

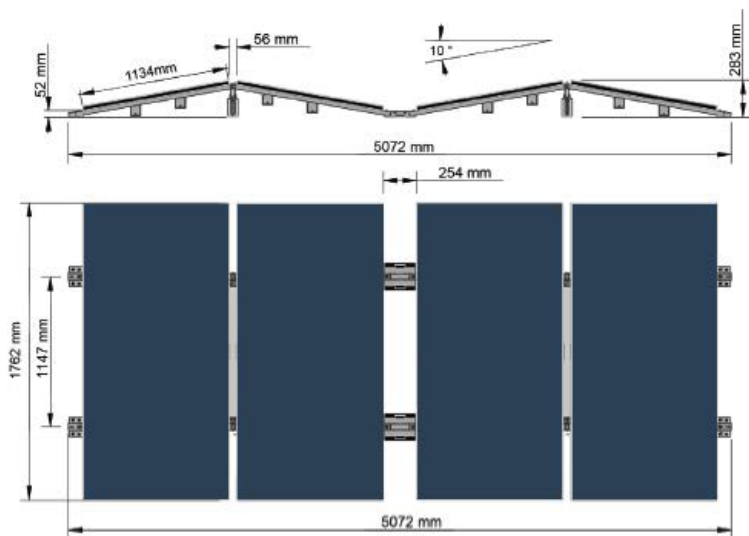
DATABLAD SMARTSOLARBOX



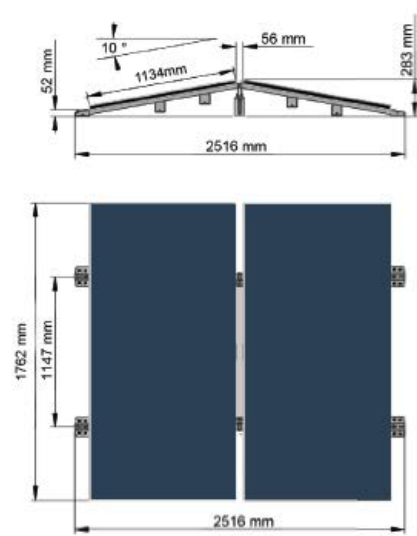
DMEGC
DM445M10RT-B54HBW
445W

VERSJON 5.0

SSB4:



SSB2:

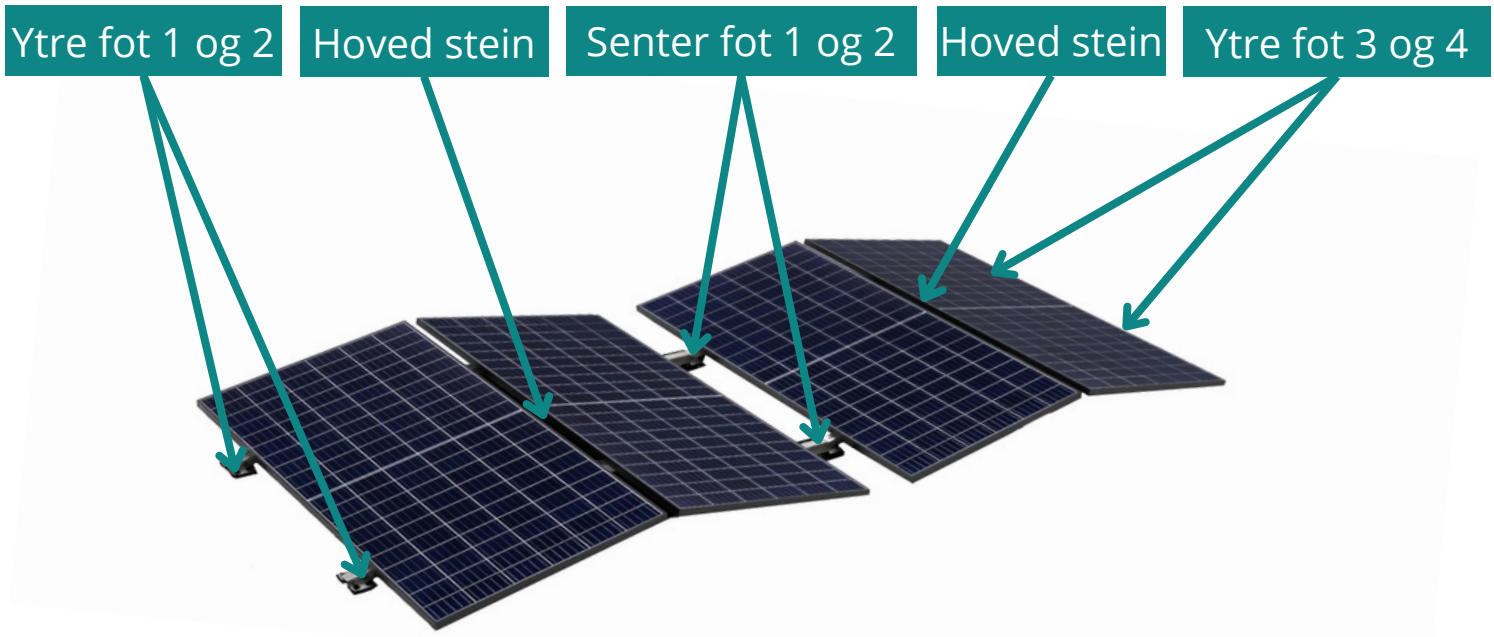


Teknisk Data

Anvendelsesområde	Flate tak med en helning på $\leq 5^\circ$ med folie eller asfalttak, på betong, grus eller grønne tak; også egnet for tak med trapesformet blikk.
Ballast	Innebygde betongballastelementer - ingen gjennomtrengning av taket
Vinkel	10°
Retning	Øst-Vest
Materiale konstruksjon	Magnelis® ZM310
Berøring på taket	RegupolSolarAlu 10mm (PUR-bond gummi granulat)
DC-Kabel	Integrert MC4-Evo2 plugg, 4mm ² - 10 års garanti
Optimizer/Microinverter	Valgfri optimizer eller microinverter kan integreres i SmartSolarBox-systemet under produksjonen.
Godkjenninger:	Vind test IFI. LoadtestsREECH



Vektfordeling SmartSolarBox Light

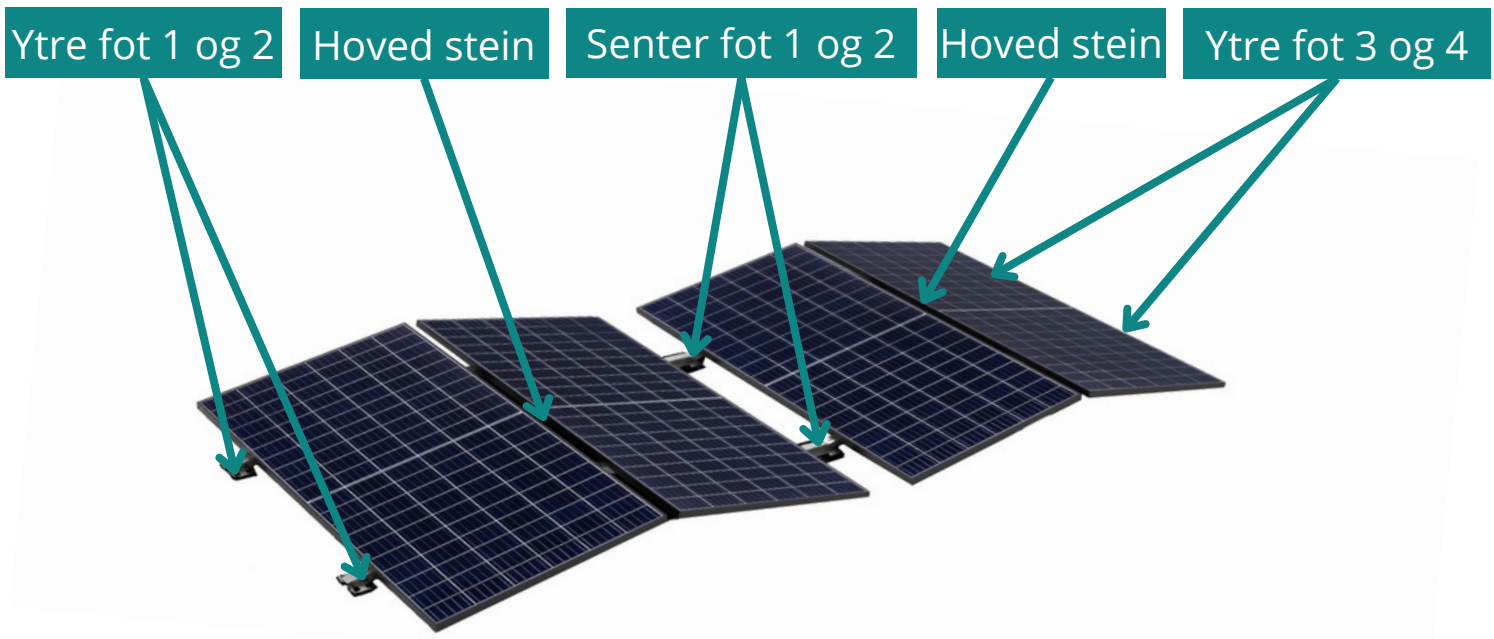


	Kontakt flate [cm ²]	Vektfordeling [%]	Trykk [N]	Trykk m ² [N/m ²] == [PA]
Ytre fot 1	94	4,28 %	68,1	7242
Ytre fot 2	94	4,28 %	68,1	7242
Hoved stein	470	33,25 %	529,5	11265
Senterfot 1	284	8,20 %	130,6	4598
Senterfot 2	284	8,20 %	130,6	4598
Hoved stein	470	33,25 %	529,5	11265
Ytre fot 3	94	4,28 %	68,1	7242
Ytre fot 4	94	4,28 %	68,1	7242
Total	1884	100,00 %	1592,4	

Modul bredde	1134	mm
Modul lengde	1762	mm
Modul vekt	24,5	kg
System lengde SSB4 V 5.0	5112	mm
Dekningsområde for SSB4 V5.0	9,01	m ²
Modul areal	2,00	m ²
Fot areal per modul	0,05	m ²

Type SSB	Vekt	Fordelt last
SSB4 Corner	309,4kg	35,15kg/m ²
SSB4 Heavy	236,4kg	26,85kg/m ²
SSB4 Light	162,4kg	18,45kg/m ²

Vektfordeling SmartSolarBox Heavy

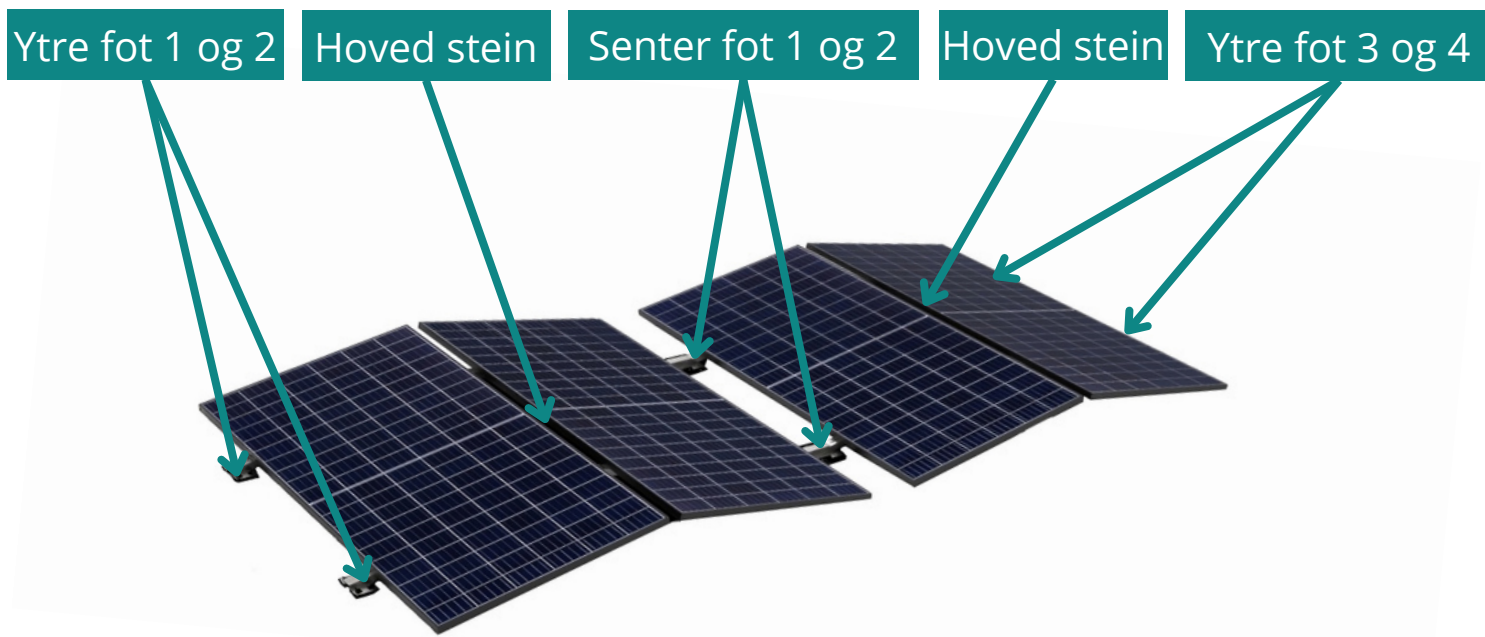


	Kontakt flate [cm ²]	Vektfordeling [%]	Trykk [N]	Trykk m2 [N/m ²] == [PA]
Ytre fot 1	94	4,33 %	100,3	10666
Ytre fot 2	94	4,33 %	100,3	10666
Hoved stein	470	34,10 %	790,5	16819
Senterfot 1	284	7,25 %	168,1	5918
Senterfot 2	284	7,25 %	168,1	5918
Hoved stein	470	34,10 %	790,5	16819
Ytre fot 3	94	4,33 %	100,3	10666
Ytre fot 4	94	4,33 %	100,3	10666
Total	1884	100,00 %	2318,1	

Modul bredde	1134	mm
Modul lengde	1762	mm
Modul vekt	24,5	kg
System lengde SSB4 V 5.0	5112	mm
Dekningsområde for SSB4 V5.0	9,01	m ²
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SSB4 Corner	309,4kg	35,15kg/m ²
SSB4 Heavy	236,4kg	26,85kg/m ²
SSB4 Light	162,4kg	18,45kg/m ²

Vektfordeling SmartSolarBox Corner



	Kontakt flate [cm ²]	Vektfordeling [%]	Trykk [N]	Trykk m ² [N/m ²] == [PA]
Ytre fot 1	94	5,20 %	157,8	16784
Ytre fot 2	94	5,20 %	157,8	16784
Hoved stein	470	30,75 %	932,9	19850
Senterfot 1	284	8,85 %	268,5	9454
Senterfot 2	284	8,85 %	268,5	9454
Hoved stein	470	30,75 %	932,9	19850
Ytre fot 3	94	5,20 %	157,8	16784
Ytre fot 4	94	5,20 %	157,8	16784
Total	1884	100,00 %	3034,0	

Modul bredde	1134	mm
Modul lengde	1762	mm
Modul vekt	24,5	kg
System lengde SSB4 V 5.0	5112	mm
Dekningsområde for SSB4 V5.0	9,01	m ²
Modul areal	2,00	m ²
Fot areal per modul	0,05	m ²

Type SSB	Vekt	Fordelt last
SSB4 Corner	309,4kg	35,15kg/m ²
SSB4 Heavy	236,4kg	26,85kg/m ²
SSB4 Light	162,4kg	18,45kg/m ²



Residential / Commercial



N-Type

Bifacial Module with Double Glass

Type: DMXXM10RT-B54HSW/HBW



Power Range: 435 - 450 W

Max. Efficiency : 22.52 %



Bifacial Module Application

Up to 25 % higher electricity yields due to active cell technology in bifacial glass/glass modules on both sides.



Better Performance

Our modules perform better on sunny and hot days thanks to its optimized temperature coefficient.



Excellent Low Light Performance

Our modules can also provide higher power output under low light conditions, such as sunset, cloudy, or dawn.



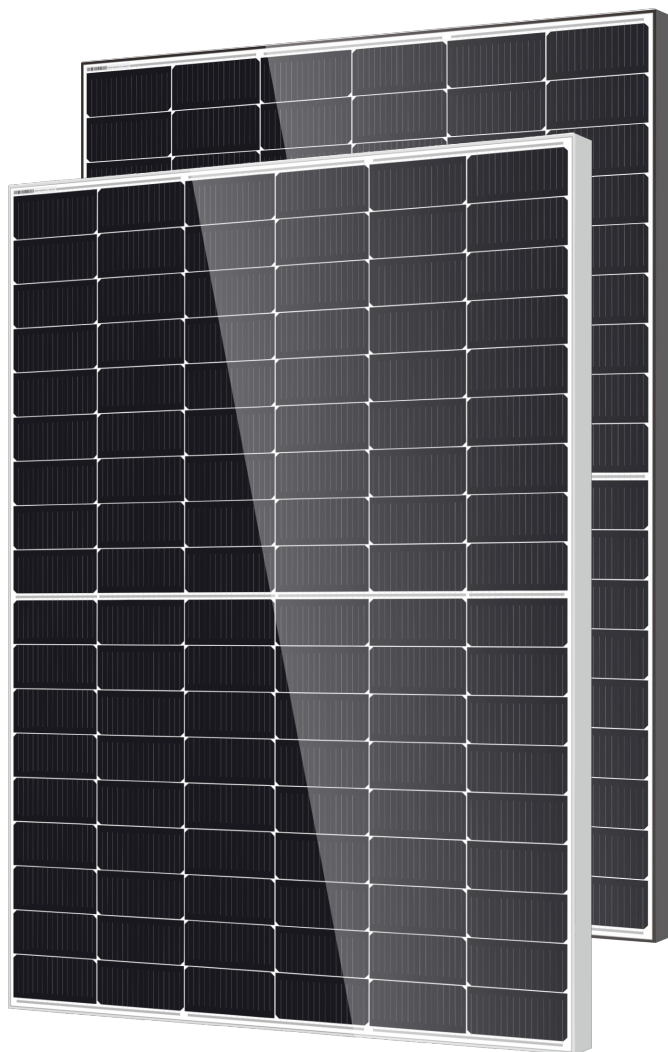
Excellent Quality

More than 40 years' experience of manufacturing and intensive quality tests above the IEC standard ensures reliable modules and a secured investment.



Assumption of Environmental, Social and Governance Responsibility (ESG)

DMEGC stands for his responsibility. Production is certified according to SA 8000 (ILO standards).



Certifications

- SA 8000** ILO Standards. Social responsibility standards
- ISO 9001** Quality management system
- ISO 14001** Environmental management system
- ISO 45001** Occupational health and safety management system
- ISO 50001** Energy management system



A member of Hengdian Group

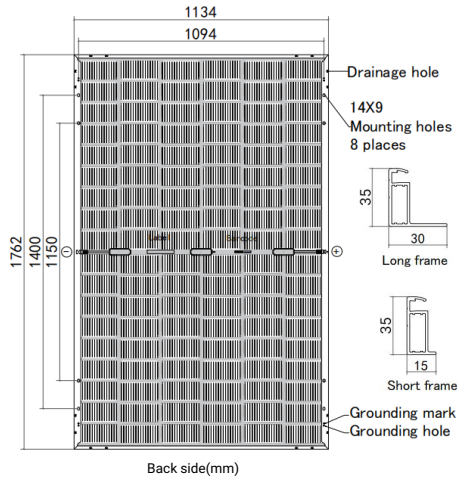


DMXXXM10RT-B54HSW/HBW



Module Specification

Cell Type	N -type Mono-crystalline , 108 (6x18)
Dimensions (mm)	1762 x 1134 x 35
Weight (kg)	24.5
Front Cover	2 mm heat strengthened glass with anti -reflective coating
Rear Cover	2 mm heat strengthened glass
Junction Box	3 Diodes, IP68 according to IEC 62790
Cables	4 mm ² solar cable, 1.1 m or Customized Length
Connector Type	PV-ZH202B or MC4-EVO 2A (1500V)



Electrical Specifications¹

Module Type	DM435M10RT-B54HSW/HBW		DM440M10RT-B54HSW/HBW		DM445M10RT-B54HSW/HBW		DM450M10RT-B54HSW/HBW	
Testing Condition	STC ²	NMOT ³	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (Pmax/W)	435	327	440	331	445	335	450	339
Maximum Power Current (Imp/A)	13.35	10.79	13.42	10.84	13.48	10.89	13.54	10.94
Maximum Power Voltage (Vmp/V)	32.59	30.45	32.81	30.65	33.03	30.86	33.24	31.06
Short-circuit Current (Isc/A)	13.78	11.15	13.84	11.20	13.90	11.25	13.96	11.30
Open-circuit Voltage (Voc/V)	39.20	37.13	39.40	37.32	39.60	37.51	39.80	37.70
Module Efficiency STC (%)	21.77		22.02		22.27		22.52	

¹ Measurements according to IEC 60904-3, Measurement tolerance: ISC: ±4%, VOC: ±3%, Bifaciality: 80% ±10%

² STC (Standard Test Condition): Radiation 1000 W/m², Module temperature 25 °C, AM = 1.5

³ NMOT: Radiation 800 W/m², Ambient temperature 20 °C, AM = 1.5, Wind Speed 1 m/s

BIFACIAL OUTPUT - REAR SIDE POWER GAIN

10 %	Pmax (STC)	479	484	490	495
20 %	Pmax (STC)	522	528	534	540
30 %	Pmax (STC)	566	572	579	585

Certifications and Warranty

Certifications	IEC 61215, IEC 61730
	Ammonia Corrosion Test: IEC 62716
	Salt Mist Corrosion Test: IEC 61701
	PID (IEC TS 62804); LeTID (IEC TS 63342)
WEEE Registration No.	Dust & Sand (IEC 60068)
	DE 50188598
Product Warranty	25 years
Peak Power Warranty	30 years linear warranty

1.) First year: min. 99 %. 2.) From the 2nd year: Max. 0.4 % degradation annually. 3.) Min. 87.4 % in the 30th year.

Temperature Characteristics

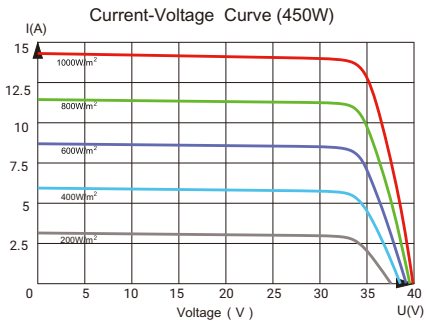
Nominal Module Operating Temperature (NMOT)	45 ± 2 °C
Temperature Coefficient of Pmax (%/ °C)	-0.31
Temperature Coefficient of Voc (%/ °C)	-0.26
Temperature Coefficient of Isc (%/ °C)	+0.038

Packaging

Container	40' HQ
Pallet Dimensions(mm)	1800 × 1140 × 1250
Pieces per Pallet	36
Pieces per Container	936

Operating conditions

Operating Temperature (°C)	-40 to +85
Maximum System Voltage(V)	1500 DC (IEC)
Overcurrent protection rating (A)	30
Power Performance Tolerance (%)	0 / +3
Protection class	II
Max. Test Load, Push/Pull (Pa)	Snow 5400 / Wind 2400
Max. Design Load, Push/Pull (Pa)	3600 / 1600



Statement: The installation instructions and the warranty conditions must be followed. Due to technological progress, product parameters will be adjusted accordingly. When signing the contract, the latest data of the company shall prevail.



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All information in this data sheet corresponds to EN 50380. Changes and errors excepted.
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