THE SELF USE SMART INVERTER

NEW GENERATION



GRID-TIE



OFF-GRID



INTELLIGENT STORAGE



30% MORE EFFICIENCY (1)



PLUG & PLAY

Self Consumption Smart Grid Inverter



Smart Energy Autonomy

IMEON Smart Grid inverter technology is the all-in-one answer for true multi-energy sources management. Consuming one's own solar production directly, storing in batteries for later use or in case of power cuts, and also injecting to - or consuming from - the grid only when needed, is now all possible. Cutting-edge French research and innovation helped develop this built-in intelligence and energy management to finally enable real control over one's power.

SMART GRID

With the smart management and the real time multi energy phase coupling, IMEON optimises solar yields by choosing the ideal energy mode: direct consumption (self-use), storing the surplus of production, drawing from the grid, or injecting the solar surplus to the grid. IMEON adapts automatically to the installation without complex configurations.

ECONOMIC

There is no longer the need for separate components such as charge controllers or added inverters. The overall cost of the photovoltaic system can therefore be reduced by 30%⁽¹⁾. IMEON's innovative Smart-Grid function allows to lower the storage capacity, reduce battery cycling, as well as further prolonging the battery life.

ALL IN ONE

The IMEON Smart Grid Inverter is specifically designed for any solar installation, regardless whether the system is an Off-Grid, Back-Up, Grid-Tie, or a hybrid power system. IMEON is a complete Plug-and-Play smart inverter which simplifies the installation process and reduces the overall setup time of a solar system.

⁽¹⁾ According to condition of use

⁽²⁾ Maximum possible overload with grid availability.

IMEON ENERGY

TECHNICAL SPECIFICATIONS

GRID AC (ON-GRID & OFF-GRID)	IMEON 3.6	IMEON 9.12
Nominal output power	3 000 W	9 000 W
Maximum output power	6 000 W ⁽¹⁾	12 000 W ⁽¹⁾
AC voltage / Frequency (input & output)	230 Vac (±15 %) / 50 Hz , 60 Hz (±5 Hz)	3/N/PE; 230/400 Vac (±15 %) / 50 Hz, 60 Hz (±5 Hz)
Nominal output current	13 A	13 A / phase
Maximum current	26 A ⁽¹⁾	17,5A / phase ⁽¹⁾
Feed in to grid	Programmable (yes by default)	
Energy consumption priorities	Programmable (PV / Storage / Grid)	

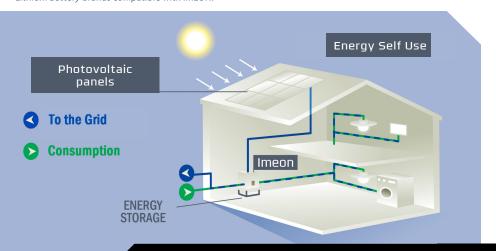
SOLAR INSTALLATION		
Maximum input power	1 500 Wp to 3 000 Wp ⁽²⁾	$4000Wp$ to $9000Wp^{(2)}$
Start-up voltage	150 V	350 V
Number of MPPT inputs	1	2
MPPT voltage range	120V – 450V	380V – 750V
Maximum input current	18 A	2 x 18 A
Maximum input voltage	510 V	850 V
Maximum efficiency	DC to AC: >95,5% (94,5% EU)	
Priorities of solar production use	Programmable (Consumption / Storage / Grid)	

BATTERY & CHARGE		
DC nominal voltage / DC voltage range	48 Vdc / 42 to 58 Vdc	
Maximum discharge current	80 A	200 A
Maximum charging current	25 A	160 A
Type of batteries	Gel, AGM, Lithium ⁽³⁾	
Charging curve	3-phase (Bulk / Absorption / Float)	
Maximum efficiency	PV -> battery : >94% / Battery <> AC : >93%	
Battery charge	Programmable (threshold / timing range via AC Grid)	
Battery discharge	Programmable (2 thresholds according to grid availability)	

GENERAL			
Dimensions (w x h x d in mm)	440 x 580 x 165	580 x 760 x 176	
Protection category	IP 20		
Weight	18 kg	46 kg	
Connectivities	TL (transformless)		
Connectors	USB / Modbus / Ethernet - IP (option)		
Conditions of use	Humidity level: 5 to 90% without condensation $T^{\circ}C:0 \text{ a} + 50^{\circ}C$, degressive power >40°C (15W/°C)		
Compliance	EN 62109-2 / EN 62109-1 / EN 62040-1 / DIN V VDE V 0126-1-1 (+VFR2013) / VDE-AR-N 4105 DIN VDE V 0124-100 / Synergrid C10/11 / TF3.2.1 / AS4777.2 / AS4777.3 / NRS 097-2-1		
Guarantee	5 years / Extensions to 10 years (optional)		

- (1) Maximum possible overload power with grid activated. Refer to installation manual.
- (2) Taking into account the full inverter specifications.

⁽³⁾ Lithium battery brands compatible with IMEON.











Your Power, Your Rules