Dynamo hub technology

A front dynamo hub that acts as a power source for your lights and other devices is now extending our renowned range of hubs.

Dynamo

From a distance, what may look like a standard hub when fitted to your wheelset is actually hiding a dynamo.

We collaborated with Shutter Precision, a market leader for dynamo hub technology, smoothly integrating their SP PL-7 generator into a tailored hub shell.

Read more about Shutter Precision’s expertise in dynamo hub technology.

Efficiency

The dynamo hub generates electricity from the rotation of the front wheel to power your lights and other electrical devices. This adds some resistance, but thanks to the design of the hub shell and the efficiency of the SP PL-7, it has a minimal effect on your ride. Efficiency is measured both with the light on and off.

This graph shows the effect on the resistance requiring additional power input and the efficiency of the dynamo hub when the light is on and off.

Efficiency with light off:

With the lights or power consumption off, the increase in resistance caused by the front dynamo hub is minimal and remains below 1 watt (W) up to a speed of 30 km/h. This slight increase is barely noticeable while bikepacking.

Efficiency with light on:

When the lights are on, the resistance increases as the generator creates its own magnetic field, producing electricity to power your lights.

Our dynamo hub with the SP PL-7 generator incorporates one of the most efficient technologies. At 15 km/h, while delivering a standard output of 6 volt/3 watts (6V3W), 4.2 watts of your rolling power are used to power the lights.

Durability

With a tailor-made hub shell, you can rely on the build quality you expect from DT Swiss hubs, with the added technology of Shutter Precision. With its rugged construction, the dynamo hub is ready to withstand the rigors of your off-road riding, including rough terrain, heavy loads and exposure to the elements.

Should your dynamo hub require service, you can rely on our worldwide service network of DT Swiss Service Centers.

Compatibility

The front dynamo hub is compliant with German road traffic regulations (StVZO). It is designed to provide adequate visibility for riders and other road users, reducing the risk of accidents. Additionally their 6V3W rating ensures compatibility with standard hub dynamo products including dynamo lamps and converters for USB powered devices.