

THE SELF USE  
SMART GRID INVERTER



**IMEON ENERGY**  
Your Power, Your Rules



HYBRID  
SMART GRID



OFF-GRID  
BACK-UP / UPS



LITHIUM  
LEAD-ACID



A.I. INSIDE  
Artificial Intelligence Inside



CONNECTED  
GENERATION

# Self Consumption Solar Hybrid Inverters



IMEON 9.12  
Up to 12kWp Three phase



IMEON 3.6  
Up to 4kWp Single phase



## 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.

### CONNECTED

The Imeon Manager application allows you to track the performance of your solar installation from any device. It breaks down and makes it possible to survey detailed information concerning the energy produced by the photovoltaic array, the energy stored in the batteries as well as energy flowing from and to the public electricity distribution network.

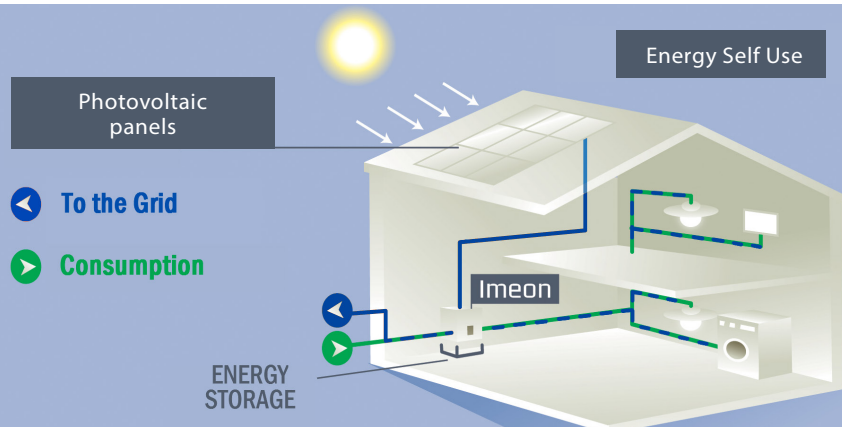
<sup>(1)</sup> According to condition of use <sup>(\*)</sup> An Internet connection must be established for minimum of 95 % of operating time and be equipped with IMEON batteries.

GRID AC (ON-GRID & OFF-GRID)	IMEON 3.6	IMEON 9.12
Rated output power	3 000 W	9 000 W
Maximum output power (3 sec)	6 000 W	12 000 W
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 input current	26 A	17,5 A / phase
Feed in to grid	Programmable (yes by default)	
Energy consumption priorities	Programmable (PV / Storage / Grid)	

SOLAR INSTALLATION		
Maximum input power	Up to 4 000 Wp <sup>(1)</sup>	Up to 12 000 Wp <sup>(1)</sup>
Number of MPPT inputs	1	2
MPPT voltage range (V <sub>mpp</sub> )	120 V – 480 V	380 V – 750 V
Maximum input current (I <sub>mpp</sub> )	18 A	2 x 18 A
Maximum short-circuit current (I <sub>sc</sub> )	18 A	2 x 23 A
Maximum input voltage (V <sub>oc</sub> )	560 V	850 V
Maximum efficiency	DC to AC : >95,5% (94,5% EU)	

BATTERY & CHARGE		
DC nominal voltage	48 Vdc	
DC range voltage	42 - 62 Vdc	
Maximum discharge current	80 A	200 A
Maximum charging current	60 A	160 A
Type of batteries	Lead-acid, Lithium <sup>(2)</sup>	
Charging curve	3-phase (Bulk / Absorption / Float)	
Maximum efficiency	PV -> battery : >94% / Battery <-> AC : >93%	
Battery charge	Programmable (threshold / timing: multiple range by AC Grid)	
Battery discharge	Programmable ( 2 thresholds according to grid availability)	

GENERAL		
Dimensions (w x h x d)	440 x 580 x 165 mm / 17.35 x 22.85 x 6.50 inch	580 x 800 x 240 mm / 22.85 x 31.5 x 9.45 inch
Protection category	IP 20 (indoor installation)	
Weight	18 kg	46 kg
Technology	TL (transformless)	
Operating mode	Smart grid / Back up - UPS / Off grid / On grid / VPP Ready	
OS / Processor	OS: Linux Debian - CPU: ARM Cortex (Texas Instrument) 32 bits RAM : 8 GO of storage - Artificial Intelligence Inside - IOT Ready	
I / O Connectors	Wifi 802.11 b/g/n 2.4 GHz - 2 USB 2 - 1 Ethernet IP - OTA Technology <sup>(4)</sup> 1 CAN bus - 2 RS485 - 1 relay 230 V 16A 4 analog inputs : 1 temperature probe - 3 electrical measurements	
Conditions of use	Humidity level: 0 to 90% without condensation T°C: -20 to + 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 (+VFR2019) / VDE-AR-N 4105 / EN 50438 DIN VDE V 0124-100 / Synergrid C10/11 / TF3.2.1 / AS4777.2 / AS4777.3 / CEI-0 21 / RD 1699	
Guarantee	10 years <sup>(3)</sup> / Extension to 20 years (optional)	



<sup>(1)</sup> Taking into account the full inverter specifications.

<sup>(2)</sup> Only brands compatible with IMEON.

<sup>(3)</sup> An Internet connection must be established for minimum of 95 % of operating time. Installation must be done by qualified staff. The installation must be equipped with IMEON batteries.

<sup>(4)</sup> Over-The-Air

