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Comparison of MPPT strategies for solar modules

M. Calavia[1], J.M. Perié[1], J.F. Sanz[2] and J. Sallán[2]

[1] CIRCE Institute. C/María de Luna 3. 50018 Zaragoza.
Phone number: +34 976761000, ext: 5164. Fax number: +34 976 976732078. e-mail: marta.calavia@unizar.es; jmperie@unizar.es

[2] CIRCE Institute – Universidad de Zaragoza. Electrical Engineering Department. C/María de Luna 3. 50018 Zaragoza.
Phone number: +34 976762403/2399. Fax number: +34 976 976762226. e-mail: jfsanz@unizar.es; jsallan@unizar.es

Abstract. The paper studies the behavior of three different Maximum Power Point Tracking (MPPT) strategies applied to solar modules: three-point perturb and observe, fixed-step incremental conductance, and variable-step incremental conductance.

It starts with a brief description of each method and then it compares them considering three criteria: simplicity of implementation, capability to follow irradiance variations and sensitivity to noise in the required measurements. Diverse simulations have been performed and the main results are presented.