



DATASHEET

THREE-PHASE INVERTER

STAR-H3-15.0/22.0/29.9/30.0-PRO

STAR H3-PRO

THREE-PHASE

H3-PRO SERIES INVERTER

The NGEN-STAR-H3-PRO series, equipped with innovative features and compatibility with our exclusive range of high-voltage batteries, defines a new era of hybrid inverters.



Easy installation

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



EASY
INSTALLATION

Integrated Emergency Power Function

Thanks to the integrated emergency power function (3-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

Protection class IP65

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



IP65 RATED

Remote Monitoring

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



REMOTE
MONITORING

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



MAXIMUM FLEXIBILITY

Thanks to the new technology, you have the possibility to connect two battery towers to the inverter, with each tower having a capacity of 41.9 kWh. To maximize the efficiency of your PV production, the inverter provides four MPP-Trackers for connecting the PV modules, depending on the application. In the event of a blackout, the inverter in combination with the NGEN-STAR battery provides you with an uninterruptible emergency power supply.

Model	STAR-H3-XX.X-PRO			
	15.0-PRO	22.0-PRO	29.9-PRO	30.0-PRO
INPUT PV				
Max. Input Power [W]	22500	33000	45000	45000
Max. Input Power per MPP Tracker [W]	7500/7500/7500	11000/11000/11000	15000/15000/15000	15000/15000/15000
Max. DC Voltage [V]		950		
Normal DC Operating Voltage [V]		750		
Max. Input Current [A]		32		
Max. Short-circuit Current [A]		40		
MPPT Voltage Range [V]		150-850		
MPPT Voltage Range (full load) [V]	170-850	250-850	340-850	340-850
Start-up Voltage [V]		160		
No. of MPP Trackers		3		
AC OUTPUT				
Rated Output Power [VA]	15000	22000	29900	30000
Max. Apparent AC Power [VA]	16500	24200	29900	33000
Rated Grid Frequency [Hz]		50/60,+/-5		
Max. AC Current (Per Phase) [A]	25.0	36.7	45.4	50
Rated Grid Voltage (AC Voltage Range) [V]		400 / 230 ; 380 / 220 , 3L / N / PE		
Power Factor		1 (Adjustable from 0.8 leading to 0.8 lagging)		
AC INPUT				
Max. AC Power [VA]	22500	33000	35000	35000
Max. AC Current (per Phase) [A]	34.1	50.0	53.0	53.0
Rated Grid Voltage (AC Voltage Range) [V]		400 / 230 ; 380 / 220 , 3L / N / PE		
Rated Grid Frequency [Hz]		50/60,+/-5		
Power Factor		1 (Adjustable from 0.8 leading to 0.8 lagging)		
EPS OUTPUT				
Max Apparent AC Power [VA]	15000	22000	30000	30000
Peak Apparent AC Power (60s) [VA]	18000	26400	36000	36000
Max. EPS Current (per Phase) [A]	22.7	33.3	45.5	45.5
Rated Grid Frequency [Hz]		50 / 60		
Rated Output Voltage [V]		400 / 230 ; 380 / 220 , 3L / N / PE		
Switch Time		<20ms		
Power Factor		1(Adjustable from 0.8 Leading to 0.8 Lagging)		
EFFICIENCY				
Max. Efficiency [%]		97.8		
Euro Efficiency [%]		97.4		
BATTERY				
Battery Voltage [V]		150-800		
Full AC Load Battery Voltage [V]	160-790	240-790	330-790	330-790
Number of Battery Input		2		
GENERAL DATA				
Dimension (W/H/D) [mm]		600*560*225		
Installation		Wall-mounted		
Storage/Operation Relative Humidity [%]		0 to 95 (Without Condensation)		
Altitude [m]		<4000		
Protection Degree		IP65 (for Outdoor Use)		
Operating Temperature Range [°C]		from -25 to +60 (Derating at 45)		
Cooling		Smart FAN Cooling		
Warranty		Standard 10 / Advanced 12 *		
Standby Consumption [W]		200W for Hot Standby , 15W for Cold Standby		
Communication Interface		Ethernet, Meter, WIFI, 4G(optional), DRM, USB, BMS(CAN), RS485		
STANDARD COMPLIANCE (MORE AVAILABLE UPON REQUEST)				
Safety		EN 62109-1, EN 62109-2		
EMC		IEC 61000-6-2, IEC 61000-6-3		



* 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