

## Abstract

The study of the reliability of PV systems, although they are answered in the world, is rare. In Algeria we have recorded any university research laboratory on the subject, despite the government gives great importance to the development of PV systems from us. It is therefore important to know the reliability, availability and sustainability of these systems. This will help to objectively determine the lifetime of a PV system before the costs become more important than the gains from the system. The objective of this work is to calculate the reliability of the MPPT of PV system and simulate the combination of a photovoltaic panel with a DC/DC converter controlled by the technical Disrupts & Regards. Two choppers are available for study parallel (three conduction modes and three powers), and the chopper Cuk (for the same power)