

Automatic Sustainable Controller, ASC Plant Management

A new link between PV & genset power plants



Serving as a link between photovoltaic (PV) power plants and genset power plants, DEIF's Automatic Sustainable Controller (ASC Plant Management) is a safe and reliable control solution for PV/genset hybrid plants.

Stand-alone and Power Management applications

In stand-alone applications, the ASC Plant Management knows little about the surrounding environment in which it is placed. Based on transducer power readings and hardwired feedbacks alone, the ASC Plant Management determines the PV plant power references. This approach is applicable for integrating PV power in already commissioned genset plants with or without DEIF controllers. Stand-alone applications support applications containing up to six gensets.

The DEIF Power Management system fully integrates the PV plant and the genset plant into a unity. The ASC Plant Management is connected to the CAN bus constituting the internal DEIF Power Management communication link. This requires your genset plant to be equipped with AGC Plant Management controllers from DEIF.

Maximising PV penetration

The ASC Plant Management automatically maximises PV penetration in all operation modes according to the total genset/PV hybrid's load demand without compromising constraints such as minimum genset load demand.

Minimum genset load in island operation

Minimum genset load constraint applies to island operation only. It causes the PV penetration to decrease if compromised. This secures a certain amount of load on the gensets, eliminating the risk of reverse power situations and impure combustion and exhaust problems.

Spinning reserve

Defined as a percentage of the PV plant power production, the spinning reserve ensures sufficient genset plant reserves to compensate for potential PV production decreases. Available for power management applications only.

ASC Plant Management features

- ▶ Fully integratable in AGC PM Power Management applications
- ▶ Support of SunSpec protocol
- ▶ Simple graphical configuration
- ▶ Maximising PV penetration
- ▶ Minimum genset load requirement
- ▶ Spinning reserve demand
- ▶ Monitoring and supervision
- ▶ Minimum genset load requirement
- ▶ Record time commissioning with DEIF Emulation – uses and verifies the functions of the real system for test, production and design

