

Round-Trip-Efficiency FENECON Industrial L and XL

As of: September 2025

1. Starting point

As one of the oldest players in the BESS market, FENECON can draw on a wealth of experience in the field and can thus verify its statements from development in practice. In line with this claim, the efficiency of our industrial storage systems has been and continues to be continuously reviewed and evaluated as the key to long-term profitable use.

2. FENECON Industrial L

To evaluate efficiency data of a large number of systems, some of which have been in operation for several years, has been used.

The use of the systems varies greatly depending on application and location. The systems are all located outdoors, either doing energy-trading applications in PV-parks or optimising energy costs at industrial sites. The application has a massive impact upon the load profile and e.g. the number of cycles.

Although the systems operate under such different conditions, they have an average efficiency of $\geq 95\%$ * in real-world operation.

The systems achieve values that are close to our internal tests, but over a longer periods of time and in real-world applications. This confirms our combination of highly efficient, decentralised silicon carbide inverters with automotive batteries, which, thanks to their NMC chemistry, among other things, have comparatively low internal resistance over the long term.

3. FENECON Industrial XL

Due to a similarly optimised system architecture, we expect the FENECON Industrial XL to achieve this value in practice as well. This has already been proven on our test system under various applications. This prompts us to specify the same high efficiency on the FENECON Industrial XL data sheet.

*This value was measured on the AC side of the inverters. It therefore includes the efficiency of the inverters and batteries. Downstream losses, e.g. due to transformers or ancillary consumption, are not included in this average value.