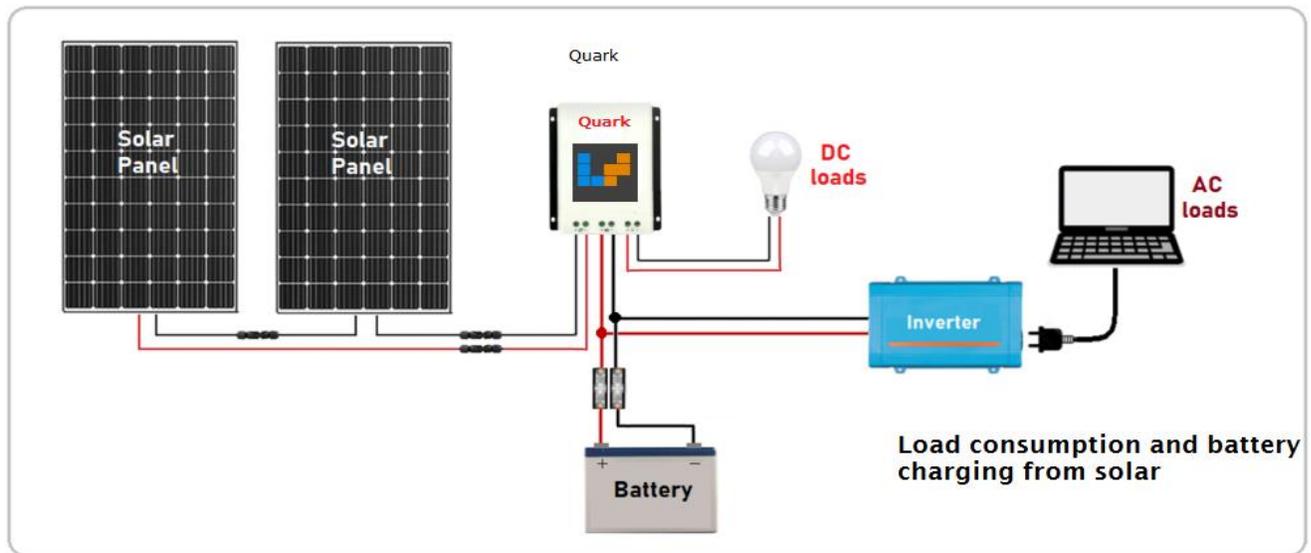


Solar power plants for a household can be a huge investment. While it's definitely sustainable and provides a guarantee on return of investments, it is often not used to its' fullest potential by a layman user. When it comes to storage of energy, solar energy has a particularly difficult hurdle to cross in order of storing the excess energy produced. Unlike off grid systems where the storage is directly charged by solar, discharged based on load requirements, on grid solar does allow the user to generate beyond their storage capacity and export to the grid.

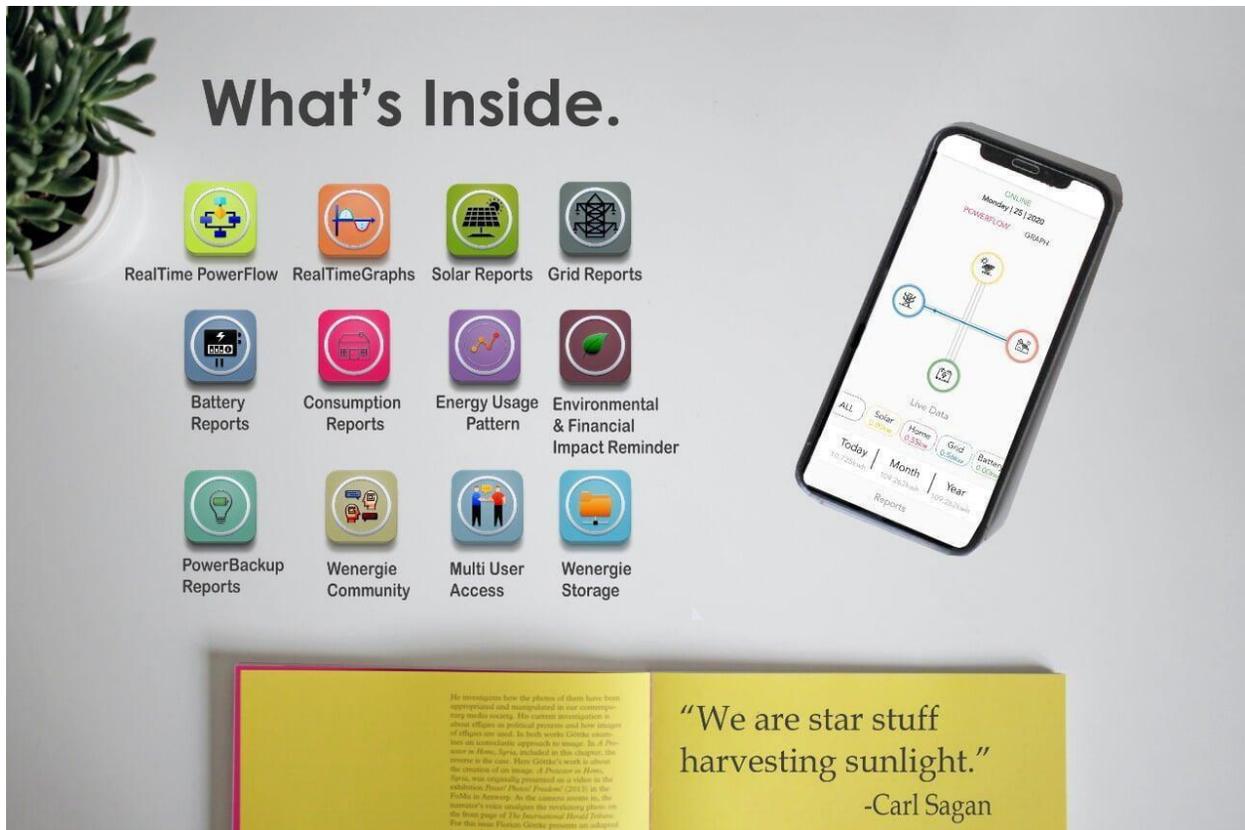
With the introduction of net metering and gross metering, users end up paying close to none or just a fraction of their actual electricity bill. Despite it's success on grid solar does have its' limits with respect to storage:

- Users who opt for on grid solar power plant, tend to use a regular UPS based battery storage that relies on charging the battery from the mains. This is counterproductive for a person who has generational capability to power their household.
- Charging batteries from mains by regular UPS often relies on Bulk and float charging, where in, massive currents are pushed into the batteries to ramp up their charge. This process can consume 2-3 units from the mains, which can undermine the solar production in the net metering plant and can drive up the price slab for a gross metering plant.
- Solar means sustainable, and improving their production and actively using it to make the household self-reliant must be the first item on the agenda.

Quark is Plug and play Solar battery charger from Wenergie Ecoworks. Compared to MPPT chargers, that require onerous connections and come at different prices depending on the battery voltage, Quark is a simple ready to use device that can be retrofitted with any legacy storage systems including lead acid batteries.



- Quark interfaces panel directly with your battery and constantly charges your battery as long as there is Solar production, throughout the day. It eliminates the need for UPS charging there by taking that burden off your bill.
- Users can also decide to consume the battery to meet their load demands, which in-turn reduces their bill further.
- Quark employs saturated charging with a constant current mechanism to effectively tap into solar energy throughout the day.
- It comes with over charge protection and low charge indicator and can be interfaced with 12V, 24V, 48V battery systems.



- Users are also able to monitor the solar energy produced to charge the battery on the Wenergie app and their load consumption, if they chose to rely on batteries instead of the grid.

This allows a user to be the master of their energy and make their home truly sustainable.