

August 2013 / EN

The proven eBike system.

Classic+



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Bosch eBike Systems 2013/2014



BOSCH
Invented for life

Classic+

The proven ebike system.

Never push your bike again. Because the right boost for every situation and every requirement is delivered by the sophisticated Bosch eBike System Classic+. Ease and controllability from start to finish now make ebiking into pure riding enjoyment. Whether up to 25 km/h or 45 km/h, the intelligent 3-way sensor system meters the force of the drive units in a sensitive and unobtrusive manner. As frame or rack batteries, the lightweight and efficient PowerPacks deliver energy for perfect all-round assistance that seems to know every riders wish.

But only Intuvia makes Classic+ into a complete drive system. The multifunctional and easy-to-use cycle computer with a separate control unit on the handlebar is the control

centre of an ebike system that achieves great things again and again: absolute freedom and independence for each and every ebiker.

It is also supported by a strong service culture and infrastructure: Trained Bosch Experts are available to every ebiker virtually always and everywhere with advice and assistance directly in the bike shop.

Just get on and ride off with Classic+. On an ebike powered by Bosch.

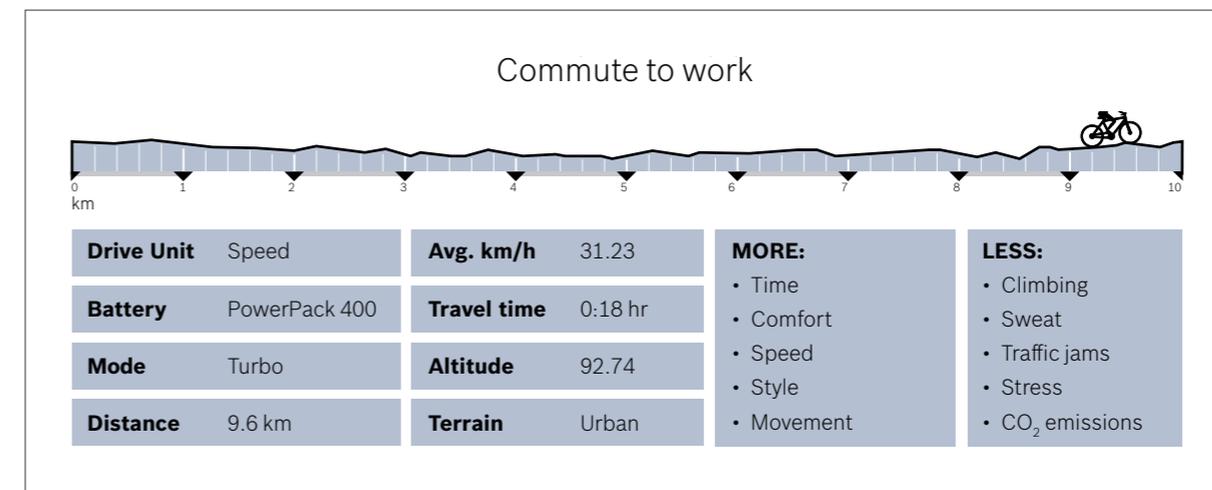




e means economy.

The city awakes, the world accelerates. Brush teeth, straighten tie, settle onto the ebike and head for the office. Modern, advanced, economical and fast. Zipping past everyone with Speed. Past bottlenecks and traffic jams.

With the ebike it's full speed ahead. Elegant and ecological. The ride to work can be so easy and relaxed. Only the ride home is even better.

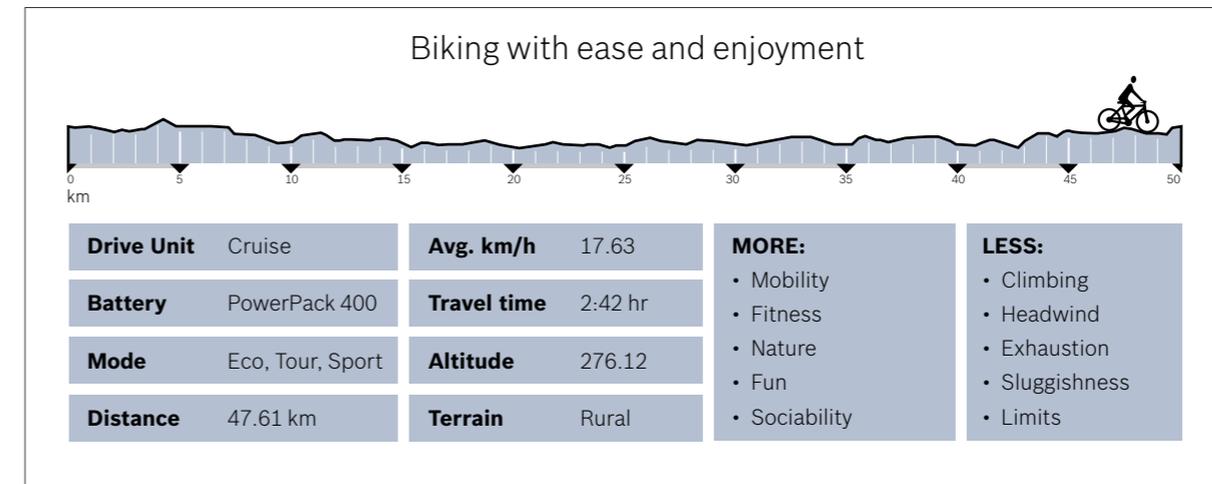




e means enjoyment.

The day planner is empty. Fantastic! Plenty of time for a tour then. Let's see what the others are doing today. Well then ... jump on the ebike and go! Round up the gang and bike together through nature. Curious what we'll find on the way, going from here to there. No hurry, no stress. Especially not

with shifting to the next pedaling assistance level. My Intuvia on-board computer is clever and easy to read for that. Break time! We can't just ride past this cake shop without a visit. And the cake's calories stay on the trail anyway.

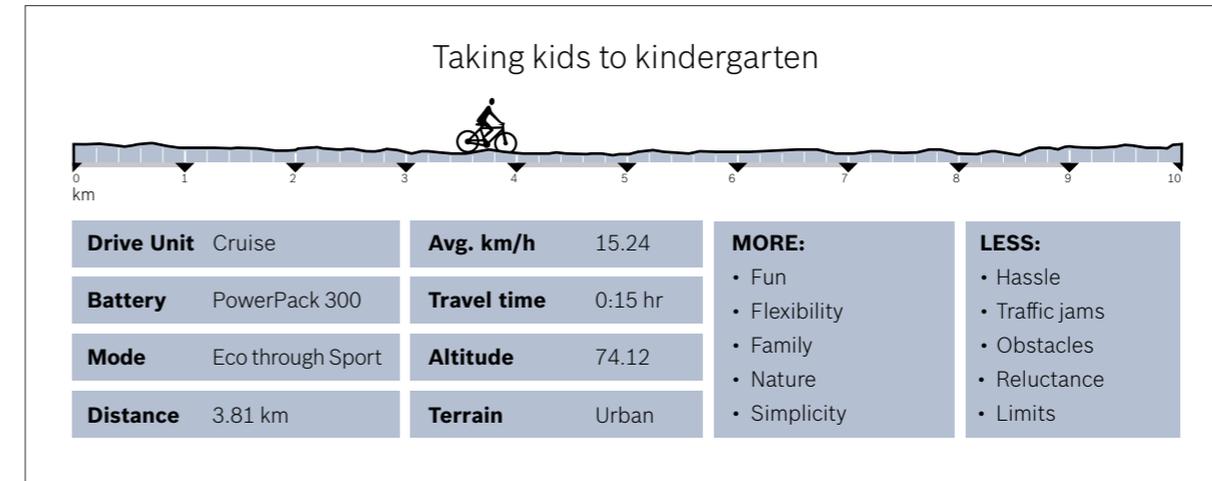




e means easy.

For the little one, it's a big deal. The ride to kindergarten. Happy as a lark, he perches in his child seat and lets himself be carted through the city, just as cheerful as his chauffeur. Who enjoys the daily ebike trip as much as his child

does. Even up the long steep slope. Caring for the environment can be so easy. It's a good route that I chose. With fresh air, exercise and a happy kid. Perfect.

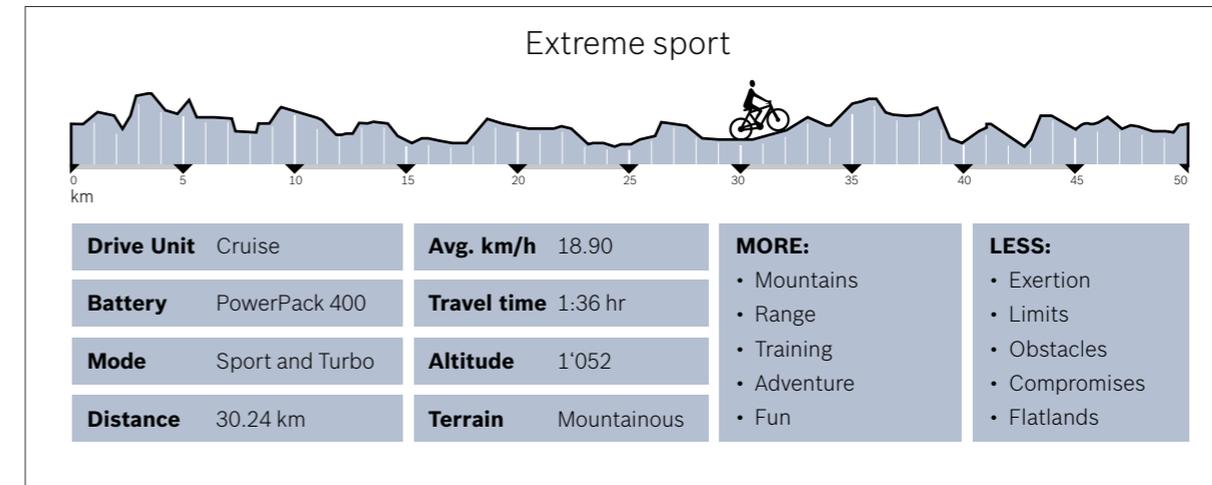




e means excitement.

Knocked off a bit early today. After all, the mountain is calling. Life is more than just work. The bike trip sounds tempting. Scenic, but also exhilarating. With a few steep slopes here and there. But the body is capable, and the eBike Drive Unit even more so. Working together, they can go just about anywhere – with flexibility

and agility. Even on difficult terrain, because of the well-balanced placement of motor and battery. Meanwhile, the Intuvia keeps me constantly updated on the motor output, remaining range, distance traveled, and all the other trip data. And if I stop in for a bite somewhere, it can be easily detached and taken along.



Technical features

Drive Unit Cruise (25 km/h) and Speed (45 km/h)

The Drive Unit consists of the central components of motor, gears, control electronics and sensors. Together they provide powerful, direct and agile support over the entire speed range. Its electronic control with three sensors for torque, speed and cadence ensures tuning that is constantly optimised. Compact,

rugged and quiet, the Drive Unit is also equipped with integrated stone chip and splash water protection. Additional design covers are available in white and black.

| | Cruise 25 km/h | Cruise 25 km/h | Speed 45 km/h |
|--------------------|-----------------|-------------------|-------------------|
| Gear type | Hub gear system | Derailleur system | Derailleur system |
| Power | 250 watts | 250 watts | 350 watts |
| Torque | 30 - 50 Nm | 30 - 50 Nm | 40 - 50 Nm |
| Support | 30 % - 200 % | 30 % - 250 % | 30 % - 250 % |
| Max. support up to | 25 km/h | 25 km/h | 45 km/h |
| Weight | < 4 kg | < 4 kg | < 4 kg |



Drive Unit Speed (45 km/h)

Drive Unit Cruise (25 km/h)

PowerPack 300 and PowerPack 400

The Battery Management System (BMS) protects the batteries against overloading, undervoltage, overheating and short circuit. The voltage of each individual cell is measured by premium Single Cell Monitoring (SCM). BMS and SCM together

ensure a long service life. The wide range of PowerPacks is not only available with 300 and 400 Wh, but also as rack and frame batteries in the colours of black and white.

| | PowerPack 300 | | PowerPack 400* | |
|---------------------|----------------|----------------|----------------|----------------|
| Mounting type | Frame battery | Rack battery | Frame battery | Rack battery |
| Voltage (V) | 36 V | 36 V | 36 V | 36 V |
| Capacity (Ah) | 8.2 Ah | 8.2 Ah | 11 Ah | 11 Ah |
| Energy content (Wh) | 300 Wh | 300 Wh | 400 Wh | 400 Wh |
| Weight | Approx. 2.4 kg | Approx. 2.4 kg | Approx. 2.6 kg | Approx. 2.6 kg |

* Higher energy density of the cells enables 30% more energy content – meaning 30% more range with comparable battery weight.

Charger

Thanks to the compact and quiet Bosch Charger (< 0.8 kg), PowerPack 300 and PowerPack 400 are fully charged in no more than 2.5 and 3.5 hours on a mains voltage of 230 V. The charg-

ing time for the PowerPack 300 is no more than 2.5 hours at 4 A (1 hour for a 50% charge) and no more than 3.5 hours at 4 A (1.5 hours for a 50% charge) for the PowerPack 400.



Cycle computer Intuvia

The cycle computer consisting of a display, base and separate control unit features five different riding modes: Eco, Tour, Sport, Turbo, Off. And also walk assistance that can be switched on and off. Intuvia provides information on range, day trip, trip time and average speed, and on the current power, time and maximum speed. The total kilometres travelled can be called

up from the configuration menu. In “off-board mode”, the functions of the computer can also be called up when it is removed from the bike. Charging of MP3 players and smartphones is also possible through the USB interface while you are on the go. A locking screw is used as protection against theft of the lightweight 140 g device.

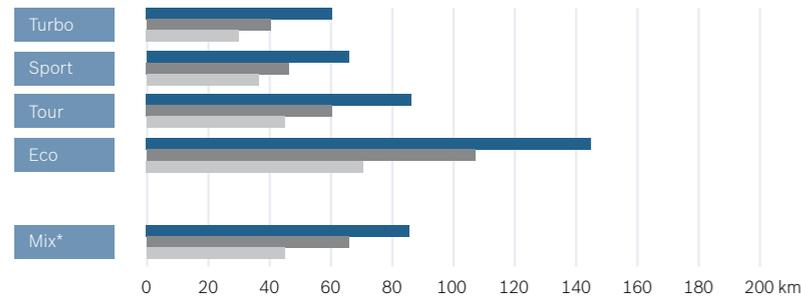
| | |
|--------------|--|
| Turbo | Direct, powerful support up to maximum cadence for ambitious and sporty riding |
| Sport | Immediate, powerful support for sporty riding off-road and in city traffic (stop and go) |
| Tour | Steady support for long tours |
| Eco | Effective support at maximum efficiency for maximum range |
| Off | No support, all cycle computer functions are available |



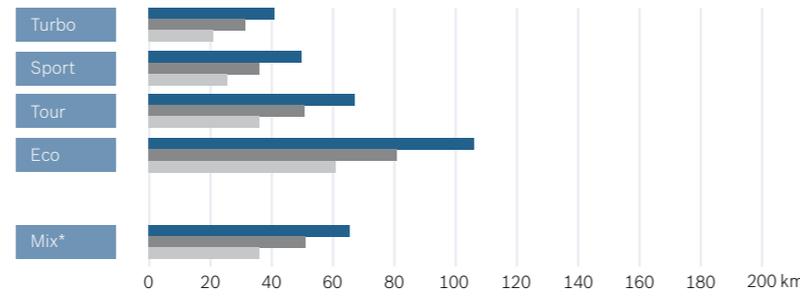
Ranges

The following graphs show the action radius depending on riding mode, drive unit and battery variant.

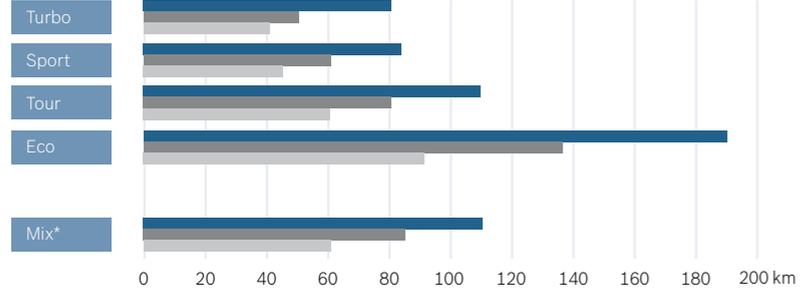
Cruise with PowerPack 300



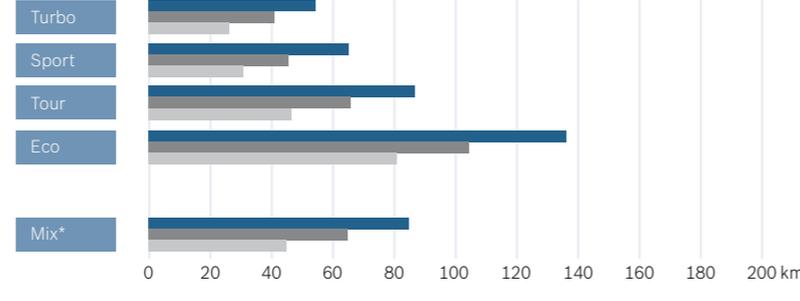
Speed with PowerPack 300



Cruise with PowerPack 400



Speed with PowerPack 400



* Average of uniform use of all four modes.

** The calculated ranges are rated values which can be reduced if any of the conditions listed worsen.

Ideal conditions**

Flat terrain, approx. 15 km/h average speed, no headwind, approx. 20°C ambient temperature, high-quality bike components, tyre tread with minimal rolling resistance and correct tyre pressure, experienced ebike rider (always shifts gears correctly), additional weight (excluding bike weight) < 70 kg.

Favourable conditions**

Slightly hilly terrain, approx. 20 km/h average speed, slight headwind, approx. 10°C to 20°C ambient temperature, medium-quality bike components, tyre tread with average rolling resistance, favourable cadence, ebike rider shifts correctly most of the time, additional weight (excluding bike weight) 70 kg to 80 kg.

Difficult conditions**

Terrain with long and steep inclines, 25 km/h (Speed: 30 km/h) average speed, possibly strong headwind, < 10°C ambient temperature, bicycle components with relatively low efficiency, tyre tread with increased rolling resistance, low tyre pressure, unfavourable gear selection / cadence, additional weight (excluding bike weight) > 85 kg.

- Ideal conditions
- Favourable conditions
- Difficult conditions