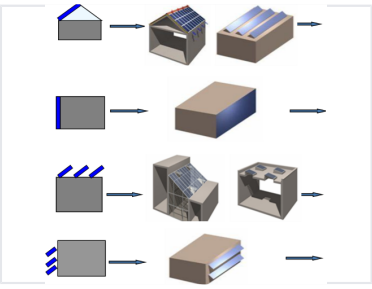
Building Integrated Photovoltaic Panels

Building integrated photovoltaic panels combine electricity generation with structural function. Integrating solar power generation into rooftops, walls, and ceilings reduces carbon footprints and offers benefits from solar power.



Product Overview

Building Integrated Photovoltaics (BIPV)

BIPV refers to photovoltaic modules or materials integrated directly into buildings as an indispensable structural component. Unlike traditional BAPV systems that are simply attached to a surface, BIPV functions as an integral building material that generates electricity while providing essential functions like weatherproofing, heat insulation, and structural support. This technology helps reduce carbon footprints, promotes green building standards, and adds social value to both office and residential projects.

Key Advantages

Core Benefits	Stable Electricity Supply, Space Saving, Material Saving, Peak Regulation, Environment Friendly, Small Carbon Footprint

Application Guide

Integration Formats

Format	PV Module Type	Construction Requirements
PV skylight Windows	PV glass modules	Architectural impacts, structural strength, day-lighting, shelter from the wind and rain
PV rooftops	PV rooftop tiles	Architectural impacts, structural strength, and shelter from the wind and rain
PV curtain walls (Transparent)	PV glass modules (Transparent/hollow)	Architectural impacts, structural strength, day-lighting, shelter from the wind and rain
PV curtain walls (Non-transparent)	PV glass modules (Non-transparent/hollow)	Architectural impacts, structural strength, and shelter from the wind and rain
PV sunshades (Day-lighting)	PV glass modules (Transparent)	Architectural impacts, structural strength, and day-lighting
PV sunshades (No day-lighting)	PV glass modules (Non-transparent)	Architectural impacts and structural strength
Roof-top PV arrays	General PV modules	Architectural impacts

Installation Areas

Suitable Areas

- Skylight roof-tops
- Transparent thin-film glass
- PV-tiles rooftops
- Building walls
- PV curtain walls