

# SINGLE PHASE OFF-GRID SOLAR INVERTER

## PV9000 HM Series

3.6-12KW | IP65 | WiFi



### Wide Power Range

Single-phase off-grid inverter with 3.6–12kW output

### IP65 Protection

Water- and dust-proof design for harsh environments

### Low-Voltage Battery Support

Compatible with 40–60V battery systems

### Parallel Expansion

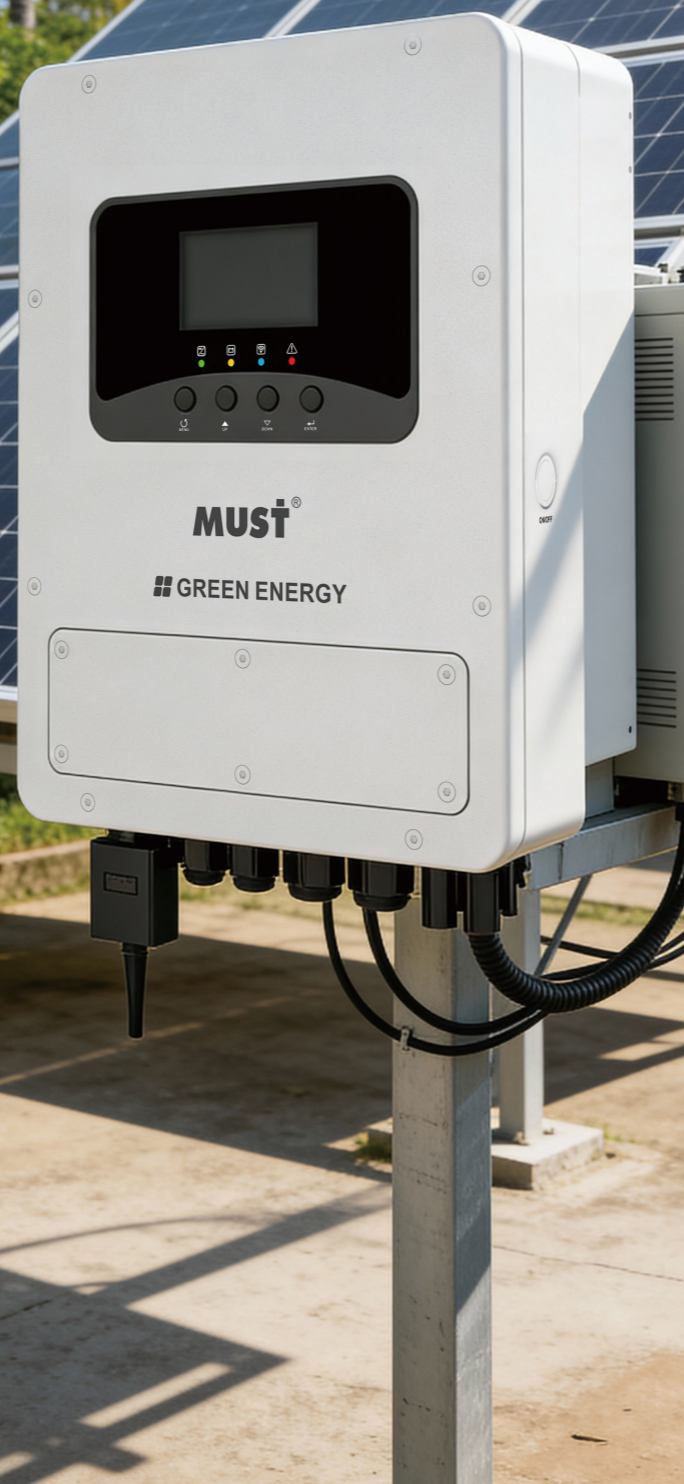
Supports up to 16 units in parallel (off-grid)

### Independent Cooling Design

Reduces dust intake and extends service life

### Smart Monitoring & Control

4.3-inch color touch LCD with WiFi monitoring



### MAIN PARAMETER

MODEL	PV90-3.6KL1 HM	PV90-5KL1 HM	PV90-6KL1 HM	PV90-8KL1 HM	PV90-10KL1 HM	PV90-12KL1 HM
Rated power	3600W	5000W	6000W	8000W	10000W	12000W
<b>BATTERY INPUT DATA</b>						
Battery type	Lead-acid battery / Lithium battery					
Battery voltage	48V					
Battery voltage range	40~60V					
Charging curve	3-stage adaptive with maintenance/Equalization					
Charging Strategy for Li-Ion Battery	Self-adaption to BMS					
Maximum charging/discharging power	3600W	5000W	6000W	8000W	10000W	12000W
Maximum charging/discharging current	90A	120A	150A	190A	220A	240A
<b>PV STRING INPUT DATA</b>						
Max. PV access power	7200W	10000W	12000W	14500W	18000W	20000W
Max. PV input power	5760W	8000W	9600W	12000W	15000W	18000W
Max. PV Input Voltage (Voc)	500V					
Start-up Voltage	125V					
PV Input Voltage Range	125~500V					
Full Load Voltage Range	300~425V					
Rated PV Input Voltage	370V					
Max.Operating PV Input Current	18A+18A	18A+18A	18A+18A	26A+26A	26A+39A	26A+39A
No.of MPP Trackers	2/1+1	2/1+1	2/1+1	2/2+2	2/2+3	2/2+3
Input terminal type	H4/MC4					
<b>AC INPUT/OUTPUT DATA</b>						
Rated AC Output Power	3600W/3600VA	5000W/5000VA	6000W/6000VA	8000W/8000VA	10000W/10000VA	12000W/12000VA
Rated AC Output Current	15.7A	21.7A	26A	34.7A	43.4A	52.2A
Max. AC Input Current	35A	35A	35A	38.2A	47.8A	55A
Rated Input/Output Voltage/Range	230VAC					
Rated Input/Output Grid Frequency	60Hz±5Hz/ 50Hz±5Hz					
Rated output power factor	1					
Power Factor Adjustment Range	0.8 leading to 0.8 lagging					
Total Harmonics Current Distortion (THDi)	<3%					
Grid Type	Single phase					
<b>EFFICIENCY</b>						
Max. Efficiency	97.5%					
Euro Efficiency	96.5%					
MPPT Efficiency	>99%					
<b>PROTECTION</b>						
Integrated	DC Polarity Reverse Connection Protection; AC Output Overcurrent Protection; AC Output Overvoltage Protection; AC Output short Circuit Protection; Island Protection Monitoring; Integrated all-pole sensitive leakage current; ISO monitoring; Over temperature protection; Grid monitoring; Surge protection level, Battery Input Over-current protection/ Battery Input Battery Over-temperature protection					
Surge Protection	Type II (DC); Type II (AC)					
Overvoltage Category	OVC II (DC); OVC III (AC)					

### OTHER PARAMETER

MODEL	PV90-3.6KL1 HM	PV90-5KL1 HM	PV90-6KL1 HM	PV90-8KL1 HM	PV90-10KL1 HM	PV90-12KL1 HM
<b>GENERAL DATA</b>						
Operating Temperature Range (°C)	-40°C~+60°C, >45°C Derating					
Permissible Ambient Humidity	0~100%					
Cooling	Fan cooling					
Noise (dB)	≤50dB			≤55dB		
Altitude	3000m, >3000m Derating					
Inverter Topology	Battery-side transformer isolation, PV-side non-transformer isolation					
Communication	WiFi/RS485/CAN/Bluetooth					
Display	4.3-inch touch screen+LED					
Protection Degree	IP65					
Installation Style	Wall-mounted					
<b>MECHANICAL SPECIFICATIONS</b>						
Machine Dimension (W*H*D)(mm)	321*431*200			486*486*235		
Warranty	5 year					
<b>CERTIFICATION &amp; STANDARDS</b>						
IEC/EN61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2						