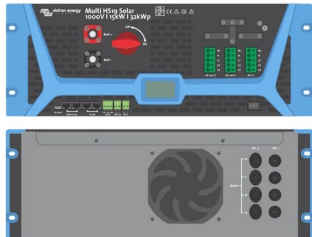


# Multi HS19 Solar 15k

High voltage Inverter/charger with solar input

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## Introducing the Victron Multi HS19 Solar

A 19-inch enclosure combining a 15kW high-voltage 3-phase inverter/charger and four MPPT high voltage solar trackers rated at 8kW. The integrated design simplifies installations, saving time and money. Lightweight, efficient, and quiet in operation with low standby power consumption due to high-frequency technology and a new design. Easy mounting with the 19-inch housing, sliding into the same rack as the batteries.

### Versatile

Ideal for off-grid, peak-shaving, backup, or feed-in applications.

### Powerful inverter/charger

The Multi HS19 Solar features a powerful sinewave inverter/charger at its core with seamless transitions between inverting, grid feed-through, and charging. This bidirectional capability allows charging the battery when excess solar power or AC supply is available or converting from the battery when needed.

### Four individual solar inputs

Four individual 8kW, MPPT solar trackers with a wide MPPT voltage range of 100-600V and a 300V startup voltage, totalling a PV capacity of 32kW at 600V.

### Battery

Connects to managed CAN-bus batteries via dedicated Battery CAN-bus ports. Supports battery banks from 650 up to 1000V, reducing battery cable thickness and installation costs. Supports a maximum charge power of 33kW at 800V.

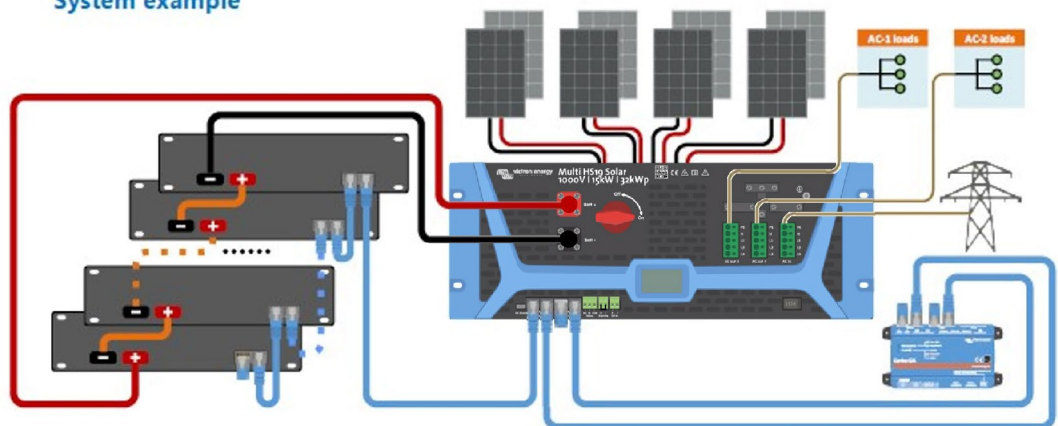
### Communication and Control

Comprehensive monitoring options include a display for reading operational status, Bluetooth connectivity via the VictronConnect app for configuration, VE.Can communication port for remote monitoring via a GX device on the VRM portal. Equipped with a remote on/off terminal and programmable relay for automated actions, such as starting a generator when the battery is low.



VictronConnect app

### System example



## Accessories



Cerbo GX



Ekran GX



VE.Can to CAN-bus  
BMS cable

| TECHNICAL SPECIFICATIONS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Multi HS19 Solar 15k                                                                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Max. AC input and pass-through current                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 32A                                                                                                                                         |
| INVERTER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                             |
| Inverter apparent/rated power                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 15kVA/15kW                                                                                                                                  |
| Continuous output power up to 40°C <sup>(1)</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 15kW                                                                                                                                        |
| Peak Power <sup>(2)</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 22kW (5s)                                                                                                                                   |
| Inverter peak AC current                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 32A (5s)                                                                                                                                    |
| Continuous AC current per phase <sup>(1)</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 22A RMS                                                                                                                                     |
| AC voltage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 400Vac ± 10%, 3-phase                                                                                                                       |
| AC frequency (range)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 50/60Hz (45-65Hz)                                                                                                                           |
| Total harmonic distortion                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <3%                                                                                                                                         |
| Maximum efficiency <sup>(3)</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 98%                                                                                                                                         |
| No load power at 650V battery voltage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 50W                                                                                                                                         |
| AC connections                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | L1, L2, L3, N, PE                                                                                                                           |
| Number of AC inputs / outputs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1 input / 2 outputs                                                                                                                         |
| SOLAR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                             |
| Maximum open circuit voltage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 600V                                                                                                                                        |
| Max. short circuit / MPP current per string                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 13.5A / 13.5A                                                                                                                               |
| Number of independent trackers / strings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 4 / 4                                                                                                                                       |
| MPPT operating voltage range                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 100 - 600V                                                                                                                                  |
| Minimum solar voltage for wake-up <sup>(4)</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 300V                                                                                                                                        |
| Maximum total power per string <sup>(1)</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 8kW (32kW total)                                                                                                                            |
| Maximum efficiency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 99%                                                                                                                                         |
| BATTERY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                             |
| Operating voltage range                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 650 - 1000V                                                                                                                                 |
| Maximum discharge current                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 25A                                                                                                                                         |
| Maximum charge current                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 41A                                                                                                                                         |
| Communication                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | CAN                                                                                                                                         |
| Supported batteries <sup>(5)</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Batteries supporting Victron HV Protocol                                                                                                    |
| FEATURES & PROTECTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                             |
| Parallel operation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | No <sup>(7)</sup>                                                                                                                           |
| Overvoltage category                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | PV II / AC III                                                                                                                              |
| Environment condition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Indoor, conditioned                                                                                                                         |
| Protections                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | PV overvoltage / PV over-current / DC insulation resistance / Residual current monitor unit / AC over-current                               |
| GENERAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                             |
| 19" rack height / Depth / Weight                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 4U / 70cm / 26.5Kg                                                                                                                          |
| AC connectors                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Push-in spring connectors:<br>Rigid cable 0.2mm <sup>2</sup> to 10mm <sup>2</sup><br>Flexible cable 0.25mm <sup>2</sup> to 6mm <sup>2</sup> |
| DC connectors                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 5.7mm Surlok                                                                                                                                |
| MC4 connectors                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | MC4 Female: Staubli (Multi-Contact) PV-ADBP4-S2-UR-2,5<br>MC4 Male: Staubli (Multi-Contact) PV-ADSP4-S2-UR-2,5                              |
| Operating temperature <sup>(1)</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 0 to +60°C (full rated operation up to 40°C)                                                                                                |
| Cooling                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Forced air                                                                                                                                  |
| Maximum altitude                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 2000m                                                                                                                                       |
| Humidity (non-condensing)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 95%                                                                                                                                         |
| Protection grade                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | IP 20                                                                                                                                       |
| Programmable relay                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Yes (3A, up to 30Vdc)                                                                                                                       |
| Data communication                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1x battery CAN port, 1x VE.Can port, VE.Direct port, Bluetooth                                                                              |
| Remote on/off terminal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Yes                                                                                                                                         |
| STANDARDS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                             |
| Electrical safety                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | EN-IEC 62109-1, EN-IEC 62109-2, Pollution degree 2                                                                                          |
| Emission/ Immunity                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | EN-IEC 61000-3-11, EN-IEC 61000-3-12<br>IEC 61000-6-1, IEC 61000-6-2, IEC 61000-6-4                                                         |
| <sup>1)</sup> When both the inverter and solar are running at full power, derating on the solar and, on more severe cases, also on the inverter can occur.<br><sup>2)</sup> Peak power and duration depend on start temperature of heatsink. Mentioned times are with cold unit.<br><sup>3)</sup> Efficiency reduces with higher battery voltages.<br><sup>4)</sup> Minimum voltage for communication to start when the Multi HS19 is only powered by solar.<br><sup>5)</sup> Check the manual for the full list of supported batteries.<br><sup>6)</sup> Programmable relay which can be set for general alarm, DC under voltage or genset start/stop function.<br><sup>7)</sup> Future hardware revisions will support parallel operation. |                                                                                                                                             |