



SOLAR GUIDE · PUNJAB

Solar panel buying guide

The panels are the part of a solar system you live with longest. This guide covers the choices that matter, in the order to make them: the subsidy rules, the technology, the datasheet, the warranties and the count.

Updated 4 October 2026

rksolarenergy.com/solar-guides/solar-panel-buying-guide/

RSK Solar Energy, UTL Solar distributor
E-203, Phase 8B Industrial Area, Sector 74, Mohali
+91 90419 96918 · WhatsApp · rksolarenergy@gmail.com

In this guide

1. Start with the subsidy rules
 2. Choose the technology
 3. Read the datasheet
 4. Check both warranties
 5. Work out how many panels
 6. Compare like with like
- UTL panels

1. Start with the subsidy rules

If you are claiming the PM Surya Ghar subsidy on a home, two rules come first:

- DCR (Domestic Content Requirement): the panels must be made with cells manufactured in India.
- ALMM: the panel model must be on the government's Approved List of Models and Manufacturers.

A panel that is not both loses the subsidy, and it cannot be put right after installation. DCR panels cost more per watt than non-DCR, but on a home system the subsidy usually more than covers the difference. DCR and non-DCR panels works through the figures. Without the subsidy, for a business or an off-grid system, non-DCR panels are an option.

2. Choose the technology

	Mono PERC half-cut	TOPCon	Bifacial
What it is	The established mono cell, cut in half to cut losses	A newer N-type cell design	Collects light on both faces
Efficiency	Good	Higher	Depends on the cell
Best for	Most rooftops	Limited roof space	Raised structures over a light surface

Higher efficiency means more watts from the same roof area. On a roof with space to spare, it matters less than price and warranty. See [TOPCon panels](#), [mono PERC and half-cut](#) and [bifacial panels](#).

3. Read the datasheet

Datasheet item	What to look for
Rated power (Pmax)	The watts at standard test conditions. Decides the panel count.
Module efficiency	Power from the area. Higher fits more on the roof.
Temperature coefficient of Pmax	How much output falls as the panel heats up. A smaller loss per degree matters in a Punjab summer.
Power tolerance	Should be positive only, so no panel is below its rated power.
Dimensions and weight	For the layout and the structure.
Certifications	The standards the model is tested to, and its ALMM listing.

[What matters on a panel datasheet](#) explains each one.

4. Check both warranties

Panel warranties come in two parts, both from the manufacturer:

- A product warranty against defects, in years.
- A performance warranty that the panel will still give a stated share of its rated power after a stated number of years.

Get both in writing, with the manufacturer's name. A warranty is only as useful as the claims process behind it, so ask who handles a claim locally.

5. Work out how many panels

1. Decide the system size in kW from your bill. The [solar calculator](#) does this.
2. Divide the size in watts by the panel's wattage, and round up. A 3 kW system with 550 W panels needs six panels.
3. Check the roof: about 100 sq ft of shade-free area per kW, including gaps between rows. The [roof capacity calculator](#) counts the panels for you.

6. Compare like with like

When quotes differ, check the panels first: make, model, wattage, DCR status and warranties. Two quotes for 3 kW with different panels are different systems. The [quote comparison tool](#) and the [50-point quote checklist](#) help.

UTL panels

We supply UTL's range, from small 40 W panels for lighting kits up to large rooftop modules, including DCR mono and TOPCon models for subsidy systems. The [UTL panel catalogue](#) lists each model with its specifications, and [UTL compared with other brands](#) sets them against other makers' published figures.

Questions we are asked

Which solar panel is best for a home in Punjab?

For a home claiming the subsidy, a DCR panel on the ALMM list, with a good temperature coefficient for Punjab's summer heat and clear manufacturer

warranties. Mono PERC half-cut is the established choice; TOPCon is newer and more efficient, so the same roof takes a little more capacity.

Does panel wattage matter?

It decides how many panels you need for a given size, not how good the panel is. Efficiency and temperature coefficient matter more for how much it makes on a hot roof.

Are bifacial panels worth it on a rooftop?

They collect some light on the back, which helps most when they are raised above a light-coloured surface. On a flat roof close to the surface the gain is small, so do not pay much extra for it there.

Work out your own figures

Roof capacity calculator

How many kW your roof takes, the panels, the units and the price.

Solar quote comparison

Put up to three quotes side by side: price per kW, subsidy and what each leaves out.

Solar calculator

Size, subsidy, cost and payback from your PSPCL bill.

Figures on subsidies, tariffs and schemes are as published by the government at the dates shown and can change. Prices and generation figures are estimates for planning, not a quotation or a guarantee.