SMART INVERTER FOR
SELF-CONSUMPTION

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

10 YEAR GUARANTEE*

THE SMART GRID REVOLUTION

IMEON's Smart Grid inverter technology is the all-in-one answer for true multi-energy source management. It is now possible to consume one's own solar production directly, to store it in batteries for later use or in case of power outage, but also to inject into the grid - or consume from it - only when needed. French research and innovation have made it possible to revolutionise this integrated intelligence and energy management to finally allow real control of one's energy.

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 automatically adapts 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.

CONNECTED

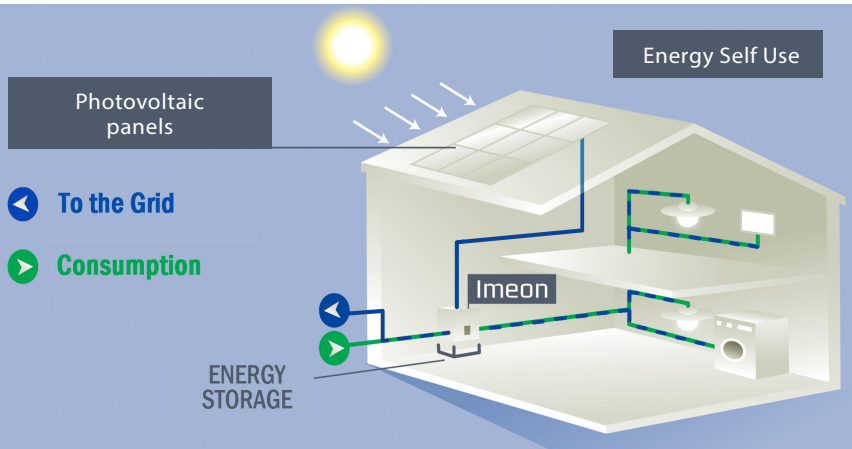
The IMEON ONLINE monitoring platform allows you to track the performance of your solar installation from any device while IMEON OS.ONE, the inverter's Operating System using Artificial Intelligence, manages the exchange of information between IMEON and diverse peripheral devices, intelligently controlling the flow of energy according to your needs.

[1] *According to condition of use*

[*] *An Internet connection must be established for minimum of 95 % of operating time*

TECHNICAL SPECIFICATIONS

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	25 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 (1)	Up to 12 000 Wp (1)
Number of MPPT inputs	1	2
MPPT voltage range (Vmpp)	120 V – 480 V	380 V – 750 V
Maximum input current (Impp)	18 A	2 x 18 A
Maximum short-circuit current (Isc)	18 A	2 x 23 A
Maximum input voltage (Voc)	560 V	850 V
Maximum efficiency	DC to AC : >95,5% (95,2% EU)	
BATTERY & CHARGE		
DC nominal voltage	48 Vdc	
DC range voltage	42 - 62 Vdc	
Maximum discharge current	80 A	200 A
Max charging current (PV/GRID)	60 A / 60 A	160 A / 120 A
Type of batteries	Lead-acid, Lithium(2)	
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	19 kg	51 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 (4) 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 50549 / DIN VDE V 0124-100 / TF3.2.1 / CEI- 0 21 / RD 1699 (5)	
Guarantee	10 years (3) / Extension to 20 years (optional)	



(1) *Taking into account the full inverter specifications.*

(2) *Only brands compatible with IMEON.*

(3) *An Internet connection must be established for minimum of 95 % of operating time.*

(4) *Over-The-Air*

(5) *Refer to the certifications available on the website.*

Datasheet IMEON 3.6 & 9.12 V7G Sept 2023
Cancels and replaces previous versions.
Technical details are subject to change without prior notice.

IMEON ENERGY
10 Rue Amiral Romain Desfossés
29200 Brest - FRANCE
+33(0)1.84.17.51.15
contact@imeon-energy.com

IMEON ENERGY
Your Power, Your Rules