

A SINGLE – STAGE SOLAR POWER CONVERTER FOR PV BATTERY SYSTEM

G. S. SUGANYA¹, P. MOHAN² & K. N. BHANUPRAKASH³

^{1,2}PG Student, Department of Electrical and Electronics Engineering, Sapthagiri College of Engineering,
Anna University, Chennai, Tamil Nadu, India

³Principal, EKC Technical Campus Engineering College, Manjeri, Kerala, India

ABSTRACT

The main concept of the new converter is to use a Single - stage three phase grid ties - solar PV converter to perform dc/dc and dc/ac operations. This converter solution is appealing for PV-battery applications, because it minimizes the number of conversion stages, improving efficiency and reducing cost, weight and volume.

KEYWORDS: Converter, Energy Storage, Photovoltaic (PV), Solar