BRC SOLAR

*GERMAN BRAND*

# *Power Optimizer M605-M & Gateway BRConnect 2.0*

*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*

***Secure Communication***
*Data transmission via powerline (using DC power lines instead of wireless) and data storage exclusively on German servers*




***Now fully optimizable***




NEW

*SIMPLE. SMART. OPTIMIZED.*

EUPD RESEARCH
TOP INNOVATION
OPTIMIZERS
GERMANY
2026

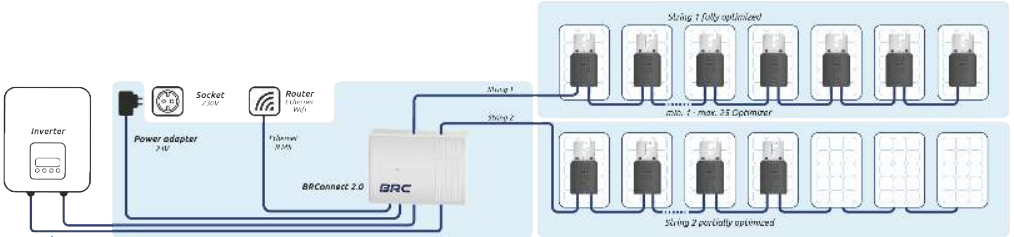
**www.brc-solar.de**

## TECHNICAL DATA - M605-M OPTIMIZER

| | | |
|---|---|---|
| **ELECTRICAL DATA** | | |
| INPUT | Input voltage range | 16 - 68 V DC |
| | Rated current | 16 A DC |
| | Short circuit current | 20 A DC |
| | Maximum Input Power | 605 W |
| | Overvoltage Category | II |
| | Maximum Efficiency | 99,5 % |
| OUTPUT | Output Voltage Range | 0 to 68 V DC |
| | Output Power Range | 0 W to 605 W |
| | Maximum System Voltage | 1000 V |
| | Safety Protection Class | II |
| **MECHANICAL DATA** | | |
| | Dimensions (W x L x H) | 78 mm x 145 mm x 22 mm |
| | Weight | 500 g |
| | Installation | M8 Screw; optional BRClamp |
| **PORTS** | | |
| | Cable Length (Input/Output) | 0,16 m / 1,20 m |
| | Connectors | Stäubli MC4 |
| | Conductor Cross-Section | 4,0 mm² |
| **AMBIENT CONDITIONS** | | |
| | IP-Protection-Class | IP68 |
| | Enviromental 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** | | |
| | Compatible gateway | BRConnect 2.0 |
| | Min. optimizers (number per string) | 1 |
| | Max. number of optimizers (per string) | 25 |
| | Max. length of string cabling | 300 m |
| **APPLIED STANDARDS** | | |
| | EMC | EN 62920:2024 |
| | Safety | IEC 62790 / IEC 62109-1/-3 |
| | RoHS | RoHS compliant |

## TECHNICAL DATA - BRConnect 2.0

| | |
|---|---|
| **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) | 104.6 mm x 148 mm x 54 mm |
| Weight | 330 g |
| Installation | 4 Screws with dowels |
| **PORTS** | |
| Max. Diameter for DC cable | 11 mm |
| Input connections Ethernet | RJ45 / 100 MBit |
| Connection for the included power adapter | P1J (ID 2,0 mm; AD 5,5 mm; l 11 mm) |
| **AMBIENT CONDITIONS** | |
| IP-Protection-Class | IP40 |
| Enviromental 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 / Ethernet | 2,4 GHz / 100BASE-TX |
| **SYSTEM REQUIREMENTS** | |
| Compatible Optimizer | M605-M |
| Min. number of Optimizers (per string) | 1 |
| Max. number of Optimizers (per string) | 25 |
| BRConnect per PV-plant | 3 pieces |
| Number of monitorable strings per BRConnect | 2 strings |
| Parallel strings | Not allowed |
| Max. Length of string cabling | 300 m |
| **APPLIED STANDARDS** | |
| EMC | IEC EN 61326-1,<br>IEC EN 61000-3-2,<br>IEC EN 61000-3-3,<br>ETSI EN 3011 489-1,-17,<br>ETSI EN 300 328 |
| Safety | IEC EN 61010-1 |
| RoHS | RoHS compliant |
| Data security | EU Regulation 2024/2847<br>EU Regulation 2023/2854 |




**BRClamp** New
Optional
frame mounting
on the module



**WARRANTY**
Because of our Long-Life-Electronics we grant warranty for 25 years for all Power Optimizer

**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

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