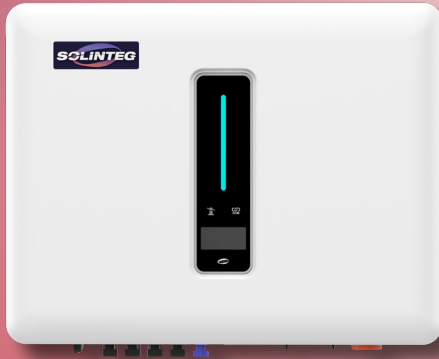




# Hybrid Inverter 10-20kW

MHT-10/12/15/20K-40

**30A**

Max. PV Input Current

**110%**

Unbalanced Output

**40A**

Max. Charge/Discharge

Commercial | Three Phase | HV Battery | 2 MPPTs



## 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



## Engineered for Versatility

- Wide 135-750V range fits diverse batteries
- 180% max backup @10s handles overloads
- IP65 protects both indoors and outdoors



## Intelligent Energy Dynamics

- 6 work modes for diverse use
- Supports TOU and dynamic pricing strategies with user-defined scheduling rules
- Peak shaving control based on configurable thresholds
- Centralized smart management for efficiency



## Simplified Interaction

- Remote upgrades maintain system health
- Solinteg I-light for quick status checks
- OLED and App for easy control



# Integ M Series

The Power Master

## Hybrid Inverter 10-20kW

| Models                              |            | MHT-10K-40                                                                                                                                                                                                                                                                                                                     | MHT-12K-40 | MHT-15K-40 | MHT-20K-40 |
|-------------------------------------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|------------|
| PV Side                             |            |                                                                                                                                                                                                                                                                                                                                |            |            |            |
| Max. PV Array Power                 | [kWp]      | 16                                                                                                                                                                                                                                                                                                                             | 19.2       | 24         | 32         |
| Max. PV Input Voltage *             | [V]        | 1000*                                                                                                                                                                                                                                                                                                                          |            |            |            |
| Rated PV Input Voltage              | [V]        | 620                                                                                                                                                                                                                                                                                                                            |            |            |            |
| Minimum Operating DC Voltage        | [V]        | 200                                                                                                                                                                                                                                                                                                                            |            |            |            |
| Start-up Voltage                    | [V]        | 135                                                                                                                                                                                                                                                                                                                            |            |            |            |
| MPPT Operating Voltage Range *      | [V]        | 200-950*                                                                                                                                                                                                                                                                                                                       | 200-950*   | 200-950*   | 200-950*   |
| No. of MPP Trackers                 |            | 2                                                                                                                                                                                                                                                                                                                              | 2          | 2          | 2          |
| No. of Strings per MPPT             |            | 2/2                                                                                                                                                                                                                                                                                                                            | 2/2        | 2/2        | 2/2        |
| Max. Input Current per MPPT         | [A]        | 30/30                                                                                                                                                                                                                                                                                                                          | 30/30      | 30/30      | 30/30      |
| Max. Short-circuit Current per MPPT | [A]        | 40/40                                                                                                                                                                                                                                                                                                                          | 40/40      | 40/40      | 40/40      |
| Battery Side                        |            |                                                                                                                                                                                                                                                                                                                                |            |            |            |
| Battery Type                        |            | Lithium-ion                                                                                                                                                                                                                                                                                                                    |            |            |            |
| Battery Voltage Range               | [V]        | 135-750                                                                                                                                                                                                                                                                                                                        |            |            |            |
| No. of Battery Input                |            | 1                                                                                                                                                                                                                                                                                                                              |            |            |            |
| Max. Charge/Discharge Current       | [A]        | 40/40                                                                                                                                                                                                                                                                                                                          |            |            |            |
| Max. Charge/Discharge Power         | [kW]       | 10/10                                                                                                                                                                                                                                                                                                                          | 12/12      | 15/15      | 20/20      |
| Grid Side (On-Grid)                 |            |                                                                                                                                                                                                                                                                                                                                |            |            |            |
| Rated Output Power                  | [kW]       | 10                                                                                                                                                                                                                                                                                                                             | 12         | 15         | 20         |
| Max. Output Apparent Power          | [kVA]      | 11 <sup>(1)</sup>                                                                                                                                                                                                                                                                                                              | 13.2       | 16.5       | 22.0       |
| Rated Output Apparent Power         |            | 10.0                                                                                                                                                                                                                                                                                                                           | 12.0       | 15.0       | 20.0       |
| Rated AC Voltage                    |            | 3L/N/PE; 220/380V; 230/400V; 240/415V                                                                                                                                                                                                                                                                                          |            |            |            |
| Rated AC Frequency                  | [Hz]       | 50/60                                                                                                                                                                                                                                                                                                                          |            |            |            |
| Rated Output Current                | [A]        | 14.5                                                                                                                                                                                                                                                                                                                           | 17.4       | 21.7       | 29.0       |
| Max. Output Current                 | [A]        | 16.5 <sup>(2)</sup>                                                                                                                                                                                                                                                                                                            | 20.0       | 25.0       | 33.5       |
| Power Factor                        |            | 0.8 leading ...0.8 lagging                                                                                                                                                                                                                                                                                                     |            |            |            |
| THDi (@Rated Power)                 |            | <3%                                                                                                                                                                                                                                                                                                                            |            |            |            |
| Max. Input Apparent Power **        | [kVA]      | 20.0                                                                                                                                                                                                                                                                                                                           | 24.0       | 30.0       | 30.0       |
| Rated AC Voltage                    |            | 3L/N/PE; 220/380V; 230/400V; 240/415V                                                                                                                                                                                                                                                                                          |            |            |            |
| Rated AC Frequency                  | [Hz]       | 50/60                                                                                                                                                                                                                                                                                                                          |            |            |            |
| Max. AC Input Current               | [A]        | 30.4                                                                                                                                                                                                                                                                                                                           | 36.4       | 45.4       | 45.4       |
| Back-up Side (Off-Grid)             |            |                                                                                                                                                                                                                                                                                                                                |            |            |            |
| Rated Output Power                  | [kW]       | 10                                                                                                                                                                                                                                                                                                                             | 12         | 15         | 20         |
| Peak Output Apparent Power          | [kVA]      | 18@10s                                                                                                                                                                                                                                                                                                                         | 18@10s     | 24@10s     | 24@10s     |
| Rated Output Apparent Power         | [kVA]      | 10.0                                                                                                                                                                                                                                                                                                                           | 12.0       | 15.0       | 20.0       |
| Rated Output Voltage                |            | 3L/N/PE; 220/380V; 230/400V; 240/415V                                                                                                                                                                                                                                                                                          |            |            |            |
| Rated Output Frequency              | [Hz]       | 50/60                                                                                                                                                                                                                                                                                                                          |            |            |            |
| Rated Output Current                | [A]        | 14.5                                                                                                                                                                                                                                                                                                                           | 17.4       | 21.7       | 29         |
| On/Off-grid Switching Time          |            | < 10ms                                                                                                                                                                                                                                                                                                                         |            |            |            |
| THDv (@Linear Load)                 |            | <3%                                                                                                                                                                                                                                                                                                                            |            |            |            |
| Efficiency                          |            |                                                                                                                                                                                                                                                                                                                                |            |            |            |
| MPPT Efficiency                     |            | 99.90%                                                                                                                                                                                                                                                                                                                         |            |            |            |
| Max. Efficiency                     |            | 98.40%                                                                                                                                                                                                                                                                                                                         |            |            |            |
| European Efficiency                 |            | 97.50%                                                                                                                                                                                                                                                                                                                         |            |            |            |
| Protection                          |            |                                                                                                                                                                                                                                                                                                                                |            |            |            |
| Integrated Protection               |            | DC reverse polarity protection / Battery input reverse connection protection / Insulation resistance protection / Surge protection(DC/AC: Type II/Type II) / Over-temperature protection / Residual current protection / Islanding protection / AC over-voltage protection / Overload protection / AC short-circuit protection |            |            |            |
| General Data                        |            |                                                                                                                                                                                                                                                                                                                                |            |            |            |
| Dimensions                          | [W×H×D mm] | 534×418×210                                                                                                                                                                                                                                                                                                                    |            |            |            |
| Weight                              | [KG]       | 28                                                                                                                                                                                                                                                                                                                             | 28         | 31         | 31         |
| Ingress Protection                  |            | IP65                                                                                                                                                                                                                                                                                                                           |            |            |            |
| Protective Class                    |            | Class I                                                                                                                                                                                                                                                                                                                        |            |            |            |
| Standby Self-consumption            | [W]        | < 15                                                                                                                                                                                                                                                                                                                           |            |            |            |
| Topology                            |            | Transformerless                                                                                                                                                                                                                                                                                                                |            |            |            |
| Islanding protection                |            | Frequency shift                                                                                                                                                                                                                                                                                                                |            |            |            |
| Operating Temperature Range         | [°C]       | -30~60                                                                                                                                                                                                                                                                                                                         |            |            |            |
| Relative Humidity                   | [%]        | 0~100                                                                                                                                                                                                                                                                                                                          |            |            |            |
| Max. Operation Altitude             | [m]        | 3000                                                                                                                                                                                                                                                                                                                           |            |            |            |
| Over Voltage Category               |            | II(PV+Battery), III(Mains)                                                                                                                                                                                                                                                                                                     |            |            |            |
| Cooling                             |            | Smart Fan                                                                                                                                                                                                                                                                                                                      |            |            |            |
| Noise Level                         | [dB]       | < 40                                                                                                                                                                                                                                                                                                                           |            |            |            |
| Display                             |            | LED & OLED                                                                                                                                                                                                                                                                                                                     |            |            |            |
| Communication                       |            | CAN, RS485                                                                                                                                                                                                                                                                                                                     |            |            |            |
| Country of Manufacturer             |            | China                                                                                                                                                                                                                                                                                                                          |            |            |            |

\* The maximum DC input voltage and maximum MPPT voltage is 950V. The inverter will stop operating when the voltage is between 950V and 1000V. The inverter will be damaged if the voltage exceeds 1000V;

\*\* 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;