

Two modules, one clear winner

E720HCBG 132-T delivers 18,432 kWh over 30 years at 92.23 p/kWh, which makes its energy 2% cheaper per kilowatt-hour than the dearest module in this report. It is not the cheapest sticker price in the set - ₹15000 is - and it still wins.

BEST LONG-TERM CHOICE

**E720HCBG 132-T** 720 Wp

✓ **Cheapest energy in the set.** 92.23 p/kWh, 2% below the dearest module in the set.

✓ **Most energy produced.** 18,432 kWh over 30 years, 2,572 kWh ahead of the next module.

✓ **Runs cooler under load.** -0.29 %/°C against -0.34 %/°C, worth 1.5 points of output at 55 °C.

93

OF 100

COST PER KWH

92.23 p/kWh

RANKING LEADER

E720HCBG 132-T

Score 93 of 100

HIGHEST 30-YEAR YIELD

18,432 kWh

2,572 kWh above the lowest module

LOWEST COST PER KWH

92.23 p/kWh

2% cheaper than the dearest

MODULES COMPARED

2

Prices entered by the requester

ASSUMPTIONS

Cell temperature **55 °C**

Installation **Flat roof**

Baseline yield **1,000 kWh/kWp**

Horizon **30 years**

Currency **INR**

01 • SIDE BY SIDE

#	MANUFACTURER / MODEL	POWER	PRICE	YEAR 1	30-YEAR	PER KWH	SCORE (P)
1	 E720HCBG 132-T	720 Wp	₹17000	651	18,432	92.23	93
2	 ASM-M12-132-650	650 Wp	₹15000	572	15,860	94.58	16

better worse

Colours and scores are relative to the 2 modules in this report only.

02 • WHERE THE DIFFERENCE COMES FROM

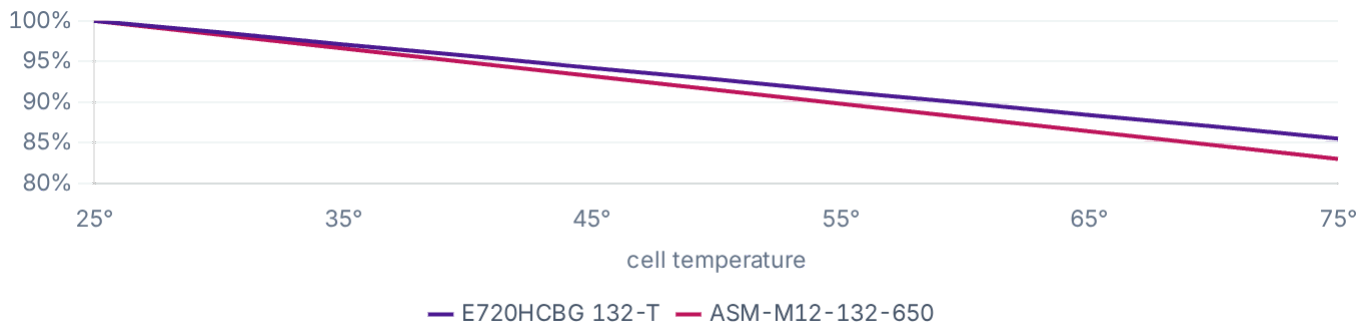
Cumulative energy over 30 years

Kilowatt-hours added up year by year. The gap widens with every year - by year 30 it is 2,572 kWh between the highest and lowest module.



Output retained as the cell heats up

A module is rated at 25 °C; a working roof sits well above it. At 55 °C the -0.29 %/°C module still delivers 91.3% of nameplate, the -0.34 %/°C module 89.8%.



03 • MILESTONES

Cumulative kWh per module

MODULE	Y5	Y10	Y15	Y20	Y25	Y30
E720HCBG 132-T	3,228	6,392	9,493	12,533	15,512	18,432
ASM-M12-132-650	2,829	5,581	8,258	10,862	13,395	15,860
Difference, best to worst	+399	+811	+1,235	+1,671	+2,117	+2,572

04 • WHAT DRIVES EACH SCORE

E720HCBG 132-T

93
ASM-M12-132-650

16

■ 30-year yield · 45%
 ■ Cost per kWh · 40%
 ■ Warranty · 15%

05 • HOW EACH FIGURE IS BUILT

1 Annual yield

Panel watts times the installation baseline of 1,000 kWh/kWp, times a temperature factor from the module's own coefficient at 55 °C, times whatever degradation has left that year.

2 Degradation

Each module ages at its own datasheet rate - E720HCBG 132-T loses 1% in year one, then 0.4% a year. Where a manufacturer publishes no curve, the 2% / 0.55% convention is used.

3 Cost per kWh

Offer price divided by the thirty annual yields added together. The only figure that lets a dearer module win, and often it does.

4 Score

A 0-100 composite: lifetime energy 45%, cost per kWh 40%, warranty 15%, each normalised across this report's modules. A dimension they all tie on splits evenly.

⚠ What this report does not model

Energy price inflation, inverter and installation cost, local irradiance, weather, shading, or a degradation curve worse than the datasheet promises. Prices were entered by whoever requested this report, not quoted or verified by ComparePV. This compares modules against each other, not a full system business case.

06 • TERMS USED IN THIS REPORT

Cost per kWh (LCOE)

Offer price divided by lifetime yield. What one kilowatt-hour from this module actually costs. Lower is better.

Baseline yield

Energy one kWp produces per year. Set by installation type: ground mount around 1,100, pitched equator-facing 1,050, east-west 950.

Tc Pmax

Temperature coefficient of maximum power, %/°C. How much output drops per degree above 25 °C. Smaller is better in heat.

Score

Relative ranking of this offer within this set only. The same module at the same price scores differently against different competition.

The live version stays online

Change the temperature, the installation type or the prices and the comparison recomputes. Anonymous and shareable.

comparepv.com/panel-report/62817bc7-5c8f-4f04-aa27-9aae81c2603a

