

AMPNER ACE™ 300



**1500 VDC String Inverters
for utility-scale PV Power Plants
and Battery Energy Storages**

For the most **demanding sites** on the globe

Ampner ACE™ 300 is a family of efficient, compact-size, and easy-to-install string inverters for utility-scale PV power plants and battery energy storages as well as commercial and industrial applications, with a maximum DC voltage of 1500 V.

The Ampner inverters bring more flexibility, scalability, and options for the design of PV plants and energy storages. They are developed based on reliable, robust, and proven technology with a new innovative approach. As a result, the ACE 300 is the world's most powerful string inverter with an excellent efficiency and power density, providing one of the lowest investment and lifetime costs on the market.

The ACE 300 is a unique combination of high power and durability – it is now possible to build reliable solar power plants, energy storages, and hybrid solutions with high yield on even the most demanding sites on the globe.



AMPNER ACE™ 300 PV

For flexibility and versatility in power plant design

The ACE 300 PV is compatible with all PV module types – including the latest high power modules – and includes a high number of inputs, meaning the plant designers have multiple options for plant configuration. In addition, thanks to its innovative design and robustness, the ACE 300 PV enables designing PV power plants for extremely demanding conditions, such as heat, cold, high altitudes, and/or highly corrosive areas.

Reliable and efficient

The ACE 300 PV is developed using reliable, stable, and proven technology with a new design approach to guarantee high reliability and maximum designed life.

The simple and innovative structure, with a minimal number of wearing parts and components, reduces maintenance and maximizes reliability, especially in challenging operating conditions.

The ACE 300 PV features excellent DC to AC conversion efficiency and provides a high performance ratio.

Low investment and maintenance costs

The ACE 300 PV can be connected with more than one thousand PV modules in array clusters, which reduces the number of string inverters in the PV power plant compared to other inverters on the market. Up to 48 strings of PV modules can be connected directly to the inverter without separate combiner boxes, which reduces the balance of system and labour costs.

Thanks to the two-piece enclosure, the maintenance and service replacement is fast and cost-effective. The ACE 300 PV is designed to be reliable and durable for the 25-year design lifetime.

AMPNER ACE™ 300 ES

For reliable grid support and economy in energy storage design

The ACE 300 ES enables modular and flexible design of battery energy storage systems by dividing the storage capacity into smaller segments, providing redundancy against potential faults. For instance, in the case of a DC or AC short circuit, only one inverter segment is affected, maximizing the system uptime and improving the energy throughput and financial yield. Various DC input configurations are supported with aR-type 1500-VDC fuses, enabling interaction with different battery rack arrangements for all plant sizes. The ACE 300 ES can operate over the entire reactive power range, enabling various grid-support operating modes.



AMPNER ACE™ 300 PV Technology highlights

- DC voltage 1500 V
- Maximum power 333 kW at 690 VAC
- Compatible with all PV module types
- Up to 48 string inputs or 1–4 combiner inputs
- Designed for outdoor installation in demanding conditions:
 - Ambient temperature range -40 °C to +60 °C (-40 °F to +140 °F)
 - Corrosion resistant aluminium frame
 - Protection class IP65 / NEMA 4
 - Operational up to 4000 m (13 000 ft) above sea level
- Easy to handle due to two-part frame structure
- Reactive power generation
- Certified for IEC and UL/CSA markets



AMPNER ACE™ 300 ES Technology highlights

- DC voltage 1500 V
- Maximum power 333 kW at 690 VAC
- Compatible with all battery types
- 1–4 DC input connections
- Designed for outdoor installation in demanding conditions:
 - Ambient temperature range -40 °C to +60 °C (-40 °F to 140 °F)
 - Corrosion resistant aluminium frame
 - Protection class IP65/ NEMA
 - Operational up to 4000 m (13 000 ft) above sea level
- Easy to handle due to two-part frame structure
- Reactive power generation
- Certified for IEC and UL/CSA markets

DESIGNED AND MADE IN FINLAND



AMPNER OY provides products and services for connecting energy sources to the grid. We create smart solutions for managing, testing, and assuring the quality of a variety of renewable energy sources. We design, calculate, and simulate electrical connections to the grid, whichever the energy source: wind, solar, water, biomass, or battery energy storage.

Our Ampner ACE™ 300 string inverters are designed for maximum yield in every climate and can be installed on the most demanding sites on the globe.

Thanks to our vast experience in energy technology, we can customize our services according to your needs, whether they include energy production, distribution, or storage. We are driven by new, better ideas for the deployment of renewable energy and aim to exceed your expectations.

ENABLING ENERGY EVOLUTION



ampner

Contact

www.ampner.com

sales@ampner.com