

OFTOB ENERGY - OE-I/ES Series (1.2–4.2 kVA)

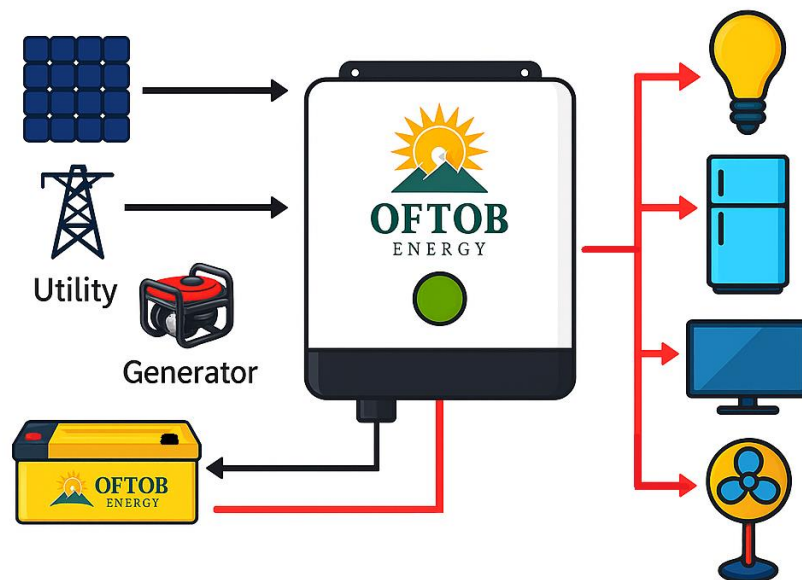


Key Advantages of the OE-I/ES Series (1.2–4.2 kVA)

- ☀ Wide PV Input Range 30–400 V
- ⚡ High Efficiency >90%
- 🔋 Hybrid operation mode: PV + Battery + Grid
- ⚙ Fast transfer time 10–20 ms
- 👤 Smart cooling & protection system
- 🔧 Supports Lithium, GEL, AGM batteries
- 📄 Configurable charging priority (Solar / Utility)
- 🌐 RS232 / WiFi / GPRS (optional)
- 🏠 Ideal for homes, small businesses, off-grid systems

Product Line — OFTOB ENERGY OE-I/ES Series (1.2–4.2 kVA)

- ◆ **OE-I/ES 1.2KVA / 12V** – 1 kW Off-Grid MPPT Inverter
Suitable for lighting, Wi-Fi router, TV, phone chargers and small household appliances.
- ◆ **OE-I/ES 2KVA / 12V** – 1.6 kW Off-Grid MPPT Inverter
Suitable for lighting, TV, computer, router and small household loads. Can support an energy-efficient Class A refrigerator.
- ◆ **OE-I/ES 3KVA / 24V** – 2.7 kW Off-Grid MPPT Inverter
Suitable for lighting, TV, inverter refrigerator (Class A), power tools up to 1 kW, and mid-level household systems.
- ◆ **OE-I/ES 4.2KVA / 24V** – 3.8 kW Hybrid On/Off-Grid Inverter
Suitable for lighting, TV, inverter refrigerator and air conditioner, low-power pumps, compressors, power tools, and mid-level household systems. Can operate **with or without batteries**.





Technical Specifications — OE-I/ES Series (1KVA / 2KVA / 3KVA / 4.2KVA)

Model	OE-I/ES 1KVA / 12V	OE-I/ES 2KVA / 12V	OE-I/ES 3KVA / 24V	OE-I/ES 4.2KVA / 24V
Rated Power	1200VA / 1000W	2000VA / 1600W	3000VA / 2700W	4200VA/3800W
Power Factor	0.8	0.8	0.9	0.9
Waveform	Pure Sine Wave	Pure Sine Wave	Pure Sine Wave	Pure Sine Wave
Efficiency (Peak)	>90%	>90%	>90%	93.5%
AC Input & Output				
AC Input Voltage	230VAC	230VAC	230VAC	230VAC
Selectable Voltage Range	170–280VAC / 90–280VAC	170–280VAC / 90–280VAC	170–280VAC / 90–280VAC	170–280VAC / 90–280VAC
Frequency Range	50/60Hz Auto	50/60Hz Auto	50/60Hz Auto	50/60Hz Auto
AC Voltage Regulation	230VAC ±5%	230VAC ±5%	230VAC ±5%	230VAC ±5%
Surge Power	2000VA	2000VA	6000VA	7000VA
Transfer Time	10ms (UPS), 20ms (Appliances)	10ms (UPS), 20ms (Appliances)	10ms (UPS), 20ms (Appliances)	Computers (UPS Mode) 10ms, Appliance (APP Mode) 10ms
Battery Parameters				
Battery Voltage	12VDC	12VDC	24VDC	24VDC
Low Battery Alarm	11.0V	11.0V	22.0V	—
Low Battery Cut-off	10.5V	10.5V	21.0V	—
Recovery Voltage	11.5V	11.5V	23.0V	—
Float Voltage	13.5V	13.5V	27.0V	28.0V
Overcharge Protection	16.0V	16.0V	32.0V	30.0V
PV (MPPT) & AC Charger				
Max PV Array Power	2000W	2000W	3000W	5000W
MPPT Range	30–400VDC	30–400VDC	30–400VDC	40–450VDC
Best PV Range	120–400VDC	120–400VDC	120–400VDC	—
Max VOC	400VDC	400VDC	400VDC	500VDC
MPPT Charge Current	80A	80A	80A	100A
AC Charge Current	60A	60A	60A	100A
Max Efficiency	98%	98%	98%	99.5%
Physical				
Product Size (mm)	400×306×103	400×306×103	400×306×103	453×312×120
Net Weight	4.4 kg	4.4 kg	5.4 kg	7.0 kg
Gross Weight	5.1 kg	5.1 kg	6.1 kg	8.5 kg
Communication	RS232 / GPRS / WiFi (opt.)	RS232 / GPRS / WiFi	RS232 / GPRS / WiFi	RS232 / GPRS / WiFi
OPERATING ENVIRONMENT				
Operating Temp.	–10°C to 50°C	–10°C to 50°C	–10°C to 50°C	0°C to 50°C
Humidity	5% to 95% Relative Humidity (Non-condensing)			

