

SOLUTIONS FOR
SELF-CONSUMPTION
AND ENERGY STORAGE

IMEON ENERGY

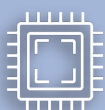
YOUR POWER YOUR RULES



ON & OFF-GRID
FULL BACKUP



ALL IN ONE
PLUG'N'PLAY



I.A. INSIDE
Artificial Intelligence



IP65 INDOOR
AND OUTDOOR

Simplify your installations. Maximize your performance.



Single Phase Hybrid Inverter

IMEON NEO

3kW 3.6kW 4kW 4.6kW 5kW 6kW
Solar Installation up to 12kWc



IMEON



Since 2013, IMEON ENERGY has been manufacturing inverters incorporating artificial intelligence for solar self-consumption with batteries. A French pioneer in hybrid solar storage, IMEON has designed the NEO: a plug-and-play solution combining artificial intelligence and ease of installation.

INTUITIVE SETUP

NEO is ideal for installers who want to make the most of their time. Its plug-and-play system enables rapid installation, without the need for complex settings or additional accessories. Compatible with all brands of solar panels and featuring high-efficiency stackable batteries, it offers automatic management and remote monitoring via an intuitive interface.

SMART MANAGEMENT

NEO isn't just an AI, it's an intelligent energy expert who's always on the lookout. NEO optimizes the use of available energy in real time, making the best decisions based on production forecasts, needs and energy tariffs. It enables self-consumption of up to 100% of the energy produced, effectively reducing dependence on the grid.

SUSTAINABLE PERFORMANCE

Thanks to continuous "over the air" updates and numerous compatibilities, NEO constantly evolves and adapts to market needs, guaranteeing optimum performance and enhanced durability. Available in power ratings from 3.6 to 6 kW, and also in retrofit versions, the NEO solution with its full back-up boasts the best technical features on the market.

Non-contractual pictures

	NEO LINEUP					
GRID AC	NEO 3.0 SH	NEO 3.6 SH	NEO 4.0 SH	NEO 4.6 SH	NEO 5.0 SH	NEO 6.0 SH
Rated output power [W]	3000	3600	4000	4600	5000	6000
Voltage / Frequency [Vac / Hz]	230 (+/-15%) / 50, 60 (+/-5%)					
Nominal output current [A]	26	26	29.6	29.6	34	34
BACKUP						
Rated output power [W]	3000	3600	4000	4600	5000	6000
Maximum output power [W / 3s]	6000	6000	6800	6800	7500	7500
Nominal output current [A]	13,0	15,7	17,4	20,0	21,8	26,1
Maximal output current [A / 3s]	26,0	26,0	29,6	29,6	32,7	32,7
SOLAR INSTALLATION						
Maximum input power PV [Wc]	9000	9000	10000	10000	12000	12000
Maximum power per MPPT input [Wc]	4500	5400	6000	6900	7500	9000
Number of MPPT inputs	2					
Starting voltage - open circuit [Voc]	120					
MPPT voltage range [Vmpp]	90 - 550 (320 - 380 max efficiency)					
Maximum input power [Impp]	18					
Maximum short-circuit current [Isc]	22					
Maximum input voltage [V]	600					
Priorities for production use	Programmable (Consumption / Battery / Grid) / Optimised by IA					
BATTERY AND CHARGE						
Type of batteries	Lithium IMEON-NEO : 1 to 4 modules (3,55k / 7,1k / 10,6k / 14,2k) + BDU					
DC range voltage [V]	Number of modules : x1 90V / x2 180V / x3 270V / x4 360V max efficiency					
Nominal Voltage [V]	320					
Rated / maximum charge current [A]	25 / 32					
Rated / maximum discharge current [A]	25 / 32					
EFFICIENCY						
Efficiency MPPT [%]	MPPT 99,9%					
Efficiency max./ EU [%]	97,8% / 97,0%					
Efficiency charge / discharge [%]	Charge 98,5% / Discharge 97,0%					
GENERAL SPECIFICATIONS						
Dimensions H x L x P [mm]	540 x 430 x 185					
Weight [kg]	24					
Protection rating	IP 65					
Cooling system	Silent Natural Convection					
Night consumption [W]	< 15					
Technology	TL (transformless)					
Operating mode	Smart-Grid / UPS Backup / Off-Grid / On-Grid / VPP Ready / Peak & Valley					
OS / Processor	OS: Linux Debian - CPU: ARM Cortex (Texas Instrument) 32 bits RAM : 8 Go of Storage Integrated Artificial Intelligence - IOT Ready					
Communication - Monitoring - I/O	Wifi 802.11 b/g/n 2.4 GHz - 2 USB 2 - 1 Ethernet IP - Technologie OTA 2 CAN bus - 3 RS485 - 1 relais 230V 16A 4 analog inputs - 3 electrical captors					
Conditions of use	Humidity level : 0 à 95%, Temperature: -20 à +60°C*					
Compliance	EN 62109-2 / EN 62040-1 / VDE-AR-N 4105 / EN 50549 / CEI- 0 21 / RD 1699					
Warranty	10 years / Extension to 20 years (optional)**					

* power loss from 45°C ** In accordance with IMEON ENERGY's Warranty Conditions. Datasheet EN-NEO-V1 - May 2025 - Cancels and replace previous versions. Technical details are subject to change without prior notice.