

SOLAR MICRO INVERTER LETRIKA SMI 260

The best technology
for decentralized
PV electricity on-site
generation and
battery storage.



Main market segments and applications

Micro, small and medium residential and light commercial rooftop on-grid PV applications

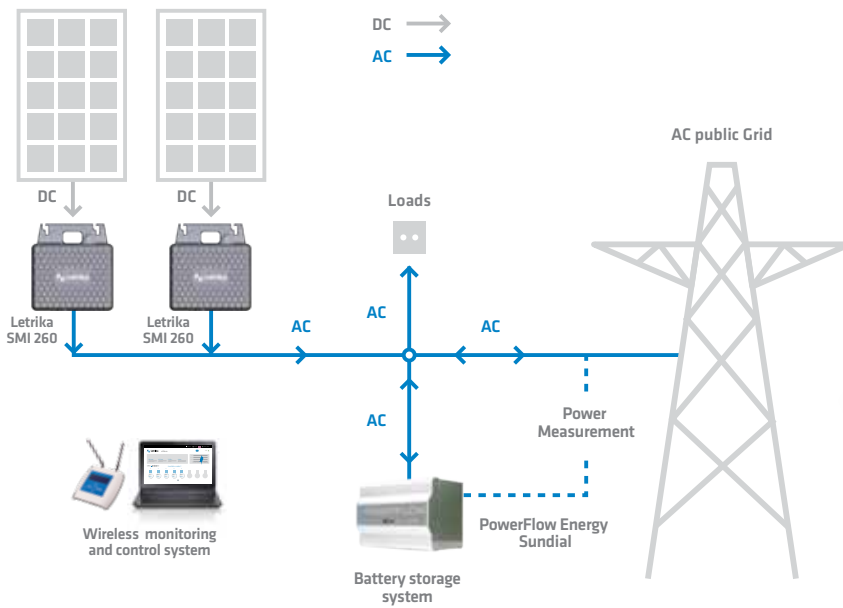


Figure 1

On-grid PV installation with grid connected AC coupled battery storage (optional)

- Optimize self-consumption
- Reduce electricity bills
- Modularity
- Optimal solution for Net metering

Utility smart grid PV applications

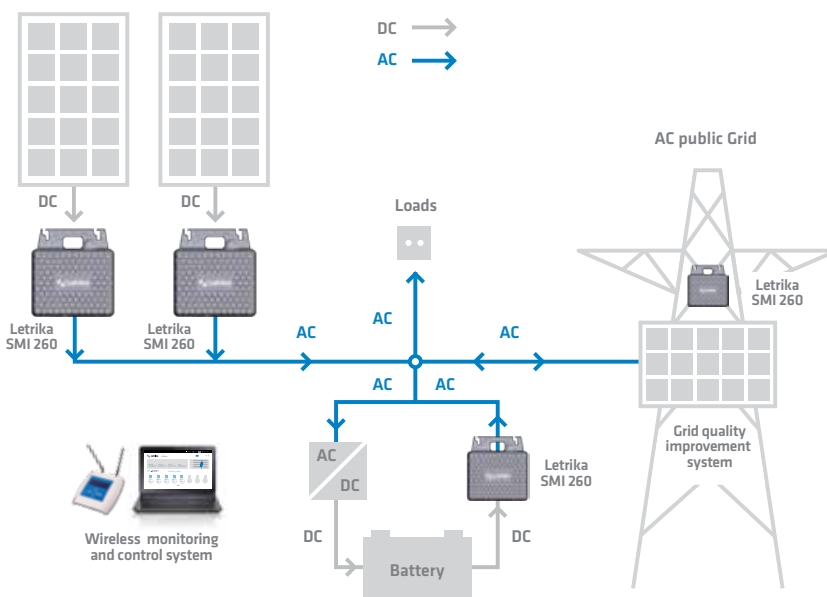


Figure 2

High distributed rooftop and pole mounted PV installation with AC coupled battery storage (optional)

- Increase share of renewable energy
- Grid voltage profile and stability improvement with power losses reduction
- On-site real and reactive power control
- Modular smart grid device

Micro, small and medium residential and light commercial rooftop combined on-grid and off-grid PV applications

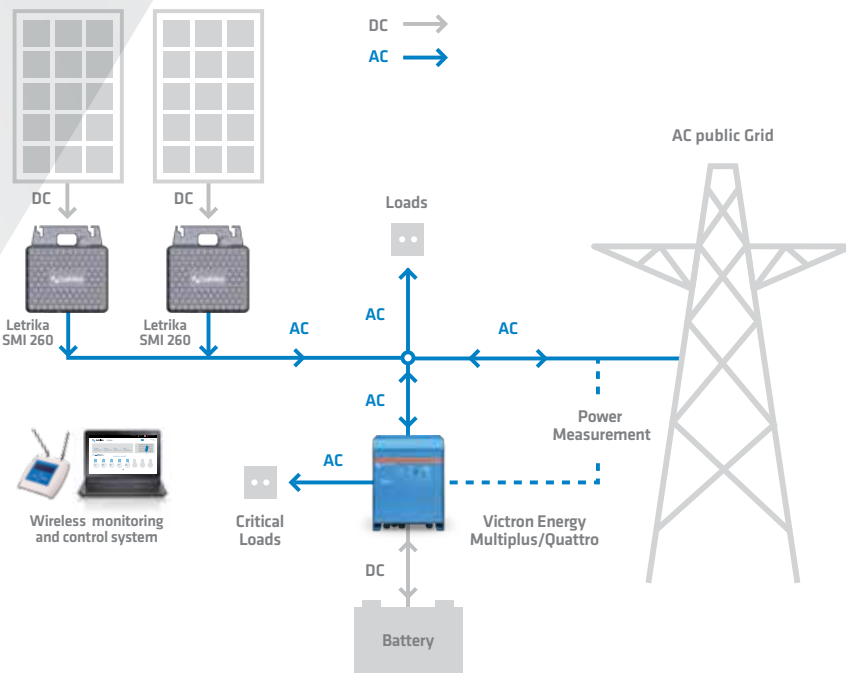


Figure 3A

PV installation with in parallel grid AC battery storage and backup

- Optimize self-consumption
- Modularity
- Demand - response PV energy management / surplus PV energy must be exported to the grid
- Cheap green on-site electricity
- There is no maximum PV power limit
- Excess PV energy during the day time is stored in the low voltage battery
- No minimum or maximum battery size
- Suitable for many battery types
- Anti-islanding detection
- No-break UPS output for critical loads

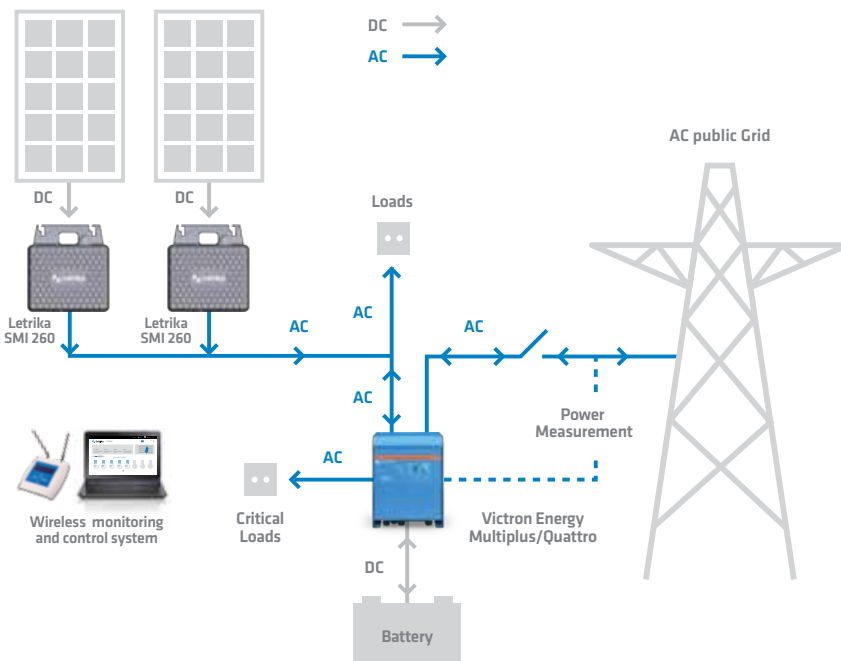


Figure 3B

PV installation with in series grid AC battery storage and backup

- Optimize self-consumption
- Maximal PV power must be lower than the inverter rating power
- Minimum low voltage battery energy capacity for 24 hours energy critical loads supply
- Demand-response PV energy management / surplus PV energy must be exported to the grid
- Can be programmed as off-grid system
- No-break UPS and PV output for loads and critical loads

Main advantages of Letrika SMI 260

Smart grid functionality with concurrent real and reactive power control capability within their whole AC power operating range.

Represents the power quantum of each PV array, which can be designed exactly according to the customer needs without overdesign waste.

Suitable for single and three phase installations.

No additional equipment for reactive power compensation needed.

Enables PV module level real-time wireless monitoring and control to optimize self-consumption and reduce electricity bills.

Allows high modularity, scalability and flexibility of on-site PV installations to increase ROI and customer consumption possibility on weak grids.

Complete safety design with integrated electro-magnetic double contact protection relay.

Represents active smart grid device, which can reduce energy losses and improve low voltage grid profile without necessary additional investments in reinforcement of medium-voltage or low-voltage weak grids.

Robust design with automotive quality electronics components and materials ensures very high reliability (MTBF>600 years) and very long lifetime (>25 years) also under extreme operating conditions (IP 67 protection).

Enables IoT and AC PV module plug&play solutions.

Suitable for modular AC LV battery storage and backup systems.

Together with wireless Communication Gateway enables remote smart grid real-time demand-response energy management of high distributed PV power generation and storage network.

Enables cheap green electricity for all and everywhere.

