

THE SELF USE  
SMART INVERTER

NEW GENERATION



**IMEON ENERGY**  
Your Power, Your Rules



GRID-TIE



OFF-GRID



INTELLIGENT  
STORAGE



30% MORE  
EFFICIENCY <sup>(1)</sup>



PLUG & PLAY  
INSTALLATION

# Self Consumption Smart Grid Inverter



## Revolutionary 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. Extensive French research and innovation helped revolutionise 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%<sup>(1)</sup>. 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.

<sup>(1)</sup> According to condition of use

<sup>(2)</sup> Maximum possible overload with grid availability.

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 <sup>(1)</sup>	12 000 W <sup>(1)</sup>
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 <sup>(1)</sup>	17,5A / phase <sup>(1)</sup>
Feed in to grid	Programmable (yes by default)	
Energy consumption priorities	Programmable (PV / Storage / Grid)	

SOLAR INSTALLATION		
Maximum input power	1 500 Wp to 4 000 Wp <sup>(2)</sup>	4 500 Wp to 12 000 Wp <sup>(2)</sup>
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 <sup>(3)</sup>	
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°C: 0 à + 50°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)	

<sup>(1)</sup> Maximum possible overload power with grid activated. Refer to installation manual.

<sup>(2)</sup> Taking into account the full inverter specifications.

<sup>(3)</sup> Lithium battery brands compatible with IMEON.

