

## German armed forces purchase mobile solar container

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The German armed forces purchase mobile solar containers equipped with high-power modules from manufacturer aleo solar. These photovoltaic modules are built into Multicon Solar containers, which act as mobile power plants to generate environmentally friendly power for the armed forces' military camps and bivouacs. They are intended to complement or replace diesel generators.

“The German armed forces need a reliable energy supply, which is why we solely depend on our own diesel generators in conflict areas. Procuring fuel for the generators is often very dangerous. By reducing our fossil fuel consumption, we could therefore protect human lives and increase our troupes' resilience,” reports Michael Schulz, senior technical civil servant in the German armed forces. “Solar containers provide us with a secure power supply, no matter where we are based. This is absolutely invaluable for our work.”

Multicon delivers its solar containers as turnkey solar installations with built-in battery storage solutions and intelligent energy management systems. Once the containers arrive on site, the wired photovoltaic modules can be set up, or dismantled again, in less than an hour. The containers keep the modules safe from potential hazards, such as sandstorms, storms and vandalism.

“We wanted to equip our Multicontainers with as much solar capacity as possible, thus providing our customers with reliable and durable solar modules at a fair price. This is why we decided to use aleo solar's high-power modules,” explains Sven Leinardi, executive manager of the Multicon Solar Group, which manufactures the solar containers. “Conventional 60-cell modules would not allow our containers to generate anywhere near as much electricity.”

Thanks to a combination of carefully selected components and state-of-the-art solar cells, aleo solar's high-power modules have an efficiency value up to than 18.3 percent. In addition to the special cell connectors (LHS = light harvesting string), anti-reflection coated front glass and a highly transparent EVA film enable more light to reach the cells.

“Over a billion people around the world do not have access to power, with a further billion producing electricity from environmentally harmful diesel generators. Solar containers could also be used in emerging and developing countries to help cover their ever increasing energy demands. We are proud to be supplying our modules for these pioneering off-grid solar plants and to be helping people all over the world to generate clean electricity,” adds Günter Schulze, managing director of aleo solar GmbH.

Each solar container has a capacity of up to 50 kWp and can store up to 150 kWh of solar power. As any number of containers can be connected, they can cover electricity demands equating to several megawatts, which is enough energy to power hospitals, refugee camps or water desalination plants, for example. Manufactured in Duisburg, Germany, the patented solar containers come in four different output levels ranging from 5.4 to 50 kWp with a storage capacity of between 15 and 150 kWh. They can produce single-phase as well as three-phase electricity from 13 cents per kWh. Each container can be easily transported on a four-wheel truck.

### **About aleo solar**

aleo solar GmbH produces and sells monocrystalline high-power modules at competitive prices and provides systems to the global photovoltaics market. Established in 2001, the company employs around 200 members of staff and has excellent knowledge of manufacturing processes. Since 2014, the company has been benefitting from its affiliation with Sunrise Global Solar Energy Co. Ltd., which develops and manufactures highly efficient solar cells. This affiliation has allowed aleo solar to join forces with a powerful solar manufacturer representing the entire solar supply chain, from producing cells to delivering modules. [www.aleo-solar.de](http://www.aleo-solar.de)

### **About the Multicon Group**

Founded in 1993, Multicon specialises in renewable energy. The company produces, assembles and sells solar substructures for flat, trapezoidal and sandwich roofs. To date, Multicon mounting systems have been installed in over 1,000 solar power plants with a cumulative capacity exceeding 100 megawatts (MW). Since 2013, the company has been focusing on off-grid solar installations, adding the Multicontainer and Solar Power Trailer to its portfolio. Multicon develops and manufactures all products at its Duisburg site, with other branches located in Italy and Switzerland.