

Ravensburg, February 14, 2017

**AKASOL at Energy Storage Europe 2017: Hall 8 B, booth D32**

## **Premiere: GridSense-enabled PV battery systems**

neoBASIX allows for intelligent, efficient electricity management in the home

**At this year's Energy Storage Europe fair in Düsseldorf (March 14 to 16, 2017), AKASOL will be presenting the prototype of its new GridSense-enabled PV storage system, neoBASIX, for the very first time. As an expert in stationary lithium-ion energy storage systems, the Ravensburg-based company has fitted its intelligent, highly scalable PV battery system with the GridSense home energy management system, which was developed by the Alpiq InTec Group in Zurich, Switzerland. Available in just a few months in two performance classes (6.5/13 kWh), the energy storage systems are designed to detect all PV systems and relevant power consumers in the household and optimize energy flows in a fully automated manner. "neoBASIX combined with GridSense offers a range of benefits to owners of PV systems, as it means they will primarily consume electricity that they produce themselves. Any excess electricity is supplied to the grid, thus promoting grid-friendly behavior. This massively reduces energy costs and cuts the payback period by a significant margin," states Markus Michelberger, Head of Stationary Battery Systems at AKASOL.**

The prototype of neoBASIX combined with GridSense that will be presented at the fair is ideal for photovoltaic (PV) systems in private households and smaller businesses with an output power of up to 10 kWp. The GridSense-enabled energy management system facilitates the management of all power producer and consumers in the home that are fitted with this technology – PV systems, heat pumps, boilers, home batteries, charging stations for electric cars, etc. – and enables energy loads to be optimized across all devices and units. Various parameters such as grid load and power consumption and production can be continuously measured based on an in-house-developed algorithm. Weather forecasts and electricity tariffs can also be included in the calculations. In addition, the intelligent algorithm is designed to learn the behavior of the power consumer. Markus Michelberger: "This smart energy

management solution combines with integrated three-phase power electronics to form a high-performance lithium-ion storage system. On top of that, neoBASIX also guarantees the safe, secure and long-term provision of energy. It is even able to manage energy volumes from a micro-generation plant (1-5 kW of electricity) with no additional effort.”

**neoBASIX (GridSense) – technical data**

Battery inverter	neoBASIX 6.5	neoBASIX 13
<b>AC values</b>		
System output AC max.	3 kW	
Mains connection	400V, three-phase, 50 Hz	
Electrical connection	3L / N / PE	
Nominal frequency/nominal frequency range	50 Hz (47.5 ... 51.5 Hz)	
Charge/discharge frequency	> 93.5 %	
AC short-circuit protection	Yes	
AC overload protection	Yes	
Thermal cutoff protection	Yes	
Power factor	0.95 (capacitive) ... 1 ... 0.95 (inductive)	
<b>DC values</b>		
Max. discharge current	50 A	60 A
Max. charging current	45 A	45 A
DC voltage range	40 V to 58.8 V	
Max. charging capacity	2.5 kW	
Max. discharge capacity	3 kW	
<b>Battery module</b>		
Battery capacity (nominal energy)	6.5 kWh	13 kWh
Usable energy	5.9 kWh	11.8 kWh
Cell technology +/-	NMC / graphite	
Nominal voltage	51.8 V	
Voltage range (discharge/charging voltage)	42 V to 58.8 V	
Expected full cycles	6,000	
Replacement value guarantee	10 years	
<b>Energy management and data</b>		
Communication for available network infrastructure	Ethernet	
Visualization	Standard web browser, portal	
Security	Authentication, hierarchy of access rights	
Internal data memory	4 GB	
PV power inverter output reduction	1 relay (turnkey, max. load 24V/5A)	
<b>General data</b>		
Ambient temperature between	+5°C and +30°C	
Dimensions	775 x 560 x 640 mm	
Weight	133 kg	176 kg
Construction height above sea level	< 2,000 m	
Protection class	Ip 21	
Total consumption in standby mode	27 W	

## Illustrations

AKA\_neeoBASIX-01.jpg

A PV energy storage system to hold in high regard – neeoBASIX with GridSense guarantees intelligent and efficient energy consumption in private homes.  
(Photo: AKASOL)



### Further information

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### About AKASOL

AKASOL GmbH has developed and manufactured mobile and stationary high-performance battery systems for the German and European market for 25 years. Its multi-award-winning storage solutions are used primarily in the automotive and commercial vehicle industries, the off-highway industry, and the solar power and wind power sectors.