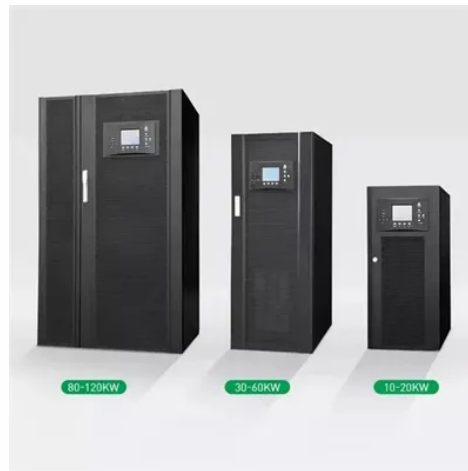


## AC inverter to three-box power



### Overview

This guide will focus on the implementation of a 3 phase inverter with open-loop generation of 3 phase sinusoidal currents in a resistive load. The topology of this converter is shown in the following diagram. It is simply made of three half-bridge modules, each connected to an inductor in. To be able to properly retrieve the measurements, the analog input channels of the B-Box RCP need to be configured properly (more information on the analog front-end configuration of the B-Box RCP can be found here: [Analog front-end configuration on B](#)). Two pieces of software are required to develop the B-Box control code. The imperix Automated Code Generation Software Development Kit (ACG SDK) can be downloaded here. Besides, a compatible version of Matlab(2016 and newer) is required as. One could then connect the 3 phase inverter to the grid and replace the DC power supply with a photovoltaic panel with a boost stage, to form a Three-phase PV inverter for grid-tied applications and showcase the great potential of imperix's solution for modular.

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