

# **Technical Information**

# FPC-E20 Solar Collector

V1. Feb. 2018

Product Name: FPC-E20 Flat Plate Collector

Part Code: FPC-E20

#### **Applications**

The Apricus FPC-E20 flat plate collector is suitable for residential or commercial domestic hot water projects.

The choice of material and design aspects can greatly affect not only the solar thermal performance but also the reliability when operating in many varied environmental conditions. Apricus has chosen only the highest quality materials to ensure reliable, efficient operation and collector longevity.

#### **Features**

- High efficiency BlueTec energy AL solar absorber
- 25mm hailstone resistance tempered glass cover
- High transparency solar glass
- Harp style riser arrangement compatible with direct flow, closed loop and drain-back systems.
- Suitable for portrait or landscape orientation

### **Materials of Construction**

Absorber: 0.3mm BlueTec solar AL

Absorber emittance:  $5\%\pm2\%$ Absorber absorption:  $95\%\pm2\%$ Header:  $\emptyset22 \times 0.8$ mm Risers:  $\emptyset10 \times 0.7$ mm

Riser spacing: 120mm (total of 7 risers)
Glass: 3.2mm 92% Transmittance
Rubber Seals: HTV Silicone Rubber

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Collector Body: Anodized AL (black)
Insulation: 20mm PF Resin sides
20mm rock wool bottom

0.4mm Galvanized steel sheet

#### **Performance Data**

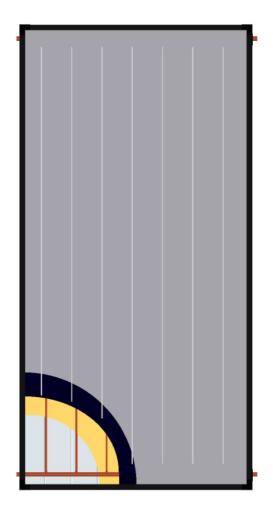
Back Sheet:

 $\begin{array}{lll} \mbox{Peak Power Output:} & 1170 \ \mbox{W} \\ \mbox{Eta0:} & 0.73 \\ \mbox{a_1 (W/m²K):} & 4.5 \\ \mbox{a_2 (W/m²K²):} & 0.004 \\ \mbox{Nominal Flow Rate:} & 2 \ \mbox{L/min} \\ \mbox{Max Flow Rate:} & 15 \ \mbox{L/min} \\ \end{array}$ 

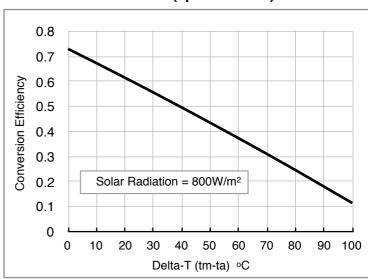
## **Physical Specifications**

Dimensions (LxWxH): 2000 x 1000 x 70 mm

Aperture Area: 1.824 m²
Gross Area: 2.0 m²
Gross Dry Weight: 30 kg
Fluid Capacity: 1.5L
Max Pressure: 900 kPa



#### **Collector Performance (aperture area)**



#### Sustainable HOT WATER Solutions, Delivered by APRICUS

Apricus Solar Co., Ltd

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