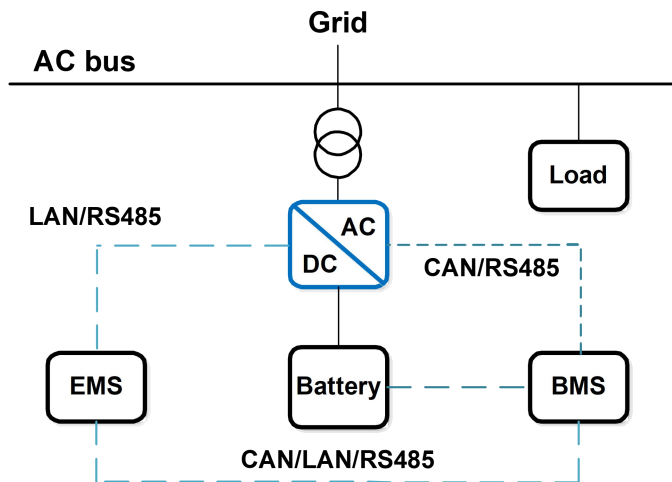


On-grid Only

Storage-only solution

“

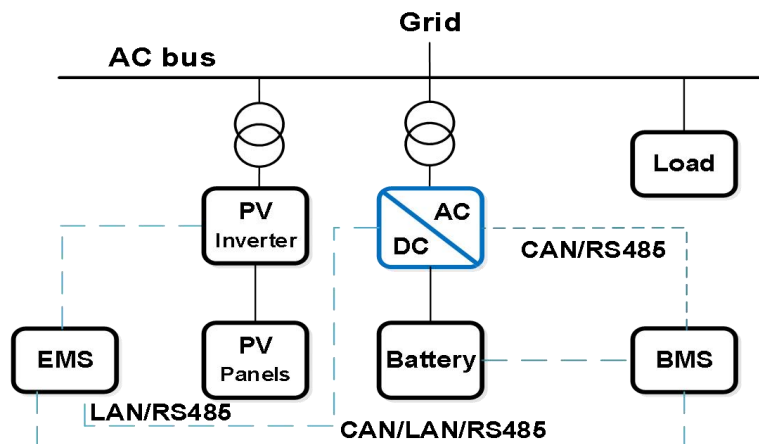
The battery is charged by grid, mainly used for peak-shaving/frequency regulation/Demand charge management.



AC-coupled solution

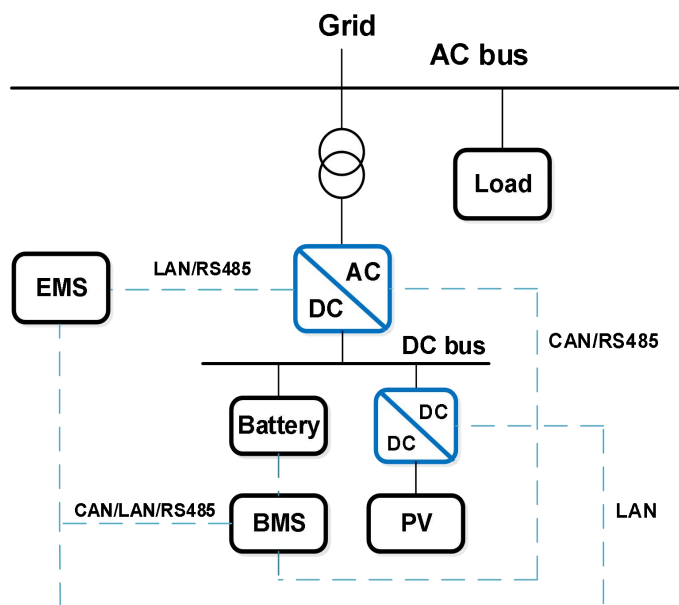
“

AC coupled with PV or other power sources together with grid, mainly for maximization of self generation and zero-consumption from grid.

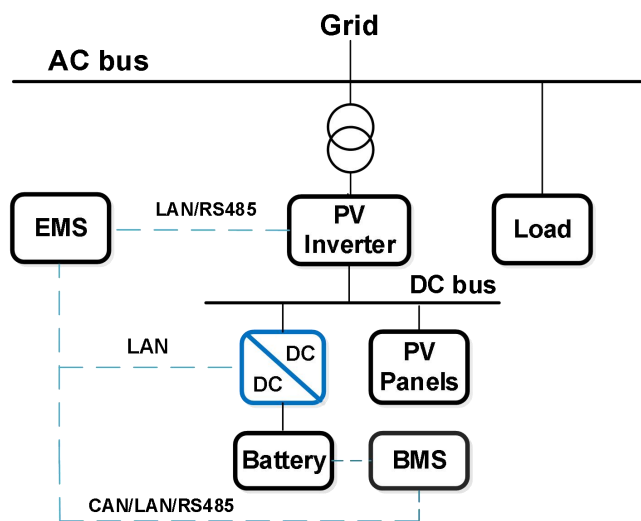


DC-coupled Solution

DC coupled with PV, mainly for self-consumption and replacement for phased-out PV inverters.



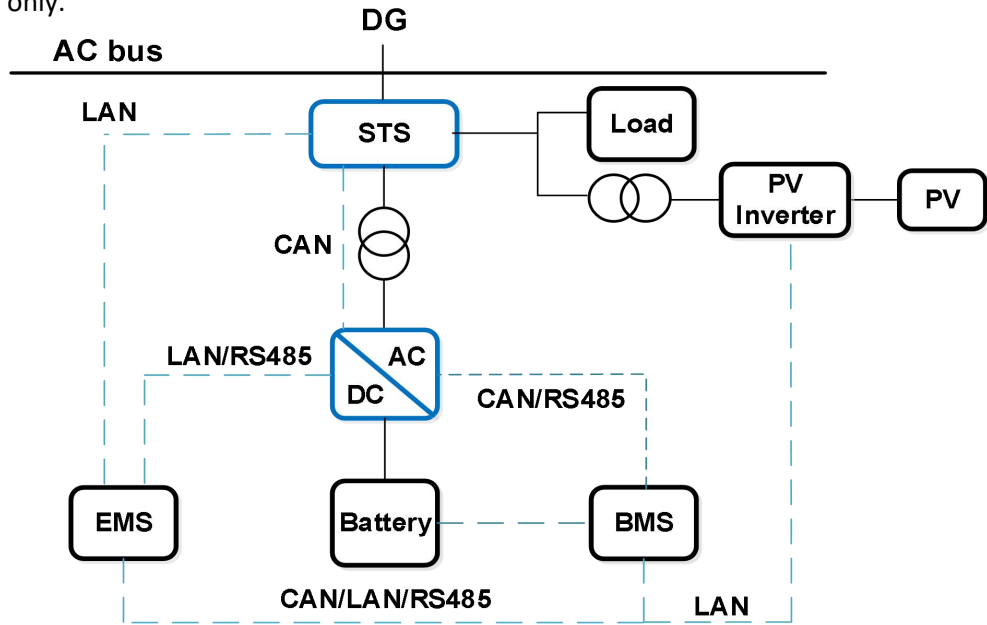
By adding DC coupled battery into existing or new-built PV farms to maximize the solar generation.



Off-grid Only

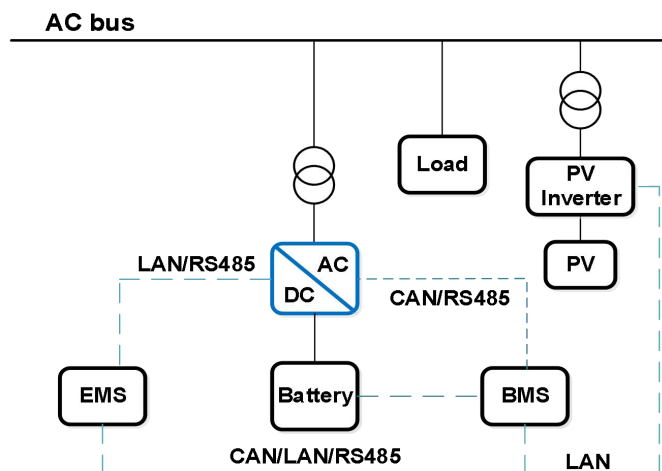
AC-coupled solution without power outage

To work with Diesel Genset In remote areas as main power source. AC coupled PV farm is following the BESS and supplying loads and charging battery when necessary. DG is been treated as back-up only.



AC-coupled solution with external EMS controls only

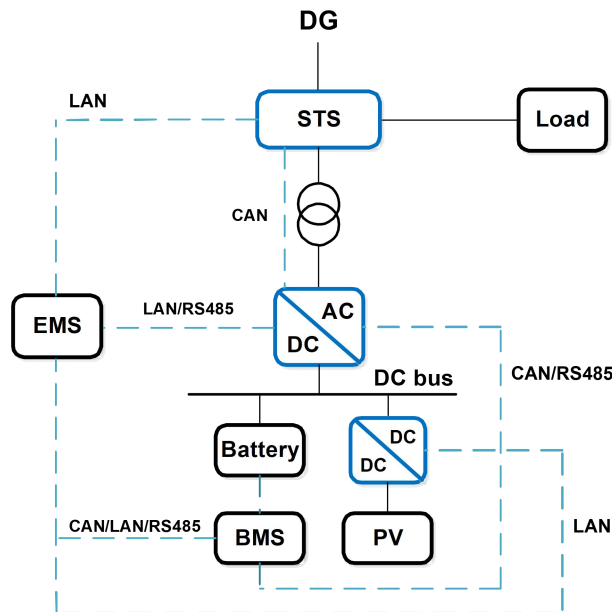
To work with any AC power source without auto backup as main voltage source. AC coupled PV farm is following the BESS. EMS could command PCS to follow external AC source when battery runs out with signals from external ATS.



DC-coupled solution without power outage

“

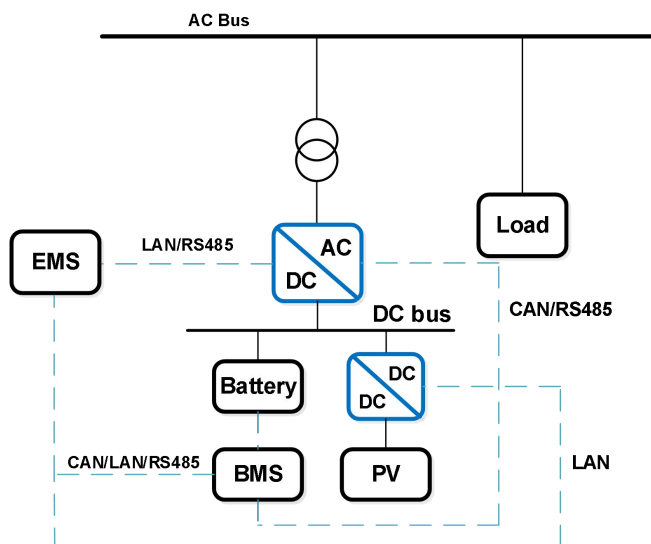
To work with Diesel Genset In remote areas as main power source for loads. DC coupled PV farm is charging battery when necessary. DG is been treated as back-up only.



DC-coupled solution with external EMS controls only

“

To work with DC coupled PV panels as main voltage source. External EMS could command PCS to follow external AC source when battery runs out with signals from external ATS.

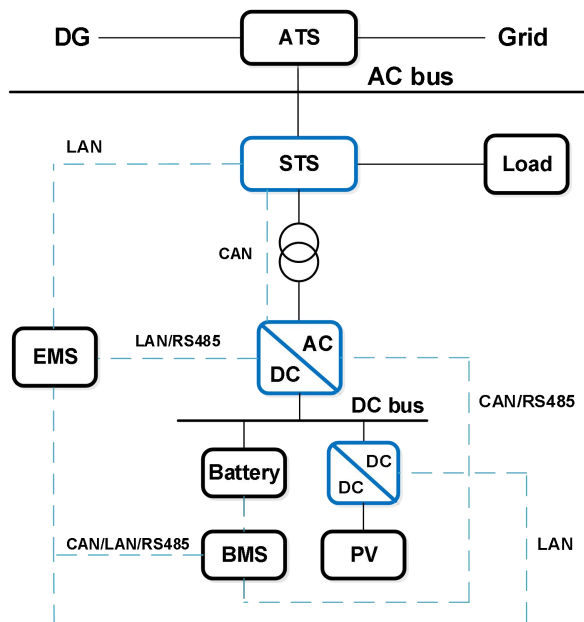
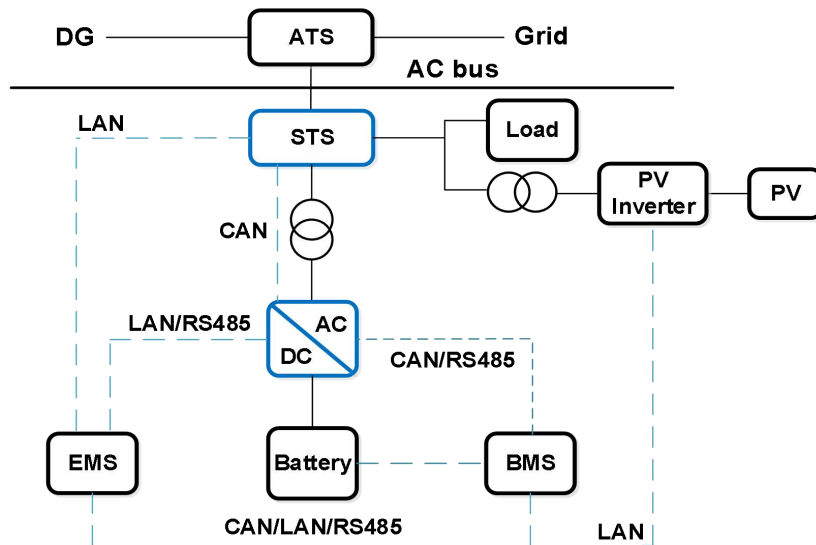


On-grid with Back-up

AC-coupled & DC-coupled solution with Generator

“

Work with AC or DC coupled PV farm, BESS can automatically act as backup power for loads when grid fails. DG will be acting as secondary back-up when both battery and solar energy runs out.



AC-coupled & DC-coupled solution w/o Generator



Work with or without DC coupled PV farm, BESS can automatically act as backup power for loads when grid fails. But loads will shut down if battery and solar runs out and grid fails.

