

# PV-Diesel Hybrid controllers

## HYBRID ADVANCED for large scale applications

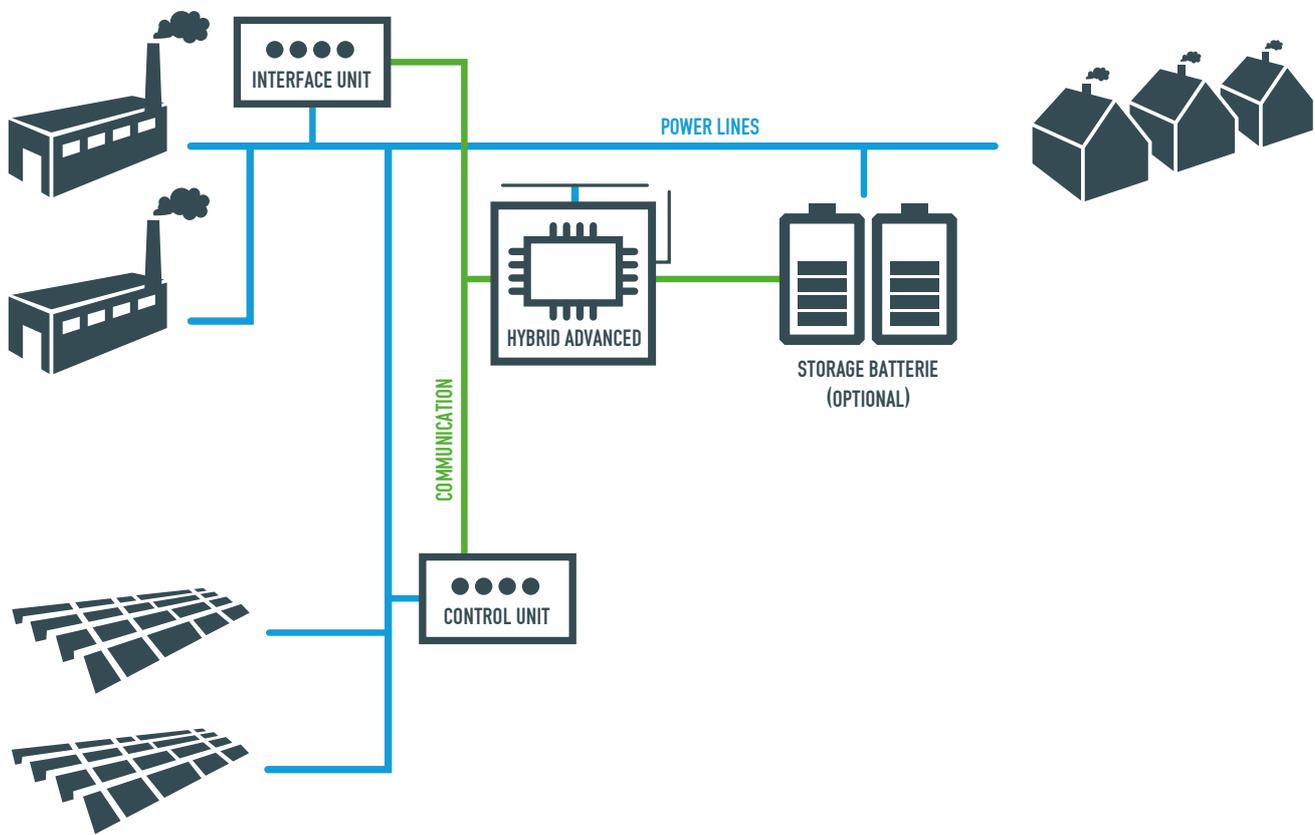


## HYBRID ADVANCED for large scale applications

With the HYBRID ADVANCED controller, elgris offers a platform for a high quality control system targeting multi generator applications starting at 150 kVA or single generator applications starting at 250 kVA. The unique features of the elgris controller define new standards in term of commissioning time, durability and performance.

Based on the inhouse developed HYBRID control algorithm, the elgris controller determines the operating point of the generator(s) and adjusts the photovoltaic system and/or generator accordingly. Due to the universal layout and standardized communication protocols and interfaces, a wide range of inverters is supported. The inverter set point is calculated in real-time and adjusts with a high resolution to optimize photovoltaic outputs and thus increase savings.

**With the elgris HYBRID ADVANCED controller, we offer a universal, scalable solution targeting customers in the field of production, mining, construction and other areas where most power is being consumed during daytime.**



## Working principle:

The elgris **HYBRID BASIC** controller measures **true three phases** the actual power supplied to the load by the generator in real time.

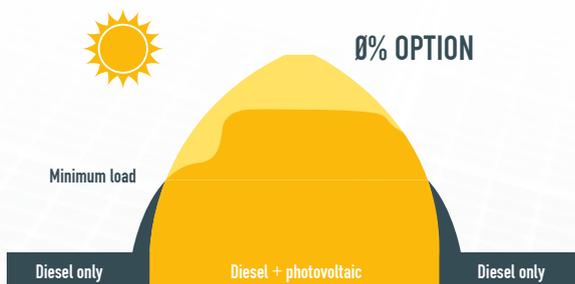
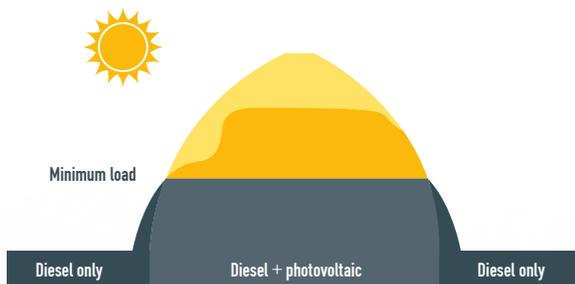
**When the load of the generator is below** a user defined threshold level, the controller will automatically reduce the power output of the photovoltaic to increase the load of the generator.

**When the load of the generator is still lower** than the minimum threshold level, the photovoltaic is disconnected to prevent the system for instability and protects the generator for reverse current.

**At night, or when the actual power of the photovoltaic is very low** (due to clouds etc), the load is supplied by the generator.

With the **HYBRID ADVANCED** controller it is possible to include a storage system like batteries and shut down the generator when there is a surplus of solar energy.

**This reduces fuel consumption and also maintenance costs of the generator.**



**Contact :** .....

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