FTMRS SOLAR

Inverter power threshold

Overview

What is the power threshold of a PVSyst inverter?

The Power threshold of most inverters is of the order of 1% or less of Pnom. In the version 5, PVsyst fixes a limit at 0.5%. Many manufacturers contest this limit. In the version 6, this limit is only required when PVsyst has to build an automatic efficiency profile from the Effmax and EffEURO parameters.

How does an inverter lose power?

However there are limits in power, voltage and current. When attaining one of these limits, the inverter will clip the operating point on the intersection of the I/V curve and this limit. The power difference between the MPP of the arrays' I/V curve and the effective power of this operating point on the limit curves is accounted as inverter loss:.

How does an inverter track a power point?

In normal conditions it will choose the maximum power point (MPPT tracking). However there are limits in power, voltage and current. When attaining one of these limits, the inverter will clip the operating point on the intersection of the I/V curve and this limit.

How do you calculate inverter loss?

The power difference between the MPP of the arrays' I/V curve and the effective power of this operating point on the limit curves is accounted as inverter loss: The current limit condition may be specified: Imax = Pnom (DC) / VminPNom, where PnomDC = PnomAC / Efficiency.

Inverter power threshold

For inverters, I can't define a Power threshold as low as ...
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Grid-tied Point Control
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