

Bi-facial Double Glass

30 Years Reliability Warranty, Rear-side energy generation yield, enable Vertical Façade, Optional for Fire Test Class A, Mirco-Inverter applications, Optimize Cost-to-Yield to improve Project IRR%

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Photovoltaic Foundry Pte. Ltd. (PvFoundry[®]) is an Invent-and-Build solar technology company headquartered in Singapore since 2016. PvFoundry[®] specialises in solar module design & customization, offer full suite of turnkey solutions which includes project design, engineering, supply, installation, maintenance & asset management for rooftop solar system as well as mass scale solar asset development.

PvFoundry[®] leverages its self-proprietary patented technologies and capabilities into solar asset development to achieve client's objectives and to attain higher-than-average project returns of investment. Our innovations are designed and engineered in Singapore. Among our product portfolio is the High-Power Density low-glare module (GMD series), 3-in-1 Building-Integrated solar roof materials (BiPV series), Bi-Facial double glass Fire Test Class A modules (DG series), and Ultra-lightweight bendable flexible module (FLEX series).

PvFoundry[®] has established market presence in Singapore, Malaysia, Hongkong, Sri Lanka and is determined to promote Singapore Brand abroad as a regional solar tech-based asset developer, which is in-line with our institutional investor Enterprise Singapore (ESG) vision.



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PvFoundry® Double Glass CELL Technology Roadmap





PvFoundry[®] Double Glass MODULE Technology Roadmap



sMBB



PvFoundry[®] Bifacial Gain – Correlation of Albedo and Rear Side PV Yield % Gain



surface	albedo [%]
water	8
dry dark soil	13
grass	17-28
dry sand	35
dune sand	37
old snow	40-70
reflective roof coatings	80-90
fresh snow	75-95





PvFoundry[®] Bifacial Gain – Correlation of Albedo and Rear Side PV Yield % Gain



Power Generation Gain Ration under different Reflection Rate of the Ground



PvFoundry[®] Bifacial Gain – Correlation of Albedo and Rear Side PV Yield % Gain





Product technology advantage

PvFoundry[®] is poised to ride on the growth of solar energy with its suite of superior products backed by patents to create a defensible advantage

BiFacial

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Bi-Facial Double Glass with Class A Fire Test: Building Vertical Façade, Solar Agri & Aqua applications





TUV SUD Outdoor Data Collection Site





PvFoundry® Double Glass Solar Module passed TUV Fire Test Class A





PvFoundry[®] HDB Vertical Façade Solar PV System (POC, POV, Test-Bedding)



- Phase 1 (POC) 1kWp at Woodland CBR rooftop
- Phase 2 (POV) 20kWp
- Phase 3 (Test-Bedding) 40kWp





Project Reference – Vertical Solar Façade (Solar Cube)



Project: HRB Central Building of Research

- Phase 1 (POC) 1kWp at Woodland CBR rooftop
- Phase 2 (POV) 20kWp
- Phase 3 (Test-Bedding) 40kWp













Project Reference – Vertical Solar Façade (Color Pattern BiPV glass panels)



Project: NUS SERIS CRP1 color pattern solar facade

- Location: SEAS (Sustainable Energy Association Singapore)
- Building: City Square, Singapore
- Feature: Color Pattern Customized Solar Module
- Design: Vertical Façade



Solar Energy Research

SERIS T Institute of Singapore



Project Reference – Vertical Solar Façade (PPVC applications)









Project: Housing Development (PPVC)

- Multiple direction Solar Energy Yield in-depth data analysis
- Multiple methods, tilt angles, mounting approaches installation
- Micro Inverter applications to enhance energy yield
- Sun Tracker integration into Building



