# Single Line Diagram

Presented by

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### Definition

- The single-line diagram is the blueprint for electrical system analysis.
- It shows a correct power distribution path from the incoming power source to each downstream load – including the ratings and sizes of each piece of electrical equipment, their circuit conductors, and their protective devices.

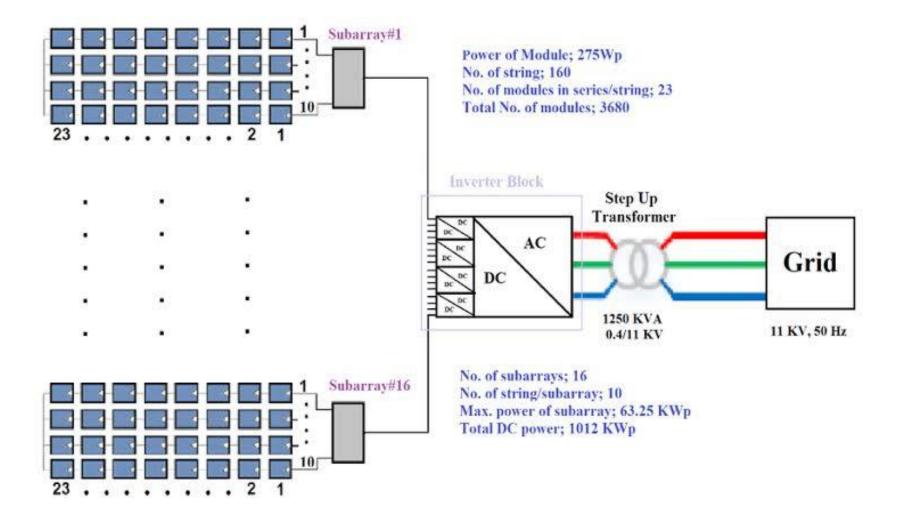
#### Use

- A one-line diagram is usually used along with other notational simplifications, such as the per-unit system.
- A secondary advantage to using a one-line diagram is that the simpler diagram leaves more space for non-electrical, such as economic, information to be included.

## SLD Vs. Schematic Diagram

- Single-line diagrams show the overall conceptual layout of a circuit. They typically condense threephase connections down to single lines for simplicity.
- Schematic diagrams show the network of contacts, a network that can be extremely complex, and the relays and motors that those contacts actuate.

## Photographs: On-grid



# Photographs: Off-grid

