

Optimization of Energy Yield (LID) and Degradation (P-N) in Mono-crystalline PERC Solar Panels

Highlights:

1. Energy yield performance

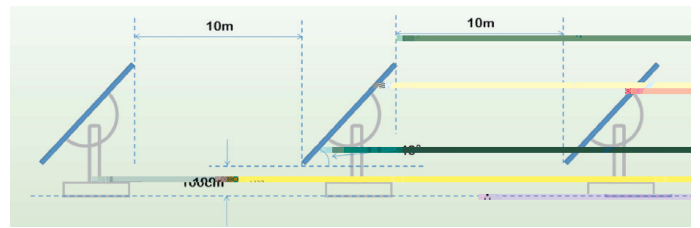
3.69%

2. Degradation

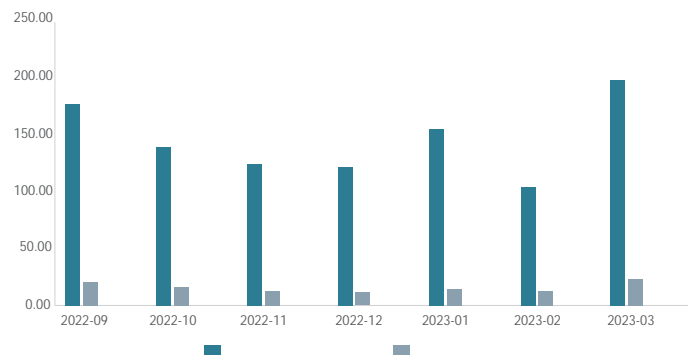
1.38%,

0.51%

Experimental Photovoltaic Test Facility



Month	Fixed Axis- Cumulative Irradiation(kWh/m ² /month)		Reflectance (%)
	Front side	Rear side	



Group	Module	Number	Type	Mounting System

Calculator:

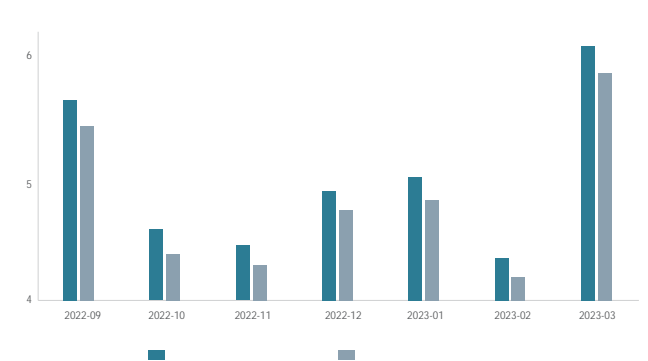
Formula 1:

Formula 2:

Isc(A)	Voc(V)	Imp(A)	Vmp(V)	Pmax(W)	FF(%)	Eff.(%)
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Isc(A)	Voc(V)	Imp(A)	Vmp(V)	Pmax(W)	FF(%)	Eff.(%)
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Month	Group 1-Power generation per watt (Wh/W)	Group 2-Power generation per watt (Wh/W)
Average		



Conclusions:

1. Energy yield performance

3.69%.

2. Degradation:

0.51% 1.38%,

0.51% 1.38%
-J. K (2022.09-2023.3)

