

The inverter is a major component of photovoltaic (PV) systems either autonomous or grid connected. It affects the overall performance of the PV system. Any problems or issues with an inverter are difficult to notice unless the inverter totally shuts down. In this article, the characteristics of inverters are discussed along with some of the problems that can occur but are not often spotted. It is also shown that high resolution time monitoring may aid in identifying issues that otherwise would go unnoticed. The data have been collected under actual operating conditions and different times of the year allowing for a better overview of their performance as a function of irradiance or temperature.