



## SINGLE-PHASE HYBRID/AC INVERTER



Unlock the boundless potential of solar energy with the revolutionary Hybrid & AC inverters by NGEN. Our advanced line of hybrid inverters is characterized by outstanding performance, flexibility and efficiency, and is optimized for use with our own high-voltage battery set.

### Easy installation

Flexible configuration, quick and easy installation, integrated safety and protection devices.



EASY  
INSTALLATION

### Remote Monitoring

The hybrid inverter can be monitored via the user-friendly smartphone app or the Web application from SG Connect.



REMOTE  
MONITORING

### Integrated Emergency Power Function

Thanks to the integrated emergency power function (Single-Phase) the inverter automatically switches to emergency power mode in the event of a grid failure (20 ms) and selected loads in the household are supplied with energy via the photovoltaic system or the NGEN-STAR battery.



INTEGRATED  
EPS-FUNCTION

### Smart heat pumps

“Smart Grid Ready” signifies that heat pumps communicate intelligently with the power grid through the Synaptic, sourcing energy at the most opportune time. This results in reduced energy costs and environmentally friendly operation of the heat pump.



SMART  
HEAT  
PUMPS

### Protection class IP65

The inverter is suitable for outdoor installation. However, it is mandatory to protect it from the weather.



IP65 RATED

### MODULAR SYSTEM- BATTERY STORAGE

The NGEN-STAR-H1 hybrid inverter series offers you the option of adapting storage capacities even more flexibly. The battery storage system can be expanded to a maximum capacity of 41,9 kWh using the plug & play principle.



Model	STAR-H1-3.7-E	STAR-H1-6.0-E
<b>INPUT PV (only for hybrid)</b>		
Max. Input Power [W]	5500	9000
Max. Input Power per MPP Tracker [W]	2750/2750	4500/4500
Max. Input Voltage [V]	600	
Max. Input Current [A]	16 / 16	
Max. Short-circuit Current [A]	20 / 20	
Start-up Input Voltage [V]	75	
MPPT Voltage Range [V]	80 - 550	
No. of Independent MPP Trackers	2	
No. of Strings per MPP Tracker	1	
<b>AC INPUT AND OUTPUT (GRID)</b>		
Max. AC Input Power [VA]	7680	12000
Max. AC Input Current (per phase) [A]	34.9	54.5
Rated Output Power [W]	3680	6000
Max. Output Apparent Power [VA]	4048	6600
Rated Output Current (per phase) [A]	16.7	27.3
Max. Output Current (per phase) [A]	18.4	30.0
Rated Grid Voltage [V]	220/230/240	
Rated Grid Frequency [Hz]	50/60	
Power Factor	1 (Adjustable from 0.8 leading to 0.8 lagging)	
<b>EPS OUTPUT (WITH BATTERY)</b>		
Max. Output Apparent Power [VA]	3680	6000
Peak Output Apparent Power (60s) [VA]	4400	7200
Max. Output Current [A]	16.7	27.3
Power Factor	1 (Adjustable from 0.8 leading to 0.8 lagging)	
<b>EFFICIENCY</b>		
Max. Efficiency [%]	97.08	
Euro Efficiency [%]	95.7	96.33
<b>GENERAL DATA</b>		
Dimensions (WxHxD) [mm]	434*418*185	
Weight [kg]	22	
Installation	Wall-Mounted	
Cooling Method	Natural	
Noise Emission [db]	35	
Max. Operating Altitude [m]	2000	
Operating Temperature Range [°C]	from -25 to +60	
Humidity (No Condensation) [%]	0 to 100	
Protection Degree	IP65	
Warranty	Standard 10 / Advanced 12 *	
Monitoring Module	WiFi, LAN, 4G, GPRS (Optional)	
Communication	2*RS485, DRM, Ripple Control, USB	
<b>STANDARD COMPLIANCE (MORE AVAILABLE UPON REQUEST)</b>		
Safety	EN 62109-1, EN 62109-2	
EMC	IEC 61000-6-2, IEC 61000-6-3	
Grid Regulation	EN50549-1, C10 / 11, VDE-AR-N 4105, G98, G99, CEI 0-21, NRS 097-2-1, AS / NZS 4777.2	



\* Standard Warranty: 10 years / Advanced Warranty: 12 years when the System is connected to the SG Connect System Solution.

Refer to NGEN STAR Warranty Terms and Conditions

Version 12.0 | 1/2025