



## Five Key Features

SolarIris modules are multi-functional elements serving as glazing material in façades and skylights.

### 1 Energy generation

The SolarIris elements are equipped with high performance solar cells for maximum energy generation.

### 2 Design

The SolarIris modules is available in a variety of colors and styles, allowing designers and architects to create attractive surfaces meeting the overall building concepts.

### 3 Glare protection

The SolarIris modules significantly reduce glare, enabling exiting, yet relaxing atmospheres in buildings where natural light is part of the lighting concept.

### 4 Shading and solar control

The SolarIris modules can be customized to transmit a percentage, usually 10 - 20 %, of natural light. This limits the thermal energy influx during the summer months, and as a result the cooling load is significantly reduced.

### 5 Roof and façade skin

The SolarIris modules serve as regular building cladding elements and can be used in most modern transom and mullion façade and skylight systems.

## About SolarIris

SolarIris is the latest Building Integrated Photovoltaic (BIPV) module solution from Hanwha SolarOne Co., Ltd. The SolarIris technology enables integration of energy production in the building envelope without compromising the overall building concept.

The SolarIris modules can be combined with non-tranmissive Hanwha SolarOne Co., Ltd. BIPV products. These elements could serve as façade cladding or roofing elements forming an energy generating building envelope helping to reduce the conventional energy demand of the building.

## About Hanwha SolarOne Co., Ltd.

Hanwha SolarOne Co., Ltd. is a vertically integrated manufacturer of photovoltaic modules designed to meet the needs of the global energy consumer.

- High reliability, guaranteed quality, and excellent cost-efficiency due to vertically integrated production and control of the supply chain;
- Optimization of product performance and manufacturing processes through a strong commitment to research and development;
- Global presence throughout Europe, North America, and Asia, offering regional technical and sales support.

## Product Description

### Construction

The SolarIris modules are available in three different versions to meet most design requirements:

- Front glass / solar cell / glass / small pieces of colorful glass – spacer inner glass pane
- Front glass / solar cell / glass /colorful glass – spacer – inner glass pane
- Front glass / solar cell / glass – spacer – colorful glass as inner glass pane

### Maximum Dimensions

The maximum available size is 1690 mm × 520 mm.

### Physical Features

The spacer between the front glass laminate and the inner glass allows a cavity filled with air. If required, this cavity can be filled with inert gas such as Argon to enhance heat insulation (Appearance and electrical performance are not be affected).

## System Requirements

### Applications

SolarIris is ideal as skylight component. It can be applied for residential and commercial southern wall decoration. SolarIris modules also suit building walls and other sun-facing structures.

### Mounting

The SolarIris modules can be installed with most modern transom and mullion façade cladding systems. Local building code requirements have to be followed.

## Handling and Shipping

### Lead-time

Minimum lead-time for delivery is 60 days. Lead time also depends on quantity and pattern design requirements.

### Handling

SolarIris modules are frameless BIPV products with sharp glass edges as known from glazing industry. Use caution when moving or installing. Local building codes and safety regulation have to be observed.

## Typical Values

SolarIris modules are customized to meet design and system requirements. Please contact us for a complete specification based on your requirements. The values below show typical values of a SolarIris module as illustrated on page 1.

### Product Information

Cell Type	125 mm × 125 mm Poly-Si
Number of cells	52 total (4 series × 13 cells/string)
Size	1760 mm × 576 mm × 23 mm
Pattern Size	1690 mm × 520 mm
Weight	40 kg

### Electrical Characteristics

Tested under Standard Test Conditions (STC)

P <sub>max</sub>	120 W
V <sub>oc</sub>	30.8 V
I <sub>sc</sub>	5.2 A
V <sub>mpp</sub>	26.1 V
I <sub>mpp</sub>	4.6 A