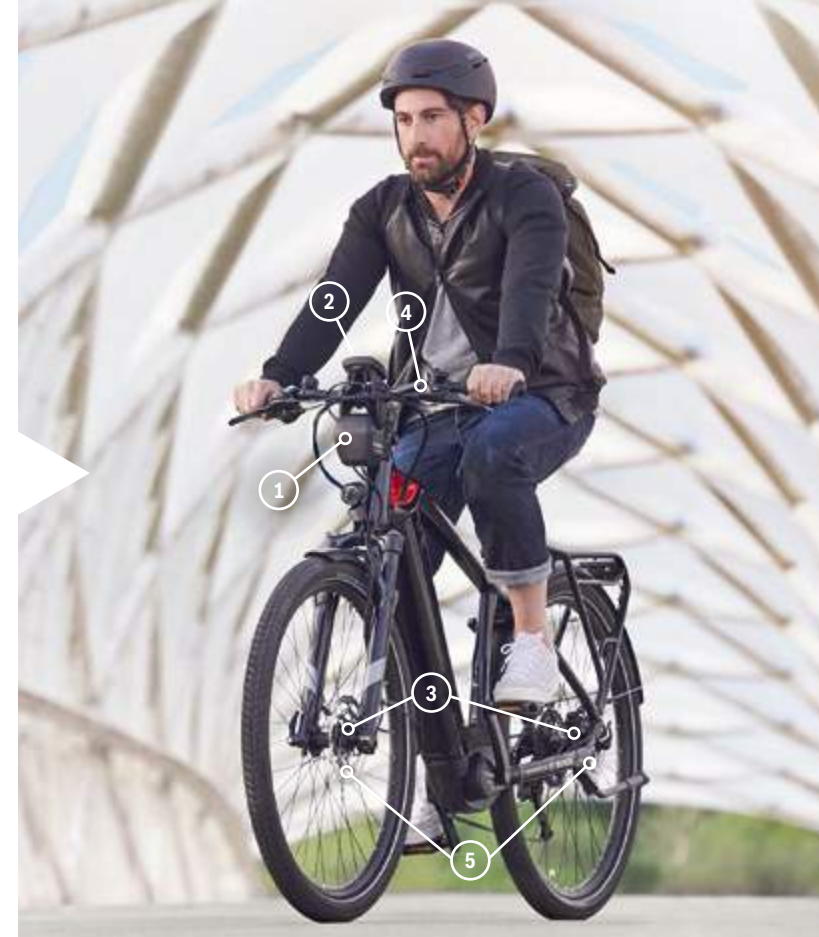
4

Magura brake lever



5

Magura ABS sensor disc  
+ Brake disc



Compatible with



✓ Active Line  
✓ Active Line Plus  
✓ Performance Line  
✓ Performance Line CX



Purion



Intuvia



Kiox



Nyon





NEW

## Lock

### Intelligent additional theft protection



Park your eBike and enjoy a bit of carefree downtime – the new premium function Lock makes the Kiox on-board computer the key to greater security. Lock enables motor support to be deactivated by removing the Kiox on-board computer. The lock only

unlocks again when the same on-board computer is re-connected. The display and acoustic signals indicate whether Lock is monitoring the eBike. Thus, Lock is the ideal complement to a mechanical lock. The service is installed and billed by means of an app.

#### The facts

- ▶ App set-up: Once it has been purchased via the eBike Connect smartphone app, the premium function Lock can initially be set up with the Kiox on-board computer on the eBike.
- ▶ Using the on-board computer as a key: Lock is simply activated and deactivated by connecting and disconnecting the Kiox on-board computer.
- ▶ One glance is all it takes: Lock status is displayed on the screen of the on-board computer. This ensures that the owner knows immediately that the eBike is secured.
- ▶ Unmissable: As with the central locking on a car, audible feedback tells you whether Lock has been activated or deactivated. The acoustic signals can be switched on and off in the app.
- ▶ The right on-board computer: Lock is available for the first time with the Kiox connected on-board computer. The eBike can only be unlocked with the on-board computer with which the Lock feature was set up via the app.
- ▶ Making reselling harder for thieves: If Lock is activated, it is no longer possible to ride with motor support.





# Safety comes first!

## Minimising risks while maximising riding enjoyment

Bosch eBike Systems provides innovative and inspiring mobility solutions. For people who want to get around relaxed, sustainably and above all, safely. For more riding enjoyment.

### Risk:

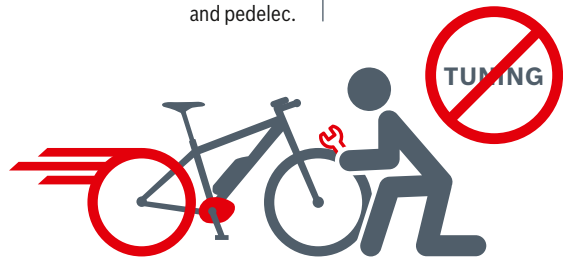
#### The dangers of manipulation

People who "tune" their eBikes endanger not only themselves, but also other road users. This may result in the invalidation of insurance claims and criminal prosecutions. In addition, you risk losing your warranty and guarantee entitlements on the Bosch eBike system. As a general rule, using the system improperly will also reduce the service life of individual eBike components and the eBiker risks causing damage to the Drive Unit and pedelec.



#### Solution:

The **software** of the Bosch eBike systems closes the door on tuning. If manipulation is detected, the pedelec switches to emergency mode and powers down support. This protects the system and discourages manipulation.



### Risk:

#### Inadequate protection

Only **60%**

of eBikers (up to 25 km/h) wear protective headgear when cycling.<sup>1</sup>

Up to **70%**

of head injuries caused during accidents can be prevented by wearing helmets.<sup>2</sup>



#### Solution:

A helmet protects against injury. **In-mould helmets** offer good protection. During manufacturing, the shock-absorbing hard foam is injected directly into the outer shell.



### Risk:

#### Sudden braking in traffic

Whether due to slippery roads or unexpected traffic situations, riders who have to brake sharply can quickly lose control.



#### Solution:

With the smart **Bosch eBike ABS**, Bosch has launched the first standard Anti-lock Braking System for pedelecs on the market. The front wheel ABS optimises the riding stability and manageability of the eBike during braking. The rear wheel lift control of Bosch eBike ABS reduces the chances of the rear wheel lifting from the ground.



### Risk:

#### Theft

When out and about with an eBike, riders need to know that they can park it safely and securely. The mechanical lock is the basis for protecting against theft – in front of a restaurant for example, or in front of the office.



#### Solution:

The new premium function **Lock** is the ideal complement to a mechanical lock. **Lock** makes the Kiox on-board computer the key to greater security. Disconnecting the on-board computer deactivates motor support and **Lock** is only released again automatically when the same on-board computer is reconnected.

### Risk:

#### Faults on the eBike

Lack of regular maintenance increases the safety risk.



#### Solution:

The specialist dealer sets a **regular service schedule** with the aid of the service interval display.



### Risk:

#### Sufficient energy

Some people interested in eBikes are sceptical that the energy provided by the eBike battery is actually sufficient for their purposes.

Information on the best way to use and care for the rechargeable battery can be found in the Bosch Battery Guide.



#### Solution:

Bosch batteries are among the most efficient on the market. **Ranges of more than 100 kilometres** are possible with a single battery charge. DualBattery, combining two Bosch batteries, offers energy content of up to 1,250 Wh for long distances or steep ascents.

To calculate a typical range under various conditions, it is worthwhile trying our Range Assistant at [bosch-ebike.com/range](https://www.bosch-ebike.com/range)



#### Source:

<sup>1</sup> bfu survey 2016: Helmet use among cyclists on public roads

<sup>2</sup> The potential safety of cycling helmets (Final Report), Research Project for HFC Human-Factors-Consult GmbH

### Risk:

#### Feeling unsteady on the bike

Beginners and less experienced riders sometimes have difficulty with the ride characteristics of an eBike and the traffic rules.



#### Solution:

Many specialist dealers offer **rider safety training courses** for this purpose. The Bosch eBike Systems website also provides helpful pointers for beginners. More information can be found at [bosch-ebike.com/riding](https://www.bosch-ebike.com/riding)





Service and Technology

# SERVICE MEANS WORRY-FREE CYCLING

Service is more than a promise. It's an attitude. Because Bosch eBike Systems believes that every product is only as good as its service. That's why specialist dealers and workshop staff receive intensive training to turn them into eBike specialists and thus guaranteeing the best possible service. Whether you need personal advice, regular software updates or comprehensive all-round checks: Enjoy that special riding sensation – and leave the rest to us.





# Service



**Bosch eBike experts** have many years of experience with Bosch eBikes and can offer **excellent advice**. There are **350 bike shops** all over Europe who are recognised as experts.

**More than 70 bike brands** worldwide rely on components 'epowered by Bosch'.

The **capacity tester** can be used to determine the **energy content of the personal eBike battery**. The specialist dealer performs a comprehensive **check**.

There are **24 Bosch expert advisers** available in **17 European countries** to support dealers at local level.

## Products to retrofit

Bosch eBike Systems offers a comprehensive and reliable after-sales service. Many of our products can be retrofitted – so that the eBike system is always equipped with the components required.

- ▶ On-board computer: Some of our on-board computers are available as retrofit kits.
- ▶ Batteries: How about an additional battery for even longer riding enjoyment? Our batteries can be purchased directly from specialist dealers.
- ▶ Chargers: Bosch batteries can be reliably recharged using our chargers. Compact, Standard and Fast Chargers are available from dealers.

## DiagnosticTool

The DiagnosticTool, a professional diagnostics solution, enables the dealer to read and update the eBike data. Adjustments (e.g. activate/deactivate walk assistance or the light function) can also be made to the eBike without rendering the warranty or the CE mark void. For example, the eBike software can be updated in order to install the latest features and ensure the full functionality of the eBike system. Furthermore, configuration data and error codes can be read out from the eBike components and individual adjustments can be made. Moreover, the tool also includes a tuning detection feature. The diagnostic report shows the current status of the Bosch eBike components and contains a great deal of useful information.

Want to find a Bosch dealer nearby?  
[bosch-ebike.com/dealers](https://bosch-ebike.com/dealers)



# Questions and Answers

## Does Bosch produce its own eBikes?

Bosch does not manufacture its own eBikes. As a provider of eBike systems, Bosch works together with renowned bicycle manufacturers that develop pedelecs. More than 70 well-known bicycle brands already use eBike systems with the "epowered by Bosch" quality seal.

## Which bike brands offer the Bosch eBike system?

You can find an overview of all manufacturers that develop eBikes 'epowered by Bosch' here: [bosch-ebike.com/brands](https://bosch-ebike.com/brands)

## Is a dealer directory available?

The Bosch eBike dealer search provides details of all bicycle retailers who sell eBikes – 'epowered by Bosch'. We particularly recommend Bosch eBike experts in Germany, Switzerland and Austria because they provide special professional advice. There is an overview of all retailers who sell eBikes 'epowered by Bosch' here: [bosch-ebike.com/dealers](https://bosch-ebike.com/dealers)

## Which system variants does Bosch offer?

Bosch eBike Systems currently offers five product lines: The elegant Active Line, the smooth Active Line Plus, the new Cargo Line for cargo bikes, the new sporty Performance Line and the powerful new Performance Line CX designed specially for eMountain bikes. The Active, Active Plus and Performance CX Drive Units support riders up to 25 km/h. The Performance Line and Cargo Line Drive Units are available in the Cruise (up to 25 km/h) and Speed (up to 45 km/h) variants.

## Is tuning allowed?

No, tuned eBikes are prohibited from use on public roads. If a so-called tuning kit is used nonetheless or the Bosch eBike system is manipulated in some other way, this risks invalidating warranty entitlements for the purchased bike. As a general rule, using the system improperly will also reduce the service life and risk causing damage to the drive unit and the bike itself. Riders may also endanger their own safety and the safety of other road users and risk accidents as a result of tuning as well as high personal liability costs and even criminal prosecution. Bosch eBike Systems therefore asks that all riders and providers refrain from tuning eBikes.

## Can a bike be retrofitted with the Bosch eBike system?

For technical reasons, the Bosch eBike system is not available as a retrofit kit. A special frame is required to integrate the drive system in the bike. Bicycle manufacturers produce the frame specially for eBikes epowered by Bosch. Bosch works together with more than 70 renowned eBike manufacturers on this. You can find an overview here: [bosch-ebike.com/brands](https://bosch-ebike.com/brands)

## Which parts of the Bosch drive system can riders repair themselves?

If an eBike fitted with a Bosch drive system develops a defect related to the Bosch eBike drive, a professional bicycle retailer specialising in eBikes is the right contact. These retailers will have the appropriate special tools, such as a software diagnosis tool, to identify the exact problem. Even ambitious bicycle repair enthusiasts may not be able to repair the defect and there is a significant risk that unprofessional repairs will compromise the safety of the overall system.

## Battery repairs, cell replacement and "refreshing" the battery?

*Some companies and internet-based service providers offer a battery repair, cell replacement or even a so-called battery 'refreshing' service: Is this solution suitable for repairing defective batteries?*

Bosch eBike batteries must never be opened – not even if they are being repaired by third parties. Opening the battery always means interfering with the condition approved by Bosch and entails safety-related risks. Further important information about safety risks and risks from battery repairs can be found in our Battery Guide. A defective battery must always be replaced. Opening or modifying batteries, as well as any other attempted manipulation, risks voiding any guarantee or warranty claim. Any questions about the battery should be directed first to the specialist retailer, who will get in touch with the Bosch service department if necessary.

## Used batteries for the Bosch eBike system are sometimes offered for sale online. Can these be used?

When purchasing used batteries, always make sure that they have not been damaged by their previous owner. Damaged batteries are occasionally sold online but they pose a significant risk and can lead to dangerous malfunctions. Sometimes illegal, e.g. stolen goods are also sold online. If applicable, ownership of such goods cannot be acquired legally in accordance with § 935 BGB [Bürgerliches Gesetzbuch, German civil code].

## Alternative replacement battery for the Bosch eBike system?

*"Low-cost replacement batteries for the Bosch system are sold online, but they are not manufactured by Bosch. Can these be used?"*

Bosch eBike Systems would strongly advise against using non-original Bosch replacement parts. The software and hardware used in Bosch eBike systems are perfectly adapted to one another in order to guarantee efficiency and safety.

## Alternative charger for the Bosch eBike system?

*"Low-cost chargers for eBikes with the Bosch system are sold online. Can these be used?"*

Original chargers are adapted specifically to the Bosch eBike System and have the correct software for charging and managing the Bosch battery to optimum effect. Using a different charger may reduce the service life of the batteries or cause other damage or malfunctions in the eBike system.

## Purchasing a converted eBike?

*"I'd like to purchase a used eBike. The previous owner said that he made a "few improvements to the eBike components". What does Bosch think of this?"*

Advice from Bosch: Steer clear of offers of this kind. The Bosch eBike system is designed for maximum safety and durability. All system components are controlled and monitored by extremely complex software. Any intervention in the system design will almost certainly have a negative effect on performance. Possible consequence: The safety of the rider may be endangered and use of the system may contravene statutory regulations.



# Technical Details

## Drive Units

								
	Active Cruise 25 km/h	Active Plus Cruise 25 km/h	Cargo Cruise 25 km/h	Cargo Speed 45 km/h	Performance Cruise 25 km/h		Performance Speed 45 km/h	Performance CX 25 km/h
Gear type	Derailleur system / hub gear system	Derailleur system / hub gear system	Derailleur system / hub gear system	Derailleur system	Derailleur system	Hub gear system**	Derailleur system	Derailleur system / hub gear system
Support level (%)	TURBO: 250 SPORT: 170 TOUR: 100 ECO: 40	TURBO: 270/250 SPORT: 180/170 TOUR: 100 ECO: 40	TURBO: 400 SPORT: 240 TOUR: 140 ECO: 60	TURBO: 400 SPORT: 240 TOUR: 140 ECO: 60	TURBO: 300 SPORT: 120-300 TOUR: 120 ECO: 55	TURBO: 300 SPORT: 200 TOUR: 120 ECO: 55	TURBO: 340 SPORT: 240 TOUR: 140 ECO: 60	TURBO: 340 eMTB*: 140-340 TOUR: 140 ECO: 60
Maximum possible drive torque (Nm) (converted to a gear ratio of 1:1 crankset to chainring)	TURBO: 40 SPORT: 38 TOUR: 35 ECO: 30	TURBO: 50 SPORT: 45 TOUR: 40 ECO: 35	TURBO: 75 SPORT: 60 TOUR: 50 ECO: 40	TURBO: 75 SPORT: 60 TOUR: 50 ECO: 40	TURBO: 65 eMTB*: 60 TOUR: 45 ECO: 35	TURBO: 65 SPORT: 50 TOUR: 45 ECO: 35	TURBO: 75 SPORT: 60 TOUR: 50 ECO: 40	TURBO: 75 eMTB*: 75 TOUR: 50 ECO: 40
Maximum cadence (rpm) with drive support	TURBO: 100 SPORT: 100 TOUR: 100 ECO: 100	TURBO: 105 SPORT: 105 TOUR: 105 ECO: 105	TURBO: >120 SPORT: >120 TOUR: >120 ECO: >120	TURBO: >120 SPORT: >120 TOUR: >120 ECO: >120	TURBO: >120 SPORT: >120 TOUR: >120 ECO: >120	TURBO: >120 SPORT: >120 TOUR: >120 ECO: >120	TURBO: >120 SPORT: >120 TOUR: >120 ECO: >120	TURBO: >120 SPORT: >120 TOUR: >120 ECO: >120
Start-up behaviour	Smooth	Smooth, agile	Powerful	Powerful	Sporty	Dynamic	Sporty	Very sporty
Max. support up to	25 km/h	25 km/h	25 km/h	45 km/h	25 km/h	25 km/h	45 km/h	25 km/h
Backpedal function	optional	optional	no	no	optional	optional	no	no
Gear shift detection	yes/no	yes/no	yes/no	yes	yes	no	yes	yes (dynamic)
Weight approx.	2.9 kg	3.2 kg	2.9 kg	2.9 kg	3.2 kg	3.2 kg	2.9 kg	2.9 kg

\* Depending on the eBike type, the eMTB mode replaces the Sport mode in the Performance Line and the Performance Line CX. It can be activated/deactivated by the bicycle manufacturer and the specialist dealer.  
\*\* Reduced torque on Shimano hub gear systems.

# Technical Details

## Batteries

						
	PowerPack 300	PowerPack 400	PowerPack 500	PowerTube 400	PowerTube 500	PowerTube 625
Mounting type	Frame battery Rack battery	Frame battery Rack battery	Frame battery Rack battery	In the frame: Horizontal/vertical	In the frame: Horizontal/vertical	In the frame: Horizontal/vertical
voltage	36 V	36 V	36 V	36 V	36 V	36 V
Capacity	8.2 Ah	11.0 Ah	13.4 Ah	11.0 Ah	13.4 Ah	16.7 Ah
Energy content approx.	300 Wh	400 Wh	500 Wh	Approx. 400 Wh	Approx. 500 Wh	Approx. 625 Wh
Weight approx. Frame battery: Rack battery:	2.5 kg 2.6 kg	2.5 kg 2.6 kg	2.6 kg 2.7 kg	2.9 kg	2.9 kg	3.5 kg
Dimensions Frame battery <sup>2</sup> /Rack battery <sup>2</sup> Horizontal <sup>3</sup> /vertical <sup>4</sup>	325 x 92 x 90 mm <sup>1</sup> 372 x 122 x 80 mm <sup>2</sup>	325 x 92 x 90 mm <sup>1</sup> 372 x 122 x 80 mm <sup>2</sup>	325 x 92 x 90 mm <sup>1</sup> 372 x 122 x 80 mm <sup>2</sup>	349 x 84 x 65 mm <sup>3</sup> 349 x 65 x 84 mm <sup>4</sup>	349 x 84 x 65 mm <sup>3</sup> 349 x 65 x 84 mm <sup>4</sup>	416 x 84 x 65 mm <sup>3</sup> 416 x 65 x 84 mm <sup>4</sup>
Compatible with DualBattery						

# Technical Details

## Kiox

- Hardware facts**
  - ▶ Transmissive 1.9-inch colour display made from unbreakable glass (208 × 274 pixels, 29 × 39 mm active range)
  - ▶ Operation of the Kiox via the separate 'Remote Compact'
  - ▶ Walk Assist button on the separate control unit
  - ▶ The display mount is installed on the stem or the bicycle manufacturer has developed a specific holder solution using the modular mounting plate.
  - ▶ Two buttons; one 'On/Off' button and one button for the light directly on the display
  - ▶ Brightness sensor automatically controls the brightness of the display during both day and night.
  - ▶ Integrated rechargeable battery delivers power in off-board mode for approx. 20 minutes; on-board it is charged from the eBike battery.
  - ▶ Rugged and IPx7 waterproof when the USB cap is closed
  - ▶ Micro-AB-USB port for diagnostics by your dealer, for charging the Kiox battery and for charging external devices such as compatible smartphones
  - ▶ Temperature range: –5 °C to +40 °C (operation) and –10 °C to +50 °C (storage)

- Connectivity facts**
  - ▶ Recording activities
  - ▶ The activity list and details of the relevant activity are displayed in the app.
  - ▶ Bluetooth connectivity (BLE) for heart rate monitors
  - ▶ Software update via app

- Additional features**
  - ▶ Integration of the ABS light
  - ▶ Displays the data for the E-Live Valve electronically controllable chassis from FOX (eSuspension)
  - ▶ Displays current power, cadence and heart rate
  - ▶ Displays current speed in relation to the average speed
  - ▶ Support for enviolo Shimano and Rohloff integrated electronic gear shifting (eShift)
  - ▶ Summary of the current trip in off-board mode
  - ▶ Resetting the consumption values for the Drive Unit (trip and range data)
  - ▶ Displays the charge state of the eBike battery and smartphone battery in the status screen
  - ▶ Service interval display possible

# Technical Details

## Nyon

- Hardware facts**
  - ▶ Transflective 4.3-inch TFT display (480 x 272 pixels, 16 million colours, 95 × 53 mm active area)
  - ▶ 8 GB storage capacity
  - ▶ 5-way joystick for intuitive operation of the Nyon on-board computer and the separate control unit
  - ▶ 3 buttons; for switching on/off, operating the light and returning to home
  - ▶ Walk Assist button on the separate control unit
  - ▶ Integrated high-precision GPS module
  - ▶ High-resolution barometric pressure sensor
  - ▶ Ambient light sensor automatically controls the backlight of the display during both day and night.

- ▶ Integrated battery delivers power for approx. one hour in off-board mode; on-board, it is charged via the eBike battery.
- ▶ Rugged and IPx7 waterproof when the USB cap is closed
- ▶ Temperature range: –5 °C to +40 °C (operation) and –10 °C to +50 °C (storage)
- ▶ Micro-AB-USB port for diagnostics by your dealer, for charging the Nyon battery and for charging external devices and compatible smartphones
- Connectivity facts**
  - ▶ WiFi connectivity for direct and convenient synchronisation (Activity sync., map update, software update) via your router or other access points
  - ▶ Smartphone app for compatible smartphones: Android version 4.0.3 or higher and iOS version 9 or higher
  - ▶ Online portal (dashboard, activities, route planning)
  - ▶ Bluetooth connectivity to compatible smartphones
- ▶ Bluetooth connectivity (Bluetooth 4.0) for heart rate chest straps, e.g. Polar H7

# Technical Details




## SmartphoneHub

- Hardware facts**
  - ▶ Dimensions: 33 x 93 x 68 (H x W x D)
  - ▶ Weight: SmartphoneHub 80 g + Remote Compact 20 g
  - ▶ Display: LC display 1.52" (192 x 64 Pixels)
  - ▶ Universal mount for different smartphone types (optional mount specially for iPhones available as an accessory)
  - ▶ Charging the smartphone: through USB on the hub or directly using iPhone mount (accessory)
  - ▶ Intuitive operation via the separate Remote Compact control unit
  - ▶ An integrated rechargeable battery in the SmartphoneHub delivers approx. 2.5 hours of power without an eBike rechargeable battery; otherwise SmartphoneHub is charged from the eBike battery.
  - ▶ Ambient light sensor automatically controls the brightness of the display during both day and night.
  - ▶ Rugged and IP54 waterproof when the USB cap is closed
  - ▶ Walk Assist button on the separate control unit
  - ▶ Temperature range: –5 °C to +40 °C (operation) and –10 °C to +50 °C (storage)
  - ▶ Micro-AB-USB port can be used by your specialist dealers to perform diagnostic tasks and also to charge your smartphone
  - ▶ Light option: light control using SmartphoneHub

- Connectivity facts**
  - ▶ Smartphone app for compatible smartphones (Android: at least 4.4; iOS: at least 10.0)
  - ▶ Bluetooth connectivity: Bluetooth 4.1 Low Energy
  - ▶ 2D/3D offline navigation with voice instructions
  - ▶ MinuteCast™: Information on the latest weather conditions, including the likelihood of rain and sunset time
  - ▶ Fitness tracking with voice output, average values and individual fitness ranges
  - ▶ Automatic route and fitness tracking via Komoot, Strava, Apple Health and Google Fit

# Technical Details

## Chargers

			
	Compact Charger	Standard Charger	Fast Chargers *
Charging current	max. 2 A	max. 4 A	max. 6 A
Voltage	100–240 V	220–240 V	220–240 V
Size approx.	160 x 75 x 45 mm	190 x 86 x 54 mm	200 x 90 x 60 mm
Cable lengths approx.	AC input: 1.5 m, DC output: 1.0 m	AC input: 1.5 m, DC output: 1.0 m	AC input: 1.5 m, DC output: 1.0 m
Plug	Country-specific power plug	Country-specific power plug	Country-specific power plug
Weight approx.	600 grams	800 grams	1000 grams
Compatibility	Active Line / Active Line Plus / Cargo Line / Performance Line / Performance Line CX compatible, Classic+ Line compatible using adapter plug (optional part)		
	▼ Charging time ▼		
PowerPack 300	5.0 h	2.5 h	2.5 h
PowerPack 400	6.5 h	3.5 h	2.5 h
PowerPack 500	7.5 h	4.5 h	3.0 h
PowerTube 400	6.5 h	3.5 h	2.5 h
PowerTube 500	7.5 h	4.5 h	3 h
PowerTube 625	8.8 h	4.9 h	3.7 h
DualBattery 1250	17.6 h	9.8 h	7.4 h

\*The charging current in PowerPack 300 and in rechargeable batteries of the Classic+ Line is limited to 4 A.

# Technical Details

## Bosch eBike ABS

- Functionality**
  - ▶ Anti-lock function on the front wheel; enhanced riding stability and control
  - ▶ Rear wheel lift control: reduced risk of crashing over the handlebar in critical braking situations
  - ▶ More efficient braking through regulated use of the front wheel brake in braking situations
- Brakes**
  - ▶ Magura CMe ABS hydraulic disc brakes
- Total weight**
  - ▶ Approx. 800 grams
- Miscellaneous**
  - ▶ 12 V power supply via the Bosch eBike System
  - ▶ Control light for quick recognition of ABS status (active (yes/no))
- Area of application**
  - ▶ 25 km/h and 45 km/h
  - ▶ 28 inch trekking and city/urban



# Test bench measurement R200

## Comparison of battery power and capacity

In order to be able to measure the range of eBikes in a standardised way for comparison purposes, Bosch eBike Systems, working in cooperation with ZIV (Germany's bicycle industry association) and other companies from the bicycle industry, has developed "standardised range test R200". This will enable manufacturers, dealers and customers to compare the range of different eBikes on an objective basis.

### The same conditions for transparent values

Previous test results for eBike range depended heavily on the rider and the external conditions (rider weight, tyres, air pressure, surface, weather, etc.). The R200 measurement method compares eBike performance with a uniform support factor of 200% (hence the name: R200). This means that the tested drive system supports an average rider performance of 70 watts with 140 watts, which corresponds to a medium to high support factor.

### R200 provides practical comparison

The result of the test is a specific indication of how many kilometres an eBike will cover under these standard conditions. However, manufacturers need to test each model individually using the R200 method. The operator simply enters the values from the list of requirements.

Further information:  
[bosch-ebike.com/R200](https://bosch-ebike.com/R200)



**ZIV**  
Zweirad-Industrie-Verband



**Robert Bosch GmbH**  
Bosch eBike Systems

Postfach 1342  
72703 Reutlingen  
Germany

[bosch-ebike.com](https://bosch-ebike.com)  
[facebook.com/boschebikesystems](https://facebook.com/boschebikesystems)