

AEP SOLAR-BOX-SYSTEM

# GREEN ENERGY OUT OF THE BOX

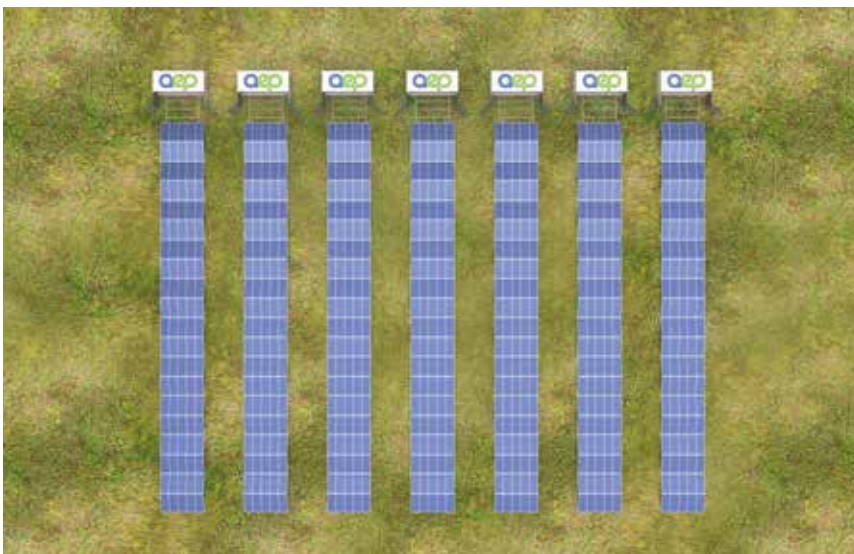




# OUT OF THE BOX

## GREEN ENERGY EVERYWHERE & EVERYTIME

Do you need clean electricity and want to generate it yourself easily and flexibly? With the AEP Solar Box, you produce green energy when and where it is worthwhile to generate electricity. The innovative solar container with a practical rail system as well as pre-installed full cabling and control system enables the quick and mobile use of your out-of-the-box power plant. This saves time and money during set-up and also keeps you highly flexible and stable in value for future applications.



The SOLAR-BOX is a modular system of standardized 20' energy storage containers with a capacity of 94 kWp per unit.

Due to its scalability, the field of application ranges from permanent use in private or municipal areas to temporary and mobile construction sites and industrial plants.

The AEP SOLAR-BOX system thus enables the location-independent generation and autonomous supply of green energy within a very short time.

### + MOBIL

Highly transportable container solution that can be installed in remote locations.

### + OUT-OF-THE-BOX

Plug & Play system for on-grid and off-grid installations that requires no construction work.

### + HIGHLY SCALABLE

Modular solution with no technical or performance limitations, scalable to any capacity.

### + ROBUST

Weatherproof system that is always ready for use even in extreme climatic conditions.

### + ECONOMICAL

Ready for use at no additional cost and high-value retention due to modular/mobile design.

### + COMPATIBLE

The modular container power plant is compatible with almost all common storage or EMS systems.

# APPLICATION AREAS

The AEP SOLAR-BOX system can be operated both on-grid and off-grid. In the on-grid variant, the container is connected directly to the public power grid. If required, the unit can be additionally extended with the AEP storage solution.

The off-grid variant consists of a container that, in combination with an AEP storage container, is not connected to the public power grid and operates completely self-sufficiently.



	Low power (85-1.000 kWp)	Medium power (1.000-5.000 kWp)	High power (>5.000 kWp)
<b>Permanent system</b> (>10 years)	● ● ●	● ●	●
<b>Mobile system</b> (2 bis 10 years)	● ● ●	● ● ●	● ●
<b>Ultra mobile system</b> (< 2 years)	● ● ●	●	●



## AGRICULTURE

Ideal for indoor farming, biogas plants, or for the use of vacant land for electricity production.



## CONSTRUCTION SITES

Sustainable green supply for construction sites with increased energy demand in remote regions.



## INDUSTRY

Mobile generation of low-cost electricity for self-consumption or for feeding into the grid.



## EMERGENCY AREAS

Rapid supply of clean energy when humanitarian assistance is needed for large numbers of people.



## EVENTS

Emission-free provision without noise for large events in remote areas.



## ENERGY COMMUNITIES

Clean energy in the shortest possible time for energy communities, municipalities and private households.

# ADVANTAGES



- Powerful and clean power supply
- Mobile and flexible deployment
- Modular scalable system
- Plug-and-play architecture
- Compatibility with storage and EMS systems
- On-grid and off-grid deployment capability
- Simple and fast operational readiness
- No site compaction and cable trenching
- Uncomplicated import and export of PV modules
- Simplified building permits
- Use even in extreme weather conditions
- Corrosion-proof aluminum system
- Low weight for maximum mobility
- Statically tested module
- High returns and stable value

# TECHNICAL DATA

<b>Solar capacity</b>	94 kWp
<b>Components</b>	168 panels x 560 Wp 1,000 VDC 1 Inverter 100 kVA, AC cabinet completely pre-wired
<b>Container weight</b>	12.5 tons
<b>Unfolding time</b>	30-45 minutes
<b>Operating temperature</b>	-30 °C to +60 °C (-86 °F to +140 °F)
<b>Rated Output Current</b>	100 kW, 400 VAC, 50/60 Hz
<b>Max. Output Current</b>	100 kW, 400 VAC, 133 A, 50/60 Hz
<b>Communication</b>	Data Interface: Modbus; Interface: RS485, Webconnect
<b>Unfolded footprint</b>	L 90 m x W 6 m x H 1 m (H 2,6 m for container)
<b>Folded footprint</b>	L 6.1 m x W 2.4 m x H 2.6 m
<b>Slope Limit</b>	< 0.6% no need for leveling
<b>Installation time</b>	3 hours with 4 workers
<b>Robustness</b>	Constructed to resist transportation by sea or truck. Longevity tested in extreme real-world conditions.
<b>Compatibility</b>	Connection to low or medium voltage. Compatibility with most 72 cells PV modules. Option for a DC output without inverter
<b>Orientation</b>	Any azimuth
<b>Module tilt angle</b>	15°
<b>Frame material</b>	Hot dipped galvanized steel (ISO 1461 standard)