LM HI-10/12/15/20-40

Hybrid Inverter 10-20kW

KEY FEATURES

Maximized Energy Harvesting

- 110% unbalanced output enhances self-consumption
- 40A charging/discharging for efficient energy transfer
- Continuous 110% AC overloading sustains power
- Smooth transition to backup power ensures continuity during power outages

Intelligent Energy Dynamics

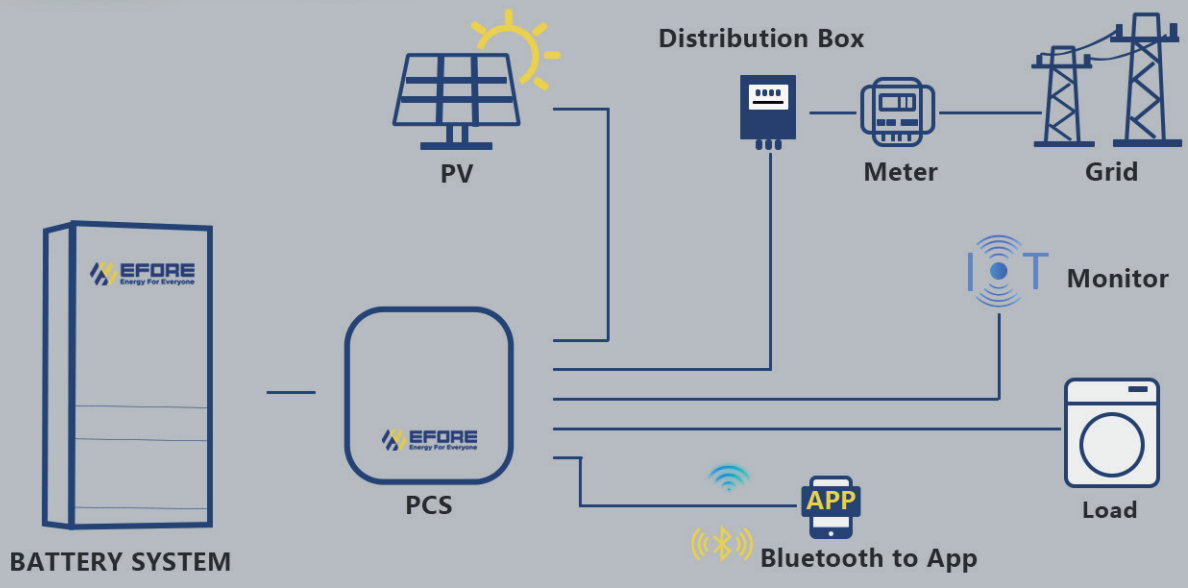
- Five work modes for diverse use
- SuperToU Station Management: Supports flexible and customizable operation modes.
- Centralized smart management for efficiency
- Supports diesel generators for diverse energy sourcing
- Supports VPP functionality for advanced grid interaction

Engineered for Versatility

- Wide 135-750V range fits diverse batteries
- 120% max backup @60s handles overloads
- IP65 protects both indoors and outdoors

Simplified Interaction

- Remote upgrades maintain system health
- Efore I-light for quick status checks
- OLED and App for easy control
- The newly enhanced Efore EMS platform for peak intelligent energy management



TECHNICAL SPECIFICATIONS

Model	LM HI-10-40	LM HI-12-40	LM HI-15-40	LM HI-20-40
PV Input				
Recommended Max. Input Power [kW]	15.00	18.00	22.50	30.00
Start-up Voltage [V]	135			
Max. DC Input Voltage* [V]	1000*			
Rated DC Input Voltage [V]	620			
MPPT Voltage Range* [V]	200-950*			
No. of MPP Trackers	2			
No. of DC Inputs per MPPT	2/2			
Max. Input Current [A]	30/30			
Max. Short-circuit Current [A]	40/40			
Battery Side				
Battery Type	Lithium Battery (with BMS)			
Battery Voltage Range [V]	135-750			
Maximum Charging/Discharge Current [A]	40/40			
Grid Side				
Rated Output Power [kW]	10.00	12.00	15.00	20.00
Max. Output Apparent Power [kVA]	11.00[1)]	13.20	16.50[3)]	22.00
Max. Input Apparent Power** [kVA]	20.00	24.00	30.00	30.00
Max. Charging Power of Battery [kW]	10.00	12.00	15.00	20.00
Rated AC Voltage [V]	3L/N/PE; 220/380V;230/400V;240/415V			
Rated AC Frequency [Hz]	50/60			
Max. Output Current [A]	16.50[2)]	20.00	25.00[4)]	33.50
Power Factor	0.8 leading ...0.8 lagging			
Max. Total Harmonic Distortion	<3% @Rated output power			
DCI	<0.5%In			
Back-up Side				
Rated Output Power [kW]	10.00	12.00	15.00	20.00
Max. Output Apparent Power [kVA]	11.00	13.20	16.50	22.00
Max. Output Current [A]	16.50	20.00	25.00	33.50
On/Off-grid Switching Time [ms]	<10ms			
Rated Output Voltage [V]	3L/N/PE; 220/380V;230/400V;240/415V			
Rated Output Frequency [Hz]	50/60			
Voltage Harmonic Distortion	<3% @Linear load			
Efficiency				
Max. Efficiency	98.4%			
European Efficiency	97.5%			
Protection				
Integrated Protection	DC reverse polarity protection / Battery input reverse connection protection / Insulation resistance protection / Surge protection / Over-temperature protection / Residual current protection / Islanding protection / AC over-voltage protection / Overload protection / AC short-circuit protection			
General Data				
Over Voltage Category	PV: II Main: III			
Dimensions [W×H×D mm]	534×418×210			
Weight [KG]	28.0 (10-12kW) / 31.0 (15-20kW)			
Protection Degree	IP65			
Standby Self-Consumption [W]	<15			
Topology	Transformerless			
Operating Temperature Range [°C]	-30~60			
Relative Humidity [%]	0~100			
Operating Altitude [m]	3000 (>3000m Derating)			
Cooling	Smart fan			
Noise Level [dB]	<40			
Display	OLED & LED			
Communication	CAN, RS485, WiFi/LAN (Optional)			

* PV Max. Input voltage is 950V without battery, or 850V with battery, otherwise inverter will be waiting;
** Max apparent power from the grid means the maximum power imported from the utility grid used to satisfy the backup loads and charge the battery;
1) G98: 10.5kVA; 2) G98: 16.00A; 3) AS 4777.2: 15.0kVA; 4) AS 4777.2: 21.7A