THE SELF USE SMART INVERTER





GRID-TIE



OFF-GRID



SMART BATTERY
MANAGEMENT



MONITORING LOCAL & REMOTE ACCESS



PLUG & PLAY

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%⁽¹⁾. IMEON's innovative Smart-Grid function allows to lower the storage capacity, reduce battery cycling, as well as further prolonging the battery life.

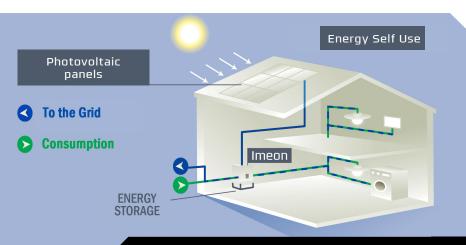
ALL IN ONE

The IMEON Smart Grid Inverters are 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.

IMEON ENERGY

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	26 A	17,5A / 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)
Start-up voltage	150 V	350 V
Number of MPPT inputs	1	2
MPPT voltage range	120 V – 450 V	380 V – 750 V
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)	
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 ⁽²⁾	
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 170	580 x 760 x 176
Protection category	IP	220
Weight	18 kg	46 kg
Technology	TL (transformless)	
Operating mode	Smart grid / Back up - UPS / Off grid / On grid	
	Wifi 802.11 b/g/n 2.4 GHz / 2 USB 2 / 1 Ethernet IP	
Connectors - I / O	1 CAN bus / 2 RS485 / 1 relay 230V/16A	
	4 analog inputs: 1 temperature probe - 3 electrical measurements	
Conditions of use	Humidity level: 5 to 90% without condensation $T^{\circ}C$: 0 à $+$ 50°C, degressive power >40°C (15W/°C)	
Conditions of use		
	EN 62109-2 / EN 62109-1 / EN 62040-1 / DIN V VDE V 0126-1-1 (+VFR2013) / VDE-AR-N 4105	
Compliance	DIN VDE V 0124-100 / Synergrid C10/11 / TF3.2.1 / AS4777.2 / AS4777.3 / NRS 097-2-1 / G83	
Guarantee	10 years / Extension to 20 years (optional)	





⁽²⁾ Lithium battery brands compatible with IMEON.



