

EH40 / 49.9 / 50 / 60-MU

40-60kW C&I Hybrid Inverter

Multiple access

- Photovoltaic-storage DC coupling, supporting connection of 12 PV strings.
- Supports diesel generator connection to expand power supply options.

Versatile modes

- Supports multiple operating modes including peak shaving and valley filling, self-consumption, battery priority, etc.
- Excellent multi-unit parallel capability.

Reliable power supply

- Seamless on-grid/off-grid switching to ensure reliable power supply for loads.
- Supports 100% unbalanced loading.

Integrated efficiency

- Compact size and high power density.
- Supports linkage with BMS, EMS and protection systems.



Spec.	EH40-MU	EH49.9-MU	EH50-MU	EH60-MU
Input DC (PV side)				
Recommended max. PV array size	80 kW	99.8 kW	100 kW	120 kW
Max. usable PV input power	80 kW	99.8 kW	100 kW	120 kW
Max. input voltage	1000 V			
Rated voltage	620 V			
Start-up voltage	180 V			
MPPT voltage range	150 V~950 V			
Max. input current	40 A × 6			
Max. short circuit current	60 A × 6			
MPPT number / Max. input strings number	6 / 12			
Battery				
Battery type	Lithium battery			
Battery voltage range	150~950 V			
Max. charge / discharge current	160 A / 80 A × 2			
Number of battery ports	1 / 2			
Max. charge / discharge current of each port	160 A / 80 A			
Communication	CAN / RS485			
Output AC (Back-up)				
Rated output power	40 kW	49.9 kW	50 kW	60 kW
Max. apparent output power	40K/50K: 1.5 times of rated power, 10s; 60K: 1.4 times of rated power, 10s; (Note: The 49.9K model has no overload capacity)			
Back-up switch time	< 10 ms			
Rated output voltage	380 V / 400 V / 415 V, 3P + PE + N			
Rated frequency	50 / 60 Hz			
THDu (@linear load)	< 3%			
Input AC (Grid side)				
Max. input current	121.6A	151.6 A	151.9 A	182.3 A
Input AC (Generator)				
Rated input voltage	380 V / 400 V / 415 V, 3P + PE + N			
Rated input frequency	50 / 60 Hz			
Output AC (Grid side)				
Rated output power	40kW	49.9 kW	50 kW	60 kW
Max. apparent output power	44kVA	49.9 kVA	55 kVA	66 kVA
Rated grid voltage	380 V / 400 V / 415 V, 3P + PE + N			
Rated grid frequency	50 / 60 Hz			
Rated grid output current	60.8A/57.7A/55.6A	75.8 A / 72 A / 69.4 A	76 A / 72.2 A / 69.6 A	91.2 A / 86.6 A / 83.5 A
Power Factor	0.8 lagging ~ 0.8 leading			
THDi	< 3% (Linear load < 1.5%)			
Efficiency				
Max. efficiency	98%			
Protection				
Protection	Anti-islanding protection, DC reverse connection protection, insulation detection,DC surge protection, AC surge protection, DC short circuit protection, AC overcurrent protection, AC short circuit protection, AC undervoltage/ overvoltage protection, PV arc protection, leakage current protection, battery overcurrent protection, over-temperature protection, etc			
General Data				
Dimensions (W × H × D)	600 × 970 × 290 mm			
Weight	< 102 kg			
Topology	Transformerless			
Operating ambient temperature range	-40° C~60° C (derate above 45° C)			
Relative humidity	0%~95%RH			
Ingress protection	IP66			
Max. operation altitude	4000 m (derate above 2000 m)			
Cooling concept	Intelligent air cooling			
Grid connection standard*	EN 50549-1&2/EN 50549-10, VDE-AR-N 4105, NTS 631, CEI 0-21, C10/11, NRS 097-2-1, TOR, G99, IEC 62116, IEC 61727, MEA, PEA, etc			
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4			
Features				
PV connection	MC4 Quick connection plug			
Battery connection	OT terminal (M6)			
AC connection	OT terminal (Grid / Generator: M8; Back-up: M6)			
Display	4.3" LCD display			
Communication	Standard: Wi-Fi + Bluetooth, CAN-BMS × 1, CAN-Parallel × 2, LAN, RS485-Meter, EMS-RS485 × 1, CAN-EMS × 1, DRM, DI × 5, DO × 6; Optional: 4G (alternative to Wi-Fi, Wi-Fi is default)			
*The certification standards listed in this column are planned targets. For the specific certification time, please consult and confirm with the local team.				