

Power Optimizer M500 – Information sheet

Without Power Optimizer M500

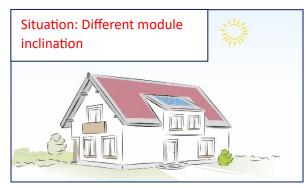














Description of the situations

As modules are connected in a series and in a series connection the current in all modules is only as high as that of the worst module, the yield of the entire solar system drops sharply in the event of **shading**, **different orientations** and **different module inclinations**. Due to the series connection, the modules marked in red above therefore all generate significantly less power.

The solution is the Power Optimizer M500

On the affected modules, the BRC optimiser increases the current to the level of the unaffected modules by reducing the voltage in the same ratio. The remaining modules marked in green above are no longer slowed down and the energy of the affected modules is utilised. Hot spot formation is avoided and the **maximum yield** is achieved. This means that the entire roof area can be optimally utilised.



Recommendation for the correct use of the Power Optimizer M500

Situation	Partial optimisation	Full optimisation
Shading	4	4
Different orientation		-
Different module inclinaton		4

Overview of the Power Optimizer M500

- Maximum yield thanks to the **patented switch-off function** of the BRC optimiser when there is no need for optimisation during the course of the day
- Not required on all modules, but only on affected modules
- **Inverter independence** from all common brands with MPP tracking (see compatible inverter page on our homepage)
- Maximum efficiency thanks to Ultra Fast MPPT (20 times faster switching)
- Can also be used at 85° ambient temperature without loss of power
- Simple installation
 - o Plug & Play (without software, apps, etc.)
- Reliable end-of-line **production in Europe**
 - No BRC optimiser goes on sale without a function test
- High-quality components
 - o Original MC4 plug to prevent the risk of arcing
 - o 6mm² cable for greater heat and EMC resistance
 - Water-repellent full encapsulation to protect against moisture penetration
- Professional customer service (by phone, e-mail and support form on our homepage)

Our services for craftsmen & installers

- 1. **BRC Checker App** Does the module match the BRC Optimizer?
- 2. list of compatible inverters Can the planned inverter be combined with the BRC Optimizer?
- 3. **planning assistant** on the homepage How many BRC Optimizers are required for the system?
- 4. webinars every Thursday weekly training sessions with the opportunity for a question and answer session
- 5. support/service fast support and advice via the support form on our homepage

