Ingeteam

POWER OUTPUT VS INPUT SOLAR VOLTAGE

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1. INDEX

2. INTRODUCTION

This document defines the behavior of POWERMAX inverter power output according the variation of voltage input of solar panels.
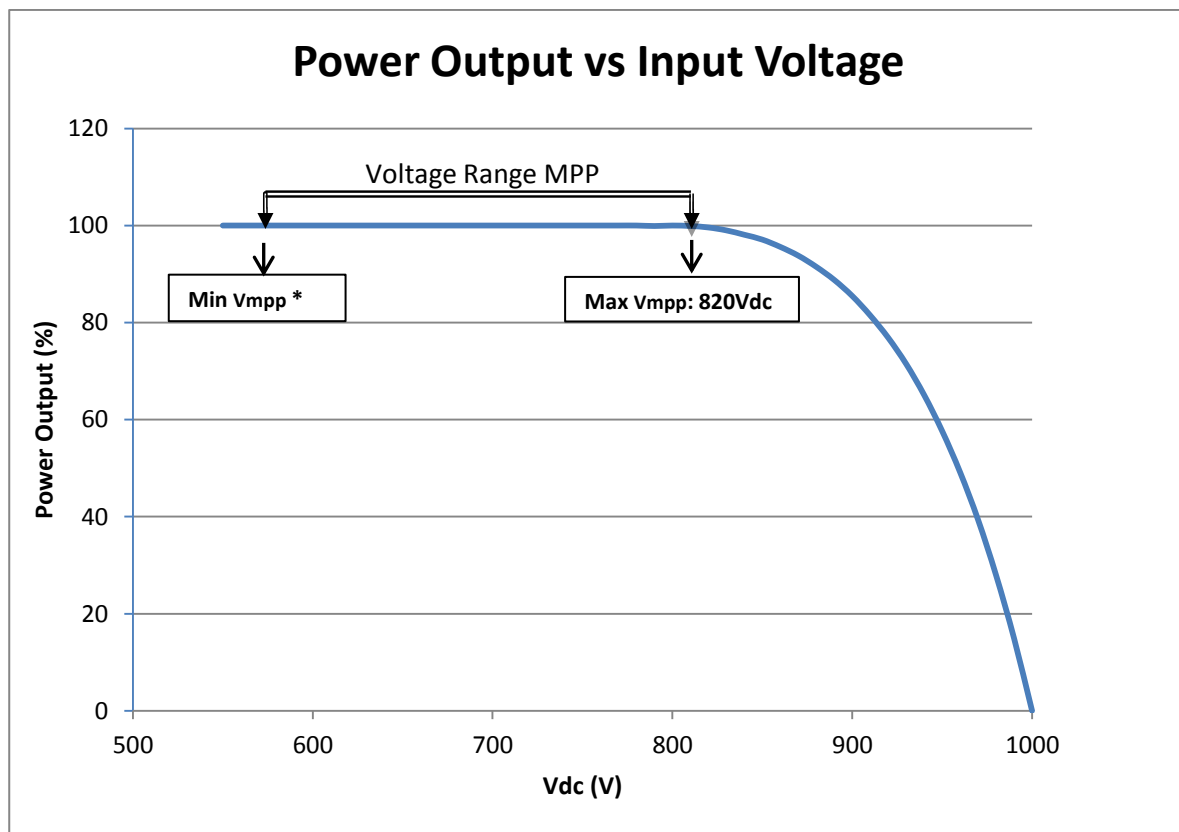
3. VOLTAGE RANGE MPP

MPP tracking algorithm is enable in a defined values of voltage. According the output power and model of the inverter is this range wider or tighter, starting in a lower voltage (Vmin Mppt).

The maximal voltage of Mppt has a limit value of 820Vdc for all the models.
Is the voltage higher of this limit the Mpp Tracking is disabled. At this point the inverter could not reach the maximal power of the solar installation.

In order to guarantee the working of the power electronics in safety conditions, the maximal output power of the inverter is limited for voltages up to 820Vdc

This diagram shows the maximal possible output power of inverter

Power Output vs Input Voltage

Voltage Range MPP

Min Vmpp *

Max Vmpp: 820Vdc

Note: Min Vmpp is defined by <u>power</u> and <u>model</u> of POWERMAX inverter