The Victron Energy Storage System (ESS) is an energy storage system intended for self-consumption of generated energy or trading in this energy. Together with solar panels, it can serve as an energy backup system in case the grid loses power. Or to reduce your connection so that you pay less fixed duty. It also stores excess solar energy in the batteries, so your inverters continue to work even though the grid is overloaded. You can also choose to charge your batteries at a low rate and use this energy when rates are high, so you are assured of a low electricity rate.

Powerful and reliable energy storage:
With an inverter capacity of 15kVa (3x 5kVa) and 16.5kWh of battery storage, this set provides enough energy for most domestic and/or commercial applications.

Power outage:
The Victron ESS ensures that the PV installation continues to work, even in the event of a power outage, so you can still use solar energy.

Dynamic contract with Dynamic ESS:
Victron's Dynamic ESS is an automated home energy system that focuses on profit optimization by intelligently responding to energy rates. This system uses local electricity prices, fees from energy providers, grid restrictions, battery specifications, charging and consumption forecasts and weather forecasts on a daily basis to act optimally. Dynamic ESS can manage and sell both self-generated energy and grid electricity, tailored to current dynamic rates.

Zero on the meter:
Through smart energy storage and distribution you can strive for a zero-on-the-meter situation, in which you generate as much energy as you consume.

UPS Function:
The Victron ESS works as a UPS (uninterruptible power supply) which provides immediate backup in the event of a power outage to keep critical devices operational.

Seamless integration of PV and storage:
Victron ESS works with all conceivable PV inverters.

Optimal use of solar power:
At times when more solar power is generated than consumed, the excess energy is stored in batteries. This stored energy can then be used at times when there is insufficient solar power available, for example when it is cloudy or during nighttime hours. You can also fully charge your batteries, if the price is very low, often at night to enjoy cheap electricity the next day.

Full control and monitoring:
Thanks to the Cerbgo Gx and Touch 50, you always have full control over your energy consumption and storage, both locally and remotely.

Pay less with a smaller home connection:
With this system it is possible to apply peak shaving to existing house connections. In the Netherlands we have fixed costs that you pay depending on the size of the connection, which can be 1x 35A or 3x 25A 3x35 3x40 or 3x50. If you were to switch from the standard 3x 25A connection to a 3x35A, you would pay 1200 euros more per year! With our system you can reduce all power to 3x 25A so that you always pay the lowest fixed costs.

Backup in case of power failure:
The stored energy can also be used if the grid connection fails, for example due to a broken cable in the street or due to a regional or even national outage. Depending on the battery capacity, it is determined how much energy can be used for later moments. The switching takes place in milliseconds and is completely automatic, so you won't notice anything. During planned maintenance, the system can be set to fully charge the batteries so that if the power fails, you can use this power immediately. The entire home is simply supplied with energy during maintenance.

Off grid situation:
The Victron ESS combination with battery is ideal for off-grid situations, where you are completely independent of the electricity grid.

Battery:
The battery is large enough to power an entire household and can also act as a reliable backup if the electricity grid fails. Condition of the entire system: new and comes with a 10-year warranty on capacity loss or defects. If it has less than 70% within 10 years, you will receive a new one from us.

Specifications Battery system
Storage: 16.50 kWh
Chemistry: LFP
Configuration: 1P16S
Nominal voltage: 51.2v
Nominal capacity: 330Ah
Cutoff voltage: 41.6v
Voltage range: 42v – 58.4v
Charge/discharge: 165A
Maximum charge discharge: 200A
Weight: 113kg
Dimensions: 817x412x267mm
SOC range: 15-95%
Cycles: 11000
Communication: CAN & RS485

With active balancing circuit board to keep the battery in good condition and balanced. When the difference in the lowest and highest voltage cell is more than 50mv, it comes into operation to balance all cells.