

## AVANT POWER ACCELERATES THE GREEN TRANSITION OF WORK MACHINERY WITH UNIQUE MOBILE POWER UNITS

Avant Power launches the OptiTemp® Cube product series at the Bauma trade fair, revolutionizing the use of electric loaders and work machinery on job sites, in remote locations, and wherever additional power is needed quickly and reliably.

**Munich, Germany – Avant Power** began battery production for Avant electric loaders in 2024. Since then, the subsidiary of Finnish compact loader manufacturer Avant Tecno has manufactured over 500 battery packs, enabling Avant's fully electric e-series loaders to operate for an entire workday on a single charge.

OptiTemp<sup>®</sup> batteries are known for their excellent performance, safety, and durability. Avant Power is now taking the OptiTemp<sup>®</sup> concept further by introducing their mobile power unit solution: the **OptiTemp<sup>®</sup> Cube product series**.

Scheduled for market release by the end of 2025, the **OptiTemp**<sup>®</sup> **Cube 50** is Avant Power's response to the growing demand for mobile energy storage in the loader and machinery industry. It is specifically designed for charging Avant's e-series electric loaders.

"As our battery production has grown, we've noticed that OptiTemp<sup>®</sup> technology works just as well in mobile energy solutions. Avant loaders are often used on job sites that do not have charging infrastructure. A mobile power unit is an ideal solution for construction sites, remote outdoor locations, forests, events—anywhere where electricity is needed quickly and reliably," says **Mikko Piepponen**, COO of Avant Power.

## Unique immersion cooling technology

The OptiTemp<sup>®</sup> Cube stands out from existing solutions thanks to its immersion cooling technology, which ensures reliable performance in all conditions. The battery cells are surrounded by a cooling liquid, enabling efficient thermal management in both hot and cold environments. The battery automatically preheats itself in cold conditions and prevents overheating during use.

"The Cube is just like our loaders—compact, durable, quiet, and safe. Despite its small size, OptiTemp® batteries offer high energy density, allowing for large capacity and fast charging," Piepponen states.

In the future, Avant Power plans to expand the product family even further. The forthcoming 100 kWh **OptiTemp® Cube 100** will provide portable energy for larger electric work machinery, such as mining, agricultural, and forestry equipment.

Avant Power's vision is to offer safe and reliable location-independent energy solutions for various industries—solutions that can be scaled for larger needs and systems by chaining multiple Cube units together.

"These products pave the way for even larger and more powerful energy storage solutions. This is just the beginning," Piepponen concludes.



	OptiTemp® Cube 50	OptiTemp® Cube 100
Capacity	50 kWh, 400 VDC	100 kWh, 400 VDC
Weight	700 kg	1160 kg
Dimensions (L x W x H)	120 x 80 x 116 cm	120 x 100 x 116 cm
Cube charging	Type 2, 220–250 VAC, 3,3 kW	Type 2 CCS, 220–250 VAC (1-phase), 380–480 VAC (3-phase), DC (CCS)
Output for work machinery	48 VDC, 150 A	Type 2 CCS, 400V/800V
Output for external socket	230 VAC, 10 A, 50 Hz	230 VAC (1-phase), 400 VAC (3-phase)
Protection	54 IP	54 IP
Readiness for bidirectional charging	Yes	Yes

Avant OptiTemp<sup>®</sup> Cube products and the new Avant e727 and e747 loader models will be presented for the first time at the Bauma 2025 international trade fair in Munich, Germany, April 7–13, 2025, at Avant's booth FM.710/5.

Hi-resolution images: https://avant.pictures.fi/kuvat/Press+Photos/Bauma+2025/

More information about Avant Power: www.avanttecno.com/fi/avant-power

## Contact:

Mikko Kettunen, CBDO, Avant Power

mikko.kettunen@avanttecno.com

+358 50 526 7027

Avant Power Oy is a subsidiary of Avant Tecno Oy, a world leading manufacturer of high-quality compact loaders and attachments. Founded in 2022, Avant Power focuses on manufacturing globally unique high-capacity batteries perfectly optimized for compact loaders. The headquarters of Avant Power are located in Ylöjärvi, near the city of Tampere in Finland. www.avanttecno.com/avant-power

Avant Tecno Oy is a world leading manufacturer of high-quality compact loaders and attachments. Founded in 1991, Avant has over the years become a household name in the compact loader business thanks to the numerous innovative solutions it has created. The Avant factory is located in Ylöjärvi, near the city of Tampere in Finland. In addition, Avant has subsidiary sales offices in Germany, Great Britain, the United States, and Brazil, and independent importers in over 70 countries all over the world. www.avanttecno.com