

SOLAR ENERGY SOLUTIONS

CIGS Flexible Solar Module

Flexible thin-film photovoltaic module

A flexible thin-film solar solution designed to reduce the weight, curved-surface installation and vibration limitations of conventional glass-silicon modules. It can be directly bonded to vehicles, curved structures and special infrastructure.



80%+

LIGHTER THAN GLASS
MODULE

16.3-18.64%

MODULE EFFICIENCY

75-390 W

PRODUCT LINEUP

IEC 61701

SALT MIST CERTIFIED

25 Years

POWER WARRANTY

01 KEY FEATURES

Product Highlights

Lightweight & Efficient

More than 80% lighter than conventional glass-silicon modules, with module efficiency of 16.3% to 18.64%.

Flexible Installation

Conforms to curved and streamlined surfaces such as camper vans and vehicle roofs.

Vibration & Impact Resistance

Designed for vibration-intensive environments such as vehicles, roads, airports and railway facilities.

Low-light & Partial Shade

Responds well under weak light and cloudy conditions, with reduced output loss under partial shading compared with conventional PV modules.

Continued Output after Partial Damage

If punctured or partially damaged, unaffected areas can continue generating power.

Direct Adhesive Installation

High-performance rear adhesive enables installation without heavy mounting structures and permits work on the module after installation.

02 TECHNICAL SPECIFICATIONS

Product Lineup

PARAMETER	03-80MN	03-80SS	03-130MN	03-80MS	03-80MW	03-130MW
Max. Power P _{max}	75 / 80 W	80 / 85 W	125 / 130 W	225 / 230 W	230 / 240 W	380 / 390 W
Rated Voltage V _{mpp}	20.0 V	20.9 V	32.1 V	18.8 V	20.0 V	32.7 V
Rated Current I _{mp}	4.01 A	4.07 A	4.06 A	12.27 A	11.98 A	12.25 A
Open-Circuit Voltage V _{oc}	24.7 V	25.5 V	39.4 V	22.9 V	24.9 V	39.9 V
Short-Circuit Current I _{sc}	4.54 A	4.5 A	4.49 A	13.37 A	13.57 A	13.39 A
Weight	1.2 kg	1.1 kg	1.7 kg	3.0 kg	3.4 kg	4.3 kg
Dimensions W x H x T	348 x 1,710 x 17 mm	663 x 1,010 x 17 mm	348 x 2,585 x 17 mm	1,000 x 1,670 x 17 mm	1,000 x 1,710 x 17 mm	1,000 x 2,585 x 17 mm

03 ENGINEERING INFORMATION

Design & Application

FLEXIBLE INSTALLATION Curved / Adhesive Mounting Conforms to curved and streamlined structures. Rear adhesive supports direct installation without complex mounting hardware.	DURABILITY Vibration / Partial Damage Designed for high-vibration applications and capable of continued generation from unaffected areas after localized damage.	ENVIRONMENT Low Light / Salt Exposure Suitable for low-light and partially shaded conditions, with IEC 61701 salt-mist certification for coastal environments.
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04 CERTIFICATION & WARRANTY

Quality & Reliability

CERTIFICATIONS International Standards IEC 61646, IEC 61730, IEC 62716, IEC 61701, UL 1703	PRODUCT WARRANTY 3 Years Product warranty period stated in the source catalog.	POWER WARRANTY 25 Years 90% for the first 10 years and 80% for the following 15 years.
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05 APPLICATIONS

Typical Applications

CAMPER / SPECIAL VEHICLE

01

Camper & Special-purpose Vehicles

Low mass and flexible installation are suited to vibration-prone vehicle roofs and curved body surfaces.

BIPV / CURVED SURFACE

02

Building-integrated PV

Can be applied to curved building surfaces while reducing structural load compared with conventional glass modules.

SPECIAL INFRASTRUCTURE

03

Vibration / Coastal Infrastructure

Applicable to roads, airports, railway facilities and coastal sites exposed to vibration or salt environments.

06 QUALITY & SUPPORT

Warranty & Safety

QUALITY ASSURANCE

Reliability Information

- Product warranty: 3 years
- Power warranty: 25 years (10 years at 90%, following 15 years at 80%)
- IEC 61701 salt-mist certification
- KRW 200 million product liability insurance with Samsung Fire & Marine Insurance

PRODUCT POSITIONING

PV for Simplified Mounting

Combines low weight, a flexible structure and direct-bond installation to increase installation freedom on vehicles, curved surfaces and vibration-prone environments.



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