

# Single Phase On-Grid Inverter



**1KW-3KW**



On-Grid Single Phase  
MPPT Inverter



IP66 Protection



Max. PV Voltage: 600V



AC Grid Frequency:  
50Hz / 60Hz



DC Switch, Anti-Islanding  
& Over Current Protection



Type II & III DC / AC  
SPD



High Efficiency: up to  
97.6%



Wi-Fi / 4G Plug  
Optional



LCD With Touch Pad



| MODEL NAME                          | VMGI-1KW-SP                     |            | VMGI-2KW-SP  | VMGI-3KW-SP  |
|-------------------------------------|---------------------------------|------------|--------------|--------------|
| RATED POWER                         | 1000VA/1000W                    |            | 2000VA/2000W | 3000VA/3000W |
| INPUT (DC)                          |                                 |            |              |              |
| Max. DC voltage                     | 600VDC                          |            |              |              |
| Nominal voltage                     | 380VDC                          |            |              |              |
| Start voltage                       | 60V                             | 80V        | 80V          |              |
| MPPT voltage range                  | 60V ~ 560V                      | 80V ~ 560V | 80V ~ 560V   |              |
| Number of MPPT                      | 1                               |            |              |              |
| Strings per MPPT                    | 1                               |            |              |              |
| Max. input current per MPPT         | 13A                             |            |              |              |
| Max. short-circuit current per MPPT | 15.6A                           |            |              |              |
| OUTPUT (AC)                         |                                 |            |              |              |
| Nominal AC output power             | 1000W                           | 2000W      | 3000W        |              |
| Max. AC apparent power              | 1100VA                          | 2200VA     | 3300VA       |              |
| Nominal AC voltage                  | 230V L-N                        |            |              |              |
| AC grid frequency range             | 50Hz / 60Hz ± 5Hz               |            |              |              |
| Max. output current (A)             | 4.8A                            | 9.6A       | 14.4A        |              |
| Power factor                        | 0.8 leading - 0.8 lagging       |            |              |              |
| THDI                                | < 3%                            |            |              |              |
| EFFICIENCY                          |                                 |            |              |              |
| Max. efficiency                     | 97.00%                          | 97.50%     | 97.60%       |              |
| Euro efficiency                     | 96.50%                          | 97.00%     | 97.00%       |              |
| PROTECTION DEVICES                  |                                 |            |              |              |
| DC switch                           | Yes                             |            |              |              |
| Anti-islanding protection           | Yes                             |            |              |              |
| Output over current protection      | Yes                             |            |              |              |
| DC reverse polarity protection      | Yes                             |            |              |              |
| DC / AC surge protection            | DC type II-III ; AC type II-III |            |              |              |
| Insulation detection                | Yes                             |            |              |              |
| AC short circuit protection         | Yes                             |            |              |              |
| GENERAL SPECIFICATION               |                                 |            |              |              |
| Dimensions, W*H*D (mm)              | 350*290*120                     |            |              |              |
| Weight (Kgs)                        | 7.3                             | 8          | 8            |              |
| ENVIRONMENT                         |                                 |            |              |              |
| Operating temperature range         | -25°C ~ +60°C                   |            |              |              |
| Cooling type                        | Natural convection              |            |              |              |
| Max. operating altitude             | 4000 m                          |            |              |              |
| Max. operating humidity             | 0 - 100%                        |            |              |              |
| AC output terminal type             | Quick connector                 |            |              |              |
| IP class                            | IP66                            |            |              |              |
| Topology                            | Transformer-less                |            |              |              |
| Communication interface             | RS-485 / Wi-fi / 4G             |            |              |              |
| Display                             | LCD / Bluetooth + App           |            |              |              |