# 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.
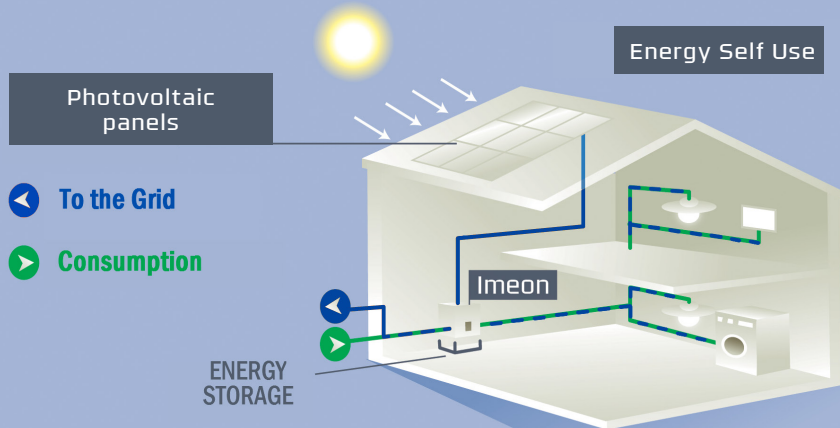
## CONNECTED

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*

| 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 / DIN VDE V 0124-100   / TF3.2.1 /  CEI- 0 21 / RD 1699 [5] | |
| Guarantee | 10 years [3] / Extension to 20 years (optional) | |



Energy Self Use

Photovoltaic panels

To the Grid

Consumption

Imeon

ENERGY STORAGE

[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

VPP ready

REACH COMPLIANT

RoHS Compliant

SAA APPROVALS

DIN

CE

NRS

Synergrid

VDE

[5] Refer to the certifications available on the website.

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