

# BRC

## SOLAR

GERMAN BRAND

### Power Optimizer M600-M & Gateway BRConnect

*Module Optimizer for Photovoltaic Systems  
with Monitoring*



#### **Maximum Yield**

*Solves the problem of shading, different alignment and different module inclinations*



#### **Maximum Quality & Efficiency**

*Standby function, Ultra Fast MPP tracking with 20x faster switching*



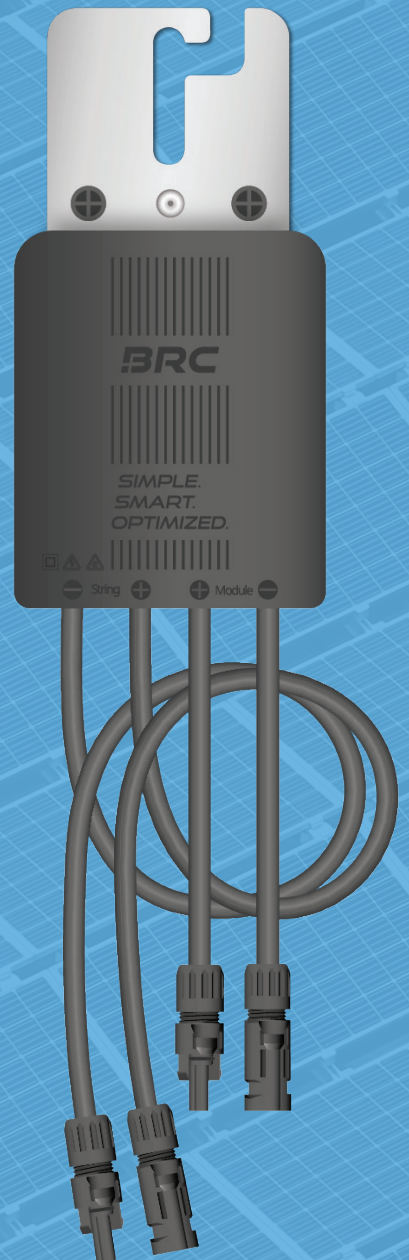
#### **Monitoring Function**

*Power data via mobile Power Manager App or on the web*



[www.brc-solar.de](http://www.brc-solar.de)

**New**



**SIMPLE.  
SMART.  
OPTIMIZED.**

## TECHNICAL DATA - M600-M OPTIMIZER

### ELECTRICAL DATA

|                          |                           |
|--------------------------|---------------------------|
| Total Max. Input Voltage | at -40°C (-40°F): 70 V DC |
| Input voltage range      | 16 - 70 V DC              |
| Rated current            | 16 A DC                   |
| Short circuit current    | 20 A DC                   |
| Maximum Input Power      | 600 W                     |
| Overvoltage Category     | II                        |
| Maximum Efficiency       | 99,3 %                    |

|                         |              |
|-------------------------|--------------|
| Output Voltage Range    | 0 to Voc     |
| Output Power Range      | 0 W to 600 W |
| Maximum System Voltage  | 1000 V       |
| Safety Protection Class | II           |

### MECHANICAL DATA

|                        |                     |
|------------------------|---------------------|
| Dimensions (W x L x H) | 78mm x 145mm x 22mm |
| Weight                 | 420g                |
| Installation           | with M8 Screw       |

### PORTS

|                             |                         |
|-----------------------------|-------------------------|
| Cable Length (Input/Output) | 0,15m / 1,20m           |
| Connectors                  | Stäubli MC4 (for 1000V) |
| Conductor Cross-Section     | 4,0 mm²                 |

### AMBIENT CONDITIONS

|                                           |                                    |
|-------------------------------------------|------------------------------------|
| IP-Protection-Class                       | IP68                               |
| Environmental Operating Temperature Range | - 40°C to + 85°C (-40°F to +185°F) |
| Relative Humidity                         | 0% to 100%                         |

### COMMUNICATION

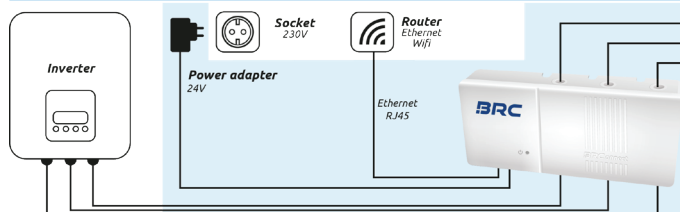
|                         |                               |
|-------------------------|-------------------------------|
| Communication principle | Powerline Communication (PLC) |
|-------------------------|-------------------------------|

### SYSTEM REQUIREMENTS

|                                  |             |
|----------------------------------|-------------|
| Min. - Max. number of Optimizers | 4 - 25      |
| Required gateway for monitoring  | BRConnect   |
| Parallel strings                 | Not allowed |
| Max. length of string cabling    | 300m        |

### APPLIED STANDARDS

|        |                                       |
|--------|---------------------------------------|
| EMC    | IEC EN 61000-6-2,<br>IEC EN 61000-6-3 |
| Safety | IEC EN 62109-1, -2, -3                |
| RoHS   | RoHS compliant                        |



## TECHNICAL DATA - BRConnect

### ELECTRICAL DATA

|                         |         |
|-------------------------|---------|
| Nominal input voltage   | 24 V DC |
| Max. Input current      | 350 mA  |
| Nominal power           | 2,5 W   |
| Safety Protection Class | III     |

### MECHANICAL DATA

|                        |                      |
|------------------------|----------------------|
| Dimensions (W x L x H) | 240mm x 100mm x 52mm |
| Weight                 | 540g                 |
| Installation           | 4 Screws with dowels |

### PORTS

|                                |                                  |
|--------------------------------|----------------------------------|
| Max. Diameter for DC cable     | 11 mm                            |
| Input connections Ethernet     | RJ45 / 100MBit                   |
| Power supply input connections | P1J (ID 2,0mm; AD 5,5mm; L 11mm) |

### AMBIENT CONDITIONS

|                                           |                                  |
|-------------------------------------------|----------------------------------|
| IP-Protection-Class                       | IP40                             |
| Environmental Operating Temperature Range | - 20°C to + 55°C (-4°F to 131°F) |
| Relative Humidity                         | 5% to 95 % (not condensing)      |

### COMMUNICATION

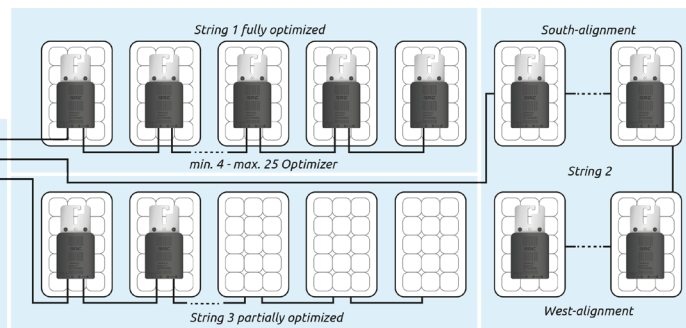
|                             |                               |
|-----------------------------|-------------------------------|
| Communication principle     | Powerline Communication (PLC) |
| WiFi / Bluetooth / Ethernet | 2,4 GHz / 4.2 / Yes           |

### SYSTEM REQUIREMENTS

|                                                |                        |
|------------------------------------------------|------------------------|
| Compatible Optimizer                           | Power Optimizer M600-M |
| Min. number of Optimizers                      | 4                      |
| Max. number of Optimizers                      | 25                     |
| BRConnect per PV-plant / Strings per BRConnect | 1 / 1-3                |
| Parallel strings                               | Not allowed            |
| Max. Length of string cabling                  | 300m                   |

### APPLIED STANDARDS

|        |                                                                                                        |
|--------|--------------------------------------------------------------------------------------------------------|
| EMC    | IEC EN 61326-1,<br>IEC EN 61000-3-2,<br>IEC EN 61000-3-3,<br>ETSI EN 3011489-1,-17,<br>ETSI EN 300 328 |
| Safety | IEC EN 61010-1                                                                                         |
| RoHS   | RoHS compliant                                                                                         |



#### WARRANTY

Because of our Long-Life-Electronics we grant warranty for 25 years for the Power Optimizer M600-M



#### LONG-LIFE-ELECTRONICS

The Power Optimizer possesses a long-life circuit using the newest GaN technology



#### MAXIMUM YIELD

More PV-modules can be installed by using BRC Power Optimizers



#### RELIABLE SUPPORT

You can reach us for any concerns by e-mail and phone

