

Solar modules Roadmap & Portfolio

Outlook Q1-2024 & Q2-2024

February 2024

(Next update: April 2024)



Modules Portfolio Q1-2024 & Q2-2024

Brand	Type	Celltype	Colour	Power output Q1-2024**	Power Wp/m2	Module size	Warranty manufacturer	# Pallet / container	Power Q2-2024**	Availability (Current expectation)
All-Black										
JA Solar	JAM54S31-405-HC-BK	P-type M10	All-black	405	207	1722 x 1134 x 30mm	12 year	36/936	405	✓ (ending)
Tongwei	TW400MAP-108-H-BK	P-type M10	All-black	400	205	1722 x 1134 x 30mm	15 year	36/936	400	✓✓✓ (ending)
DMEGC	DM440M10RT-54HBB-BK	N-type M10	All-black	440	220	1762 x 1134 x 30mm	25 year	36/936	440	March 2024
DMEGC	DM410M10-54HBB-BK	P-type M10	All-black	410	213	1722 x 1134 x 30mm	12 year	36/936	410	✓ (ending)
Jinko	JKM420N-54HL4-BK	N-type M10	All-black	420	215	1722 x 1134 x 30mm	25 year	36/936	420	✓ (ending)
Jinko	JKM435N-54HL4R-BK	N-type M10	All-black	430/435	218	1762 x 1134 x 30mm	25 year	36/936	435/440	✓✓✓
Aiko	AK-A-MAH54Mb-450-BK	N-type M10	All-black	440/450	230	1722 x 1134 x 30mm	15 year	36/936	450	✓
Aiko	AK-A460-MAH54Mb-BK	N-type M10	All-black		231	1757 x 1134 x 30mm	15 year	36/936	455/460	Q2 2024
Meyer Burger	MB-390-HJT120-HC-BK	N-type M6	All-black	390	212	1767 x 1041 x 35mm	25 year	30/840	390	✓✓✓
Glas/Glas module										
JA Solar	JAM54D41-435N-LB	N-type M10	All black	430/435	218	1762 x 1134 x 30mm	25 year	36/936	435/440	✓✓
JA Solar	JAM54D40-440N-LB	N-type M10	Black frame	440	220	1762 x 1134 x 30mm	25 year	36/936	440/445	✓
Aiko	AK-A-MAH54Db-445-BK	N-type M10	All-black	440/450	228	1722 x 1134 x 30mm	25 year	36/936	445	✓✓✓
Aiko	AK-A455-MAH54Db-BK	N-type M10	All-black		228	1757 x 1134 x 30mm	25 year	36/936	455	Q2 2024

Modules Portfolio Q1-2024 & Q2-2024

Brand	Type	Celltype	Colour	Power output Q1-2024**	Power Wp/m2	Module size	Warranty manufacturer	# Pallet / container	Power Q2-2024**	Availability (Current expectation)
White Backsheet										
JA Solar	JAM54S30-420-HC-B	P-type M10	Black frame	415/420	215	1722 x 1134 x 30mm	12 year	36/936	415/420	✓✓✓ (ending)
JA Solar	JAM72S20-460-SF	P-type M6	Silver frame	460	207	2112 x 1052 x 35mm	12 year	31/682	n/a	✓ (ending)
JA Solar	JAM66D42-580-MB	N-type M10	Silver frame		222	2278 x 1134 x 30mm	12 year	36/720	580	April 2024
DMEGC	DM460M6-72HBW-V	P-type M6	Zwart frame	460	212	2094 x 1038 x 35mm	12 year	31/682	460	✓ (ending)
DMEGC	DM535M10T-66HSW	N-type M10	Silver frame	530	225	2094 x 1134 x 35mm	12 year	31/682	530	March 2024
Risen	RSM120-8-410M (Twinsel con.)	P-type G12	Black frame	405/410	213	1754 x 1096 x 30mm	12 year	36/936	410	✓✓ (ending)
Jinko	JKM445N-54HL4R-V-B	N-type M10	Black frame	445	222	1762 x 1134 x 30mm	15 year	36/936	445	✓✓✓
Special										
BISOL	BDO-305M-TERRA-ST4 (ST4)	P-type M10	Terracotta	305	156	1722 x 1134 x 30mm	15 year	35/1050	305	✓✓✓
BISOL	BDO-350M-RED-ST4 (ST4)	P-type M10	Rooftile-red	350	179	1722 x 1134 x 30mm	15 year	35/1050	350	March 2024

Market trends 2024

- After several years of various module sizes seemed to be standardized at 1722x1134mm for residential roofs. Due to German regulations, which is limited at two squared meter, the standard module size is even pushed further to 1762x1134mm. Making it a perfect 2m² module. The size is a little longer, but the with is the same. Manufactureres are making a rectangular solar cell reach this module size.
- There were a lot of shortages in supply chain from 2021 till the first half of 2023. Many Chinese manufacturers increased production capacity a lot. In 2022 there was 239GW of total worldwide installation. Voor 2023 it was expected at 314GW to be installed. At this moment the production capacity of polysilicon, wafers, cells and modules are hundreds of gigawatts extra. For this reason there will be a very strong competition between manufacturers and some of them not able to earn back there investment. In China they say: "Winter is coming for the next 1,5 year". The very big vertically integrated players (polysilicon till module) together with persistent parent companies have the best chance to come out of this difficult period with success.
- At this moment the stock levels in Europe are relatively high. Expectations are that this will normalize in Q2/Q3. Due to heavy competition the prediction is that pricing will stabalize at a relatively low level and maybe increase a little around Q2/Q3.
- The trend we saw from 2021 that technology is chaning from P-type to N-type will finalize in 2024. N-type will be fully dominant in the residential segment and very strong in commercial already.

