BRC SOLAR

GERMAN BRAND

Now fully optimizable

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
Patented 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



SIMPLE.
SMART.
OPTIMIZED.

EUPD RESEARCH
TOP INNOVATION
OPTIMIZERS
GERMANY
2026

www.brc-solar.de

V1.2.1 11/2026

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

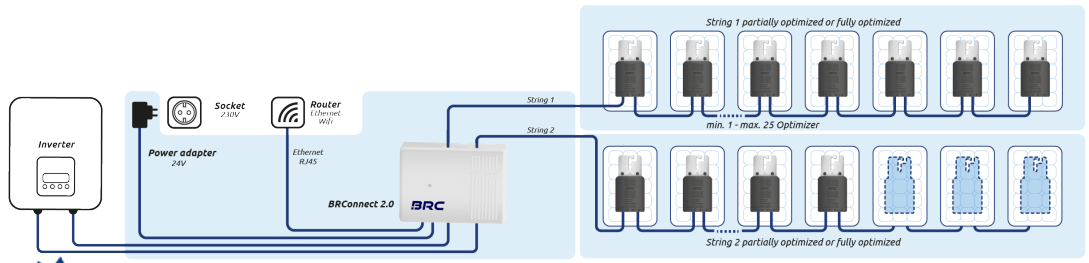
Communication principle	Powerline Communication (PLC)
WiFi / Ethernet	2,4 GHz / 100BASE-TX

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

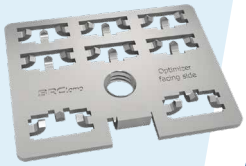
EMC	IEC EN 61326-1, IEC EN 61000-3-2, IEC EN 61000-3-3, ETSI EN 3011 489-1,-17, ETSI EN 300 328
Safety	IEC EN 61010-1
RoHS	RoHS compliant
Data security	EU Regulation 2024/2847 EU Regulation 2023/2854



BRClamp

New

Optional frame mounting on the module



WARRANTY
Thanks to our long-life electronics, we offer a 25-year warranty on all BRC Power Optimizers and a 10-year warranty on the BRConnect 2.0.

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

BRC SOLAR

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