

SMART HYBRID
INVERTER
TECHNOLOGY

i - SERIES



GRID-TIE



OFF-GRID



INTELLIGENT
STORAGE



30% MORE
EFFICIENCY ⁽¹⁾



PLUG & PLAY
INSTALLATION



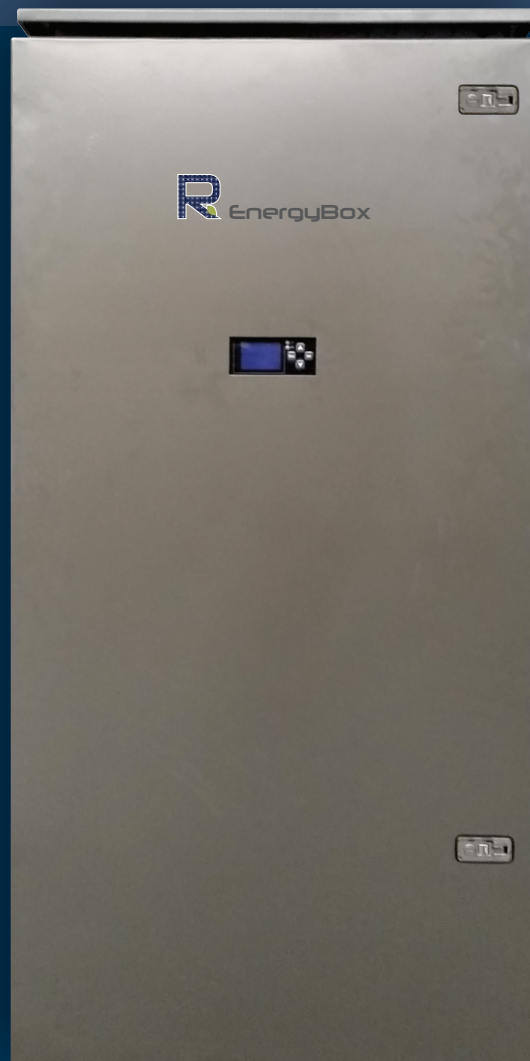
ReachMore
Energy

Energy Solutions By Design

EnergyBox

EnergyBox is a concentration of innovation and technology. Multi-sources phase coupling (Phase Coupling Energy, or PCE) is used to couple several energy sources (eg. PV / batteries / grid). There is no more need for source switching which often leads to micro-cuts. PCE solves the age long renewable energy concerns such as intermittence and fluctuation.

EnergyBox PCE has now made it possible to guarantee constant feed and optimal yields.



SMART GRID

ECONOMICAL

ALL IN ONE

With the smart management and real time multi energy phase-coupling, **EnergyBox** optimises the yield by choosing the ideal energy modes automatically: direct consumption (self use), storing the surplus, using the grid, and /or injecting the energy surplus to the grid. It adapts automatically to the installation without any complex configurations.

No more need for solar chargers, commutators or additional inverters. The clever energy management and all-in-one features of **EnergyBox** help reduce the price of the photovoltaic electricity down to 30%⁽¹⁾. Its innovative Smart Grid function also allows to lower the storage capacity and cycles, as well as further prolonging the battery life.

EnergyBox is conceived for all solar installation types: isolated sites (Off-Grid), connected to the grid (Grid-Tie), hybrid (On and Off-Grid). It replaces inverters, load regulator, commutator, etc. **EnergyBox** is a Plug & Play smart inverter, simplifying the implementation of a solar system and thereby also reducing an otherwise long installation time.

⁽¹⁾ According to condition of use

GRID AC (ON-GRID & OFF-GRID)	i 3.6	i 9.12
Nominal output power	3000 W	9000 W
Maximum output power	6000 W ⁽²⁾	12 000 W ⁽²⁾
AC voltage & frequency (in & output)	230 Vac (±15 %) / 50 Hz (±5 %)	3/N/PE; 230/400 Vac (±15 %) / 50 Hz, 60 Hz (±5 Hz)
Nominal output current	13 A	13 A / phase
Maximum output current	26 A ⁽²⁾	17,5A / phase ⁽²⁾
Feed in to grid	Programmable (Yes by default)	
Energy consumption	Programmable priorities (PV / Storage / Grid)	
SOLAR INSTALLATION		
Maximum input power	1500 - 3000W	4000 W to 9 000 W
Start-up voltage	150 V	350 V
Number of MPPT inputs	1	2
MPPT voltage range	120 - 450V	350V – 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)	
Solar production use	Programmable priorities (Consumption / Storage / Grid)	
BATTERY & CHARGE		
DC voltage / DC range	48 Vdc / 42 to 58 Vdc	
Maximum discharge current	80 A	200 A
Maximum charging current	25 A	120 A
Type of batteries	Gel, AGM	
Charging curve	3-phase (Bulk / Absorption / Float)	
Maximum efficiency	PV to Battery:>94% / Battery to 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	42 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)	
Standards	EN 62109-2 / EN 62109-1/ EN 62040-1/ TF3.2.1 / Synergrid C10/11 DIN V VDE V 0126-1-1 (+VFR2013) / VDE-AR-N 4105 / DIN VDE V 0124-100	
Guarantee	5 years / Extensions to 10 years (optional)	

⁽²⁾ Maximum possible overload power with grid activated. Refer to installation manual.

