

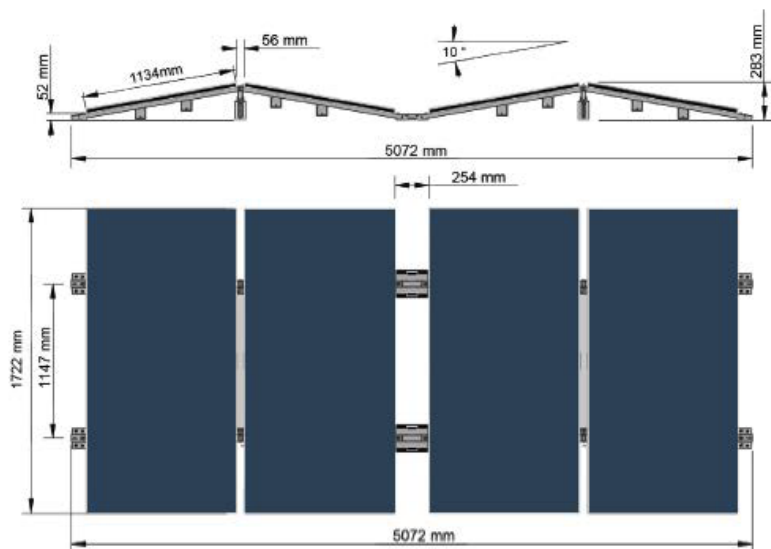
DATABLAD SMARTSOLARBOX



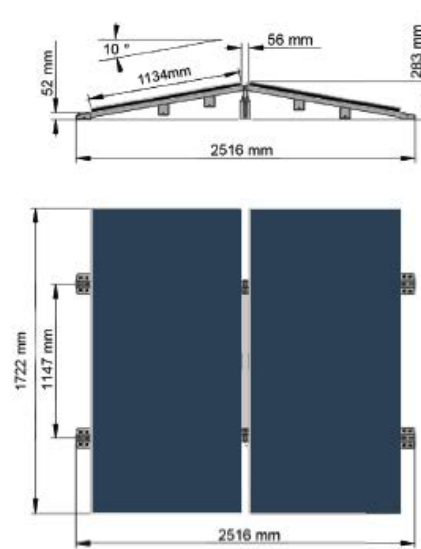
LONGi
LR5-54HIBD 405MM
405W

VERSJON 5.0

SSB4:

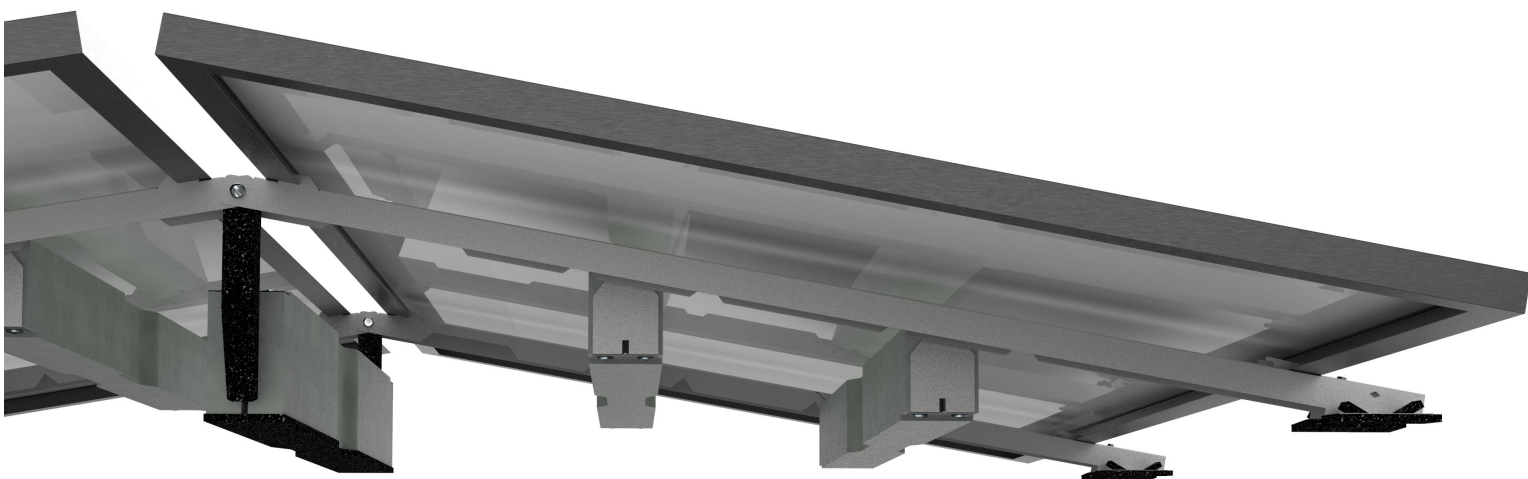


SSB2:

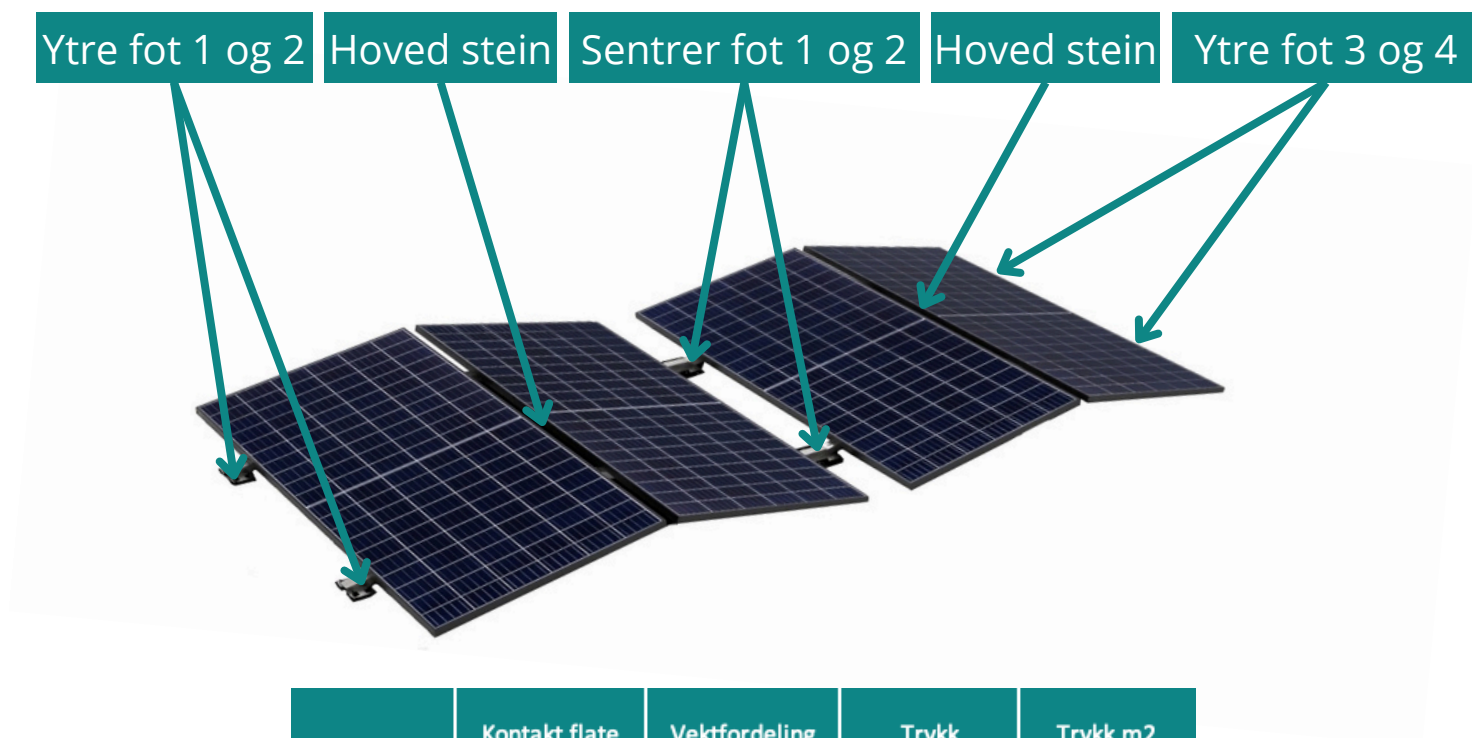


Teknisk Data

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

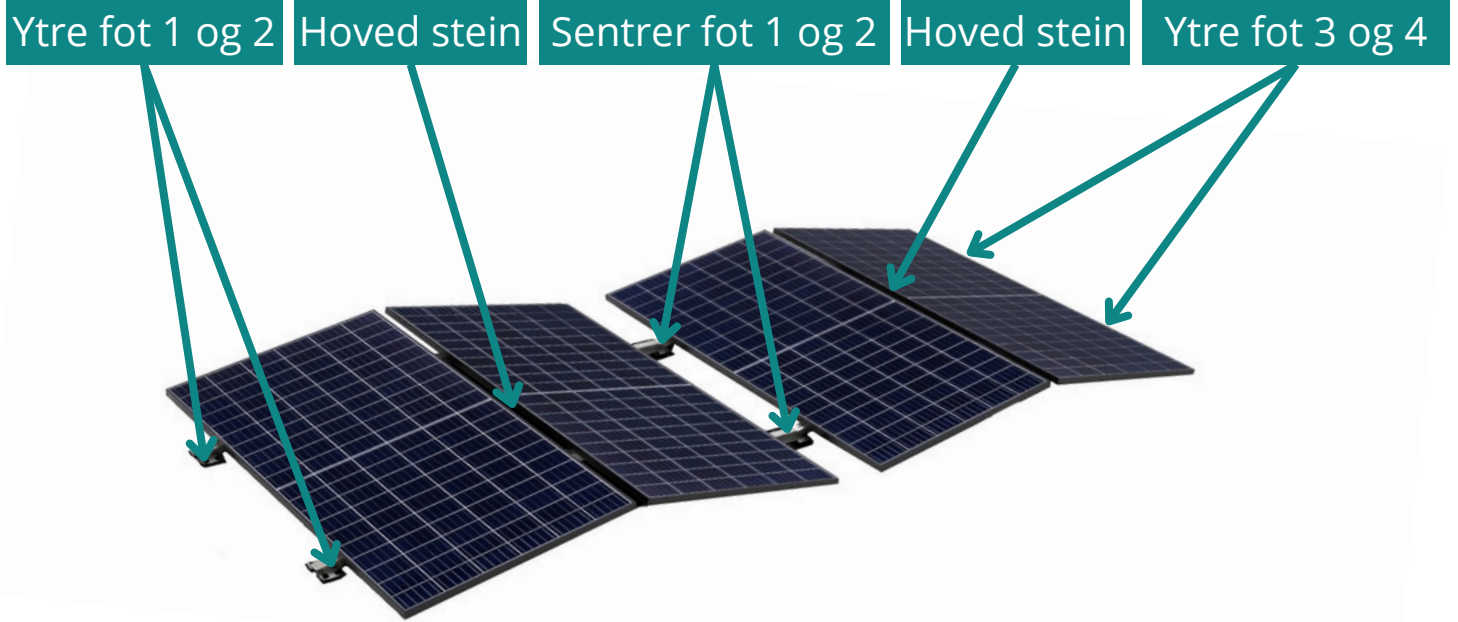


	Kontakt flate [cm ²]	Vektfordeling [%]	Trykk [N]	Trykk m ² [N/m ²] == [PA]
Ytre fot 1	94	4,28 %	64,7	6885
Ytre fot 2	94	4,28 %	64,7	6885
Hoved stein	470	33,25 %	503,4	10710
Senterfot 1	284	8,20 %	124,1	4371
Senterfot 2	284	8,20 %	124,1	4371
Hoved stein	470	33,25 %	503,4	10710
Ytre fot 3	94	4,28 %	64,7	6885
Ytre fot 4	94	4,28 %	64,7	6885
Total	1884	100,00 %	1514,0	

Modul bredde	1134	mm
Modul lengde	1722	mm
Modul vekt	22,5	kg
System lengde SSB4 V 5.0	5112	mm
Dekningsområde for SSB4 V5.0	8,80	m ²
Modul areal	1,95	m ²
Fot areal per modul	0,05	m ²

Type SSB	Vekt	Fordelt last
SSB4 Corner	301,4kg	34,24kg/m ²
SSB4 Heavy	228,4kg	25,94kg/m ²
SSB4 Light	154,4kg	17,54kg/m ²

Vektfordeling SmartSolarBox Heavy

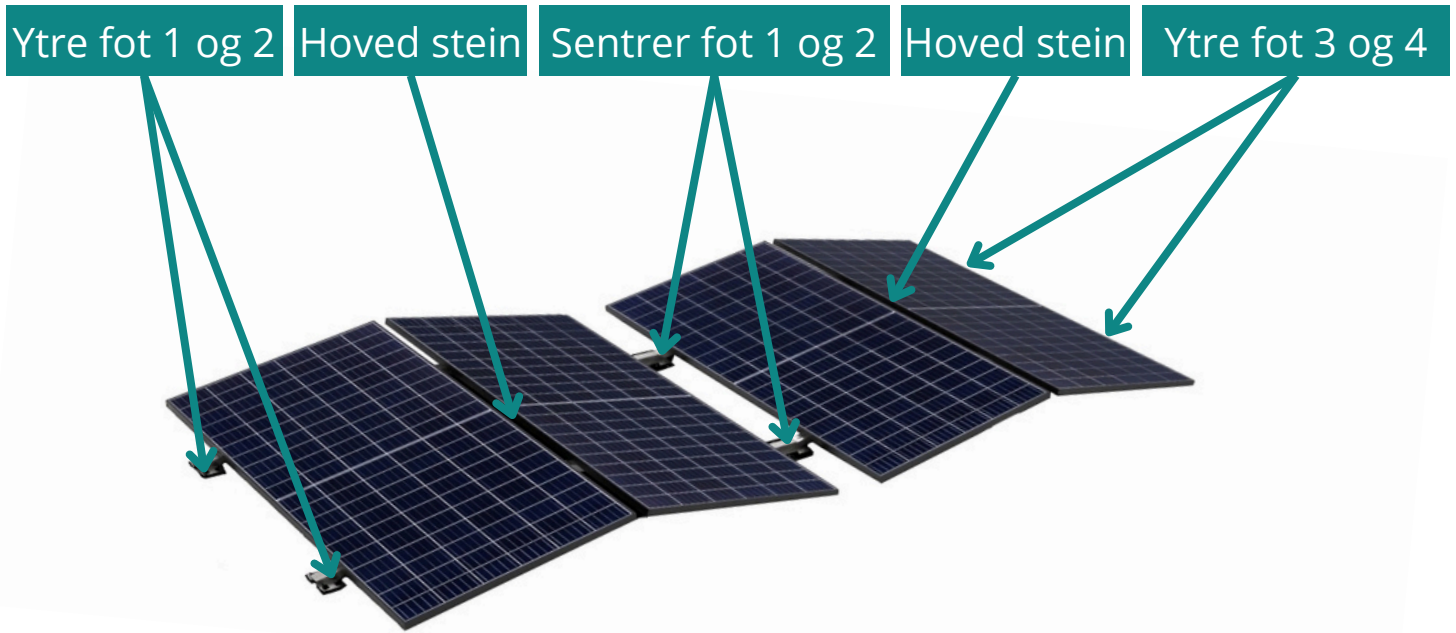


	Kontakt flate [cm2]	Vektfordeling [%]	Trykk [N]	Trykk m2 [N/m2] == [PA]
Ytre fot 1	94	4,33 %	96,9	10305
Ytre fot 2	94	4,33 %	96,9	10305
Hoved stein	470	34,10 %	763,7	16249
Senterfot 1	284	7,25 %	162,4	5717
Senterfot 2	284	7,25 %	162,4	5717
Hoved stein	470	34,10 %	763,7	16249
Ytre fot 3	94	4,33 %	96,9	10305
Ytre fot 4	94	4,33 %	96,9	10305
Total	1884	100,00 %	2239,6	

Modul bredde	1134	mm
Modul lengde	1722	mm
Modul vekt	22,5	kg
System lengde SSB4 V 5.0	5112	mm
Dekningsområde for SSB4 V5.0	8,80	m2
Modul areal	1,95	m2
Fot areal per modul	0,05	m2

Type SSB	Vekt	Fordelt last
SSB4 Corner	301,4kg	34,24kg/m2
SSB4 Heavy	228,4kg	25,94kg/m2
SSB4 Light	154,4kg	17,54kg/m2

Vektfordeling SmartSolarBox Corner



	Kontakt flate [cm2]	Vektfordeling [%]	Trykk [N]	Trykk m2 [N/m2] == [PA]
Ytre fot 1	94	5,20 %	153,7	16350
Ytre fot 2	94	5,20 %	153,7	16350
Hoved stein	470	30,75 %	908,8	19337
Senterfot 1	284	8,85 %	261,6	9210
Senterfot 2	284	8,85 %	261,6	9210
Hoved stein	470	30,75 %	908,8	19337
Ytre fot 3	94	5,20 %	153,7	16350
Ytre fot 4	94	5,20 %	153,7	16350
Total	1884	100,00 %	2955,5	

Modul bredde	1134	mm
Modul lengde	1722	mm
Modul vekt	22,5	kg
System lengde SSB4 V 5.0	5112	mm
Dekningsområde for SSB4 V5.0	8,80	m2
Modul areal	1,95	m2
Fot areal per modul	0,05	m2

Type SSB	Vekt	Fordelt last
SSB4 Corner	301,4kg	34,24kg/m2
SSB4 Heavy	228,4kg	25,94kg/m2
SSB4 Light	154,4kg	17,54kg/m2

Hi-MO 5

LR5-54HIBD 390~415M

- Suitable for distributed projects
- Advanced module technology delivers superior module efficiency
 - M10 Gallium-doped Wafer
 - Integrated Segmented Ribbons
 - 9-busbar Half-cut Cell
- Globally validated bifacial energy yield
- High module quality ensures long-term reliability

15

15-year Warranty for
Materials and Processing

30

30-year Warranty for Extra
Linear Power Output

Complete System and Product Certifications

IEC 61215, IEC 61730

ISO9001:2015: ISO Quality Management System

ISO14001: 2015: ISO Environment Management System

ISO45001: 2018: Occupational Health and Safety

IEC62941: Guideline for module design qualification and type approval

LONGi



CE

21.3%
MAX MODULE
EFFICIENCY

0~3%
POWER
TOLERANCE

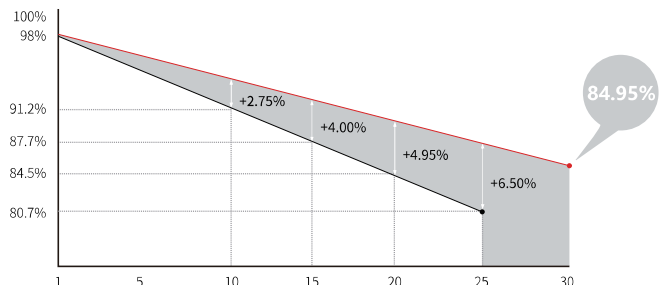
<2%
FIRST YEAR
POWER DEGRADATION

0.45%
YEAR 2-30
POWER DEGRADATION

HALF-CELL
Lower operating temperature

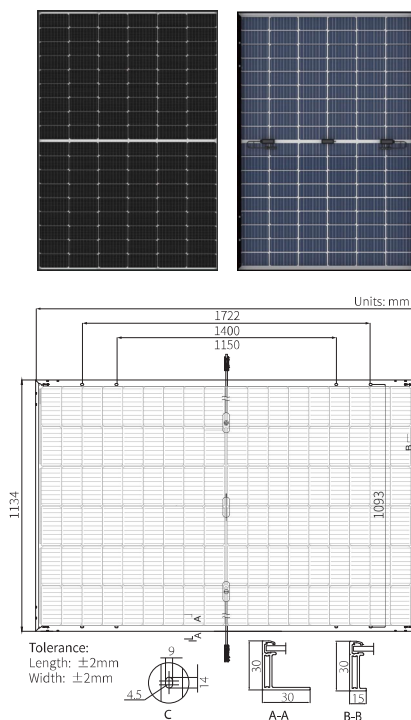
Additional Value

30-Year Power Warranty



Mechanical Parameters

Cell Orientation	108 (6×18)
Junction Box	IP68, three diodes
Output Cable	4mm ² , ±1200mm length can be customized
Glass	Dual glass, 2.0+1.6mm heat strengthened glass
Frame	Anodized aluminum alloy frame
Weight	22.5kg
Dimension	1722×1134×30mm
Packaging	36pcs per pallet / 216pcs per 20' GP / 936pcs per 40' HC



Electrical Characteristics

STC : AM1.5 1000W/m² 25°C NOCT : AM1.5 800W/m² 20°C 1m/s Test uncertainty for Pmax: ±3%

Module Type	LR5-54HIBD-390M		LR5-54HIBD-395M		LR5-54HIBD-400M		LR5-54HIBD-405M		LR5-54HIBD-410M		LR5-54HIBD-415M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	390	291.5	395	295.2	400	299.0	405	302.7	410	306.5	415	310.2
Open Circuit Voltage (Voc/V)	36.40	34.2	36.63	34.44	36.87	34.67	37.11	34.89	37.35	35.12	37.59	35.34
Short Circuit Current (Isc/A)	13.65	11.0	13.72	11.07	13.79	11.13	13.87	11.19	13.94	11.25	14.00	11.30
Voltage at Maximum Power (Vmp/V)	30.26	28.2	30.49	28.44	30.73	28.67	30.97	28.89	31.21	29.12	31.45	29.34
Current at Maximum Power (Imp/A)	12.89	10.3	12.96	10.38	13.02	10.43	13.08	10.48	13.14	10.53	13.20	10.57
Module Efficiency(%)	20.0		20.2		20.5		20.7		21.0		21.3	

Electrical characteristics with different rear side power gain (reference to 405W front)

Pmax /W	Voc/V	Isc /A	Vmp/V	Imp /A	Pmax gain
425	37.11	14.56	30.97	13.73	5%
446	37.11	15.25	30.97	14.38	10%
466	37.21	15.95	31.07	15.04	15%
486	37.21	16.64	31.07	15.69	20%
506	37.21	17.33	31.07	16.35	25%

Operating Parameters

Operational Temperature	-40°C ~ +85°C
Power Output Tolerance	0 ~ 3%
Voc and Isc Tolerance	±3%
Maximum System Voltage	DC1500V (IEC)
Maximum Series Fuse Rating	30A
Nominal Operating Cell Temperature	45±2°C
Protection Class	Class II
Bifaciality	65±5%
Fire Rating	IEC Class C

Mechanical Loading

Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

Temperature Ratings (STC)

Temperature Coefficient of Isc	+0.050%/°C
Temperature Coefficient of Voc	-0.265%/°C
Temperature Coefficient of Pmax	-0.340%/°C