

# 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



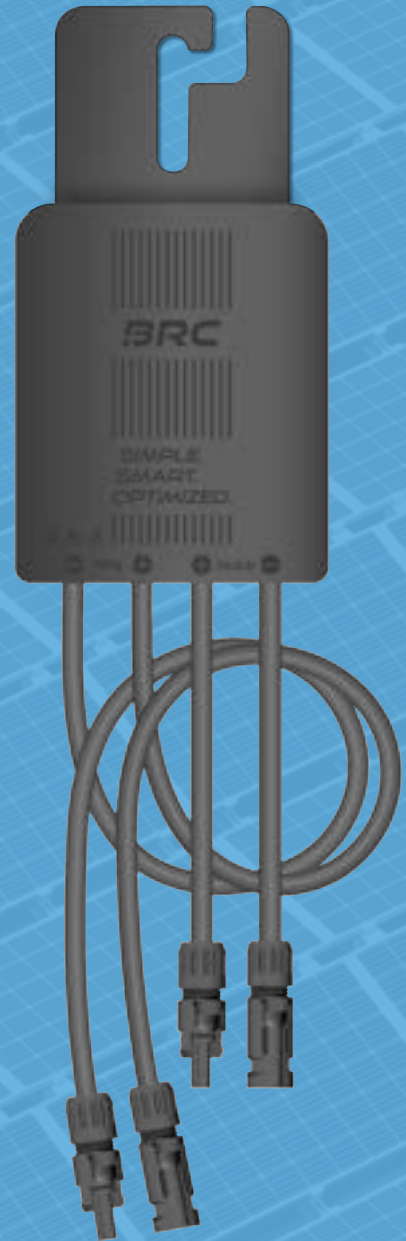
### Maximum Quality & Efficiency

Standby function, Ultra Fast MPP tracking with 20x faster shifting



### Monitoring Function

Power data via mobile Power Manager App or on the web



**SIMPLE.  
SMART.  
OPTIMIZED.**

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

## TECHNICAL DATA - M600-M OPTIMIZER

### ELECTRICAL DATA

Total Max. Input Voltage	at -40°C (-40°F): 70 V d.c
Input voltage range	16 - 70 V d.c.
Rated current	16 A d.c.
Short circuit current	20 A d.c.
Maximum Input Power	600 W
Overvoltage Category	II
Maximum Efficiency	99,5 %

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 mm <sup>2</sup>

### AMBIENT CONDITIONS

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

### COMMUNICATION

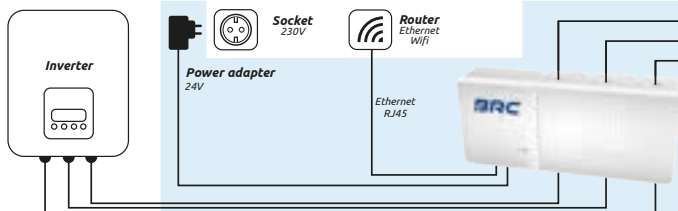
Communication principle	Powerline Communication (PLC)
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### SYSTEM REQUIREMENTS

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

### STANDARDS

EMV	IEC61000-6-2, IEC61000-6-3
Safety	IEC62109-1, -2, -3 / IEC62790
RoHS	RoHS compliant



## TECHNICAL DATA - BRConnect

### ELECTRICAL DATA

Nominal input voltage	24 V d.c
Max. Input current	350 mA
Nominal current consumption/Standby	6 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 bis + 55°C (-20°F to +55°F)
Relative Humidity	5% to 95 % (not condensing)

### COMMUNICATION

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

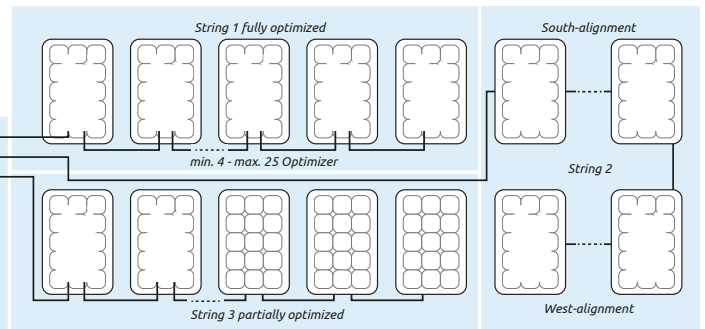
### SYSTEMANFORDERUNGEN

Compatible Optimizer	Power Optimizer M600-M
Min. number of Optimizers	4
Max. number of Optimizers	25
BRConnect per PV-plant / Stings per BRConnect	2 / 1-3
Parallel strings	Not allowed
Max. Length of string cabling	300m

### STANDARDS

EMV	EN 61000-6-2, EN 61000-6-3
Safety	EN 61010-1
RoHS	RoHS compliant

preliminary data, qualification is pending



#### 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

