

Flat Plate Collector MPI3.0A-FP

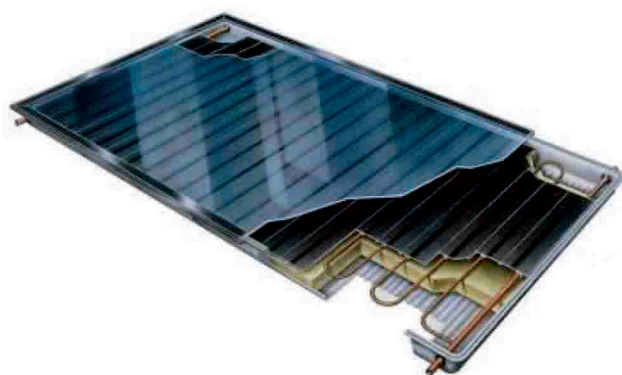
The flat plate collectors are always connected with existing heating supply device in any situation, whether on a flat roof, in a backyard garden, on a building facade or as a module of a large system. Its highly selective black chrome/ blue sputtered coating absorbs solar energy and transfers heat to the metal heat pipe. The anti-freeze mixture inside the heat pipe is heated, and conducts the heat energy to the water storage tank.

Features of MPI3.0A-FP

- Suitable for frigid zones because there is no water in the tube
- Elegant 2.03m² units, suitable for all types of assembly
- High solar-thermo conversion and low heat loss
- Structured absorber entirely of copper with advanced solar selective coatings heats water rapidly : black chromed/ blue sputtered or TiNOX
- Tempered textured glass : high chemical and thermal shock resistance
- Hail resistant solar glass and high quality rear wall insulation
- High output even at lower outside temperature
- Very simple assembly process - low assembly costs
- Easy to install detachable screw connections



Typical section diagram



Idle temperature	120 °C
Max. operating pressure	1.0 MPa
Freezing resistance	-33 °C
Wind resistance	30mps
Bearing hailstone ability	hail stone diameter Φ 25mm
Min. collector angle	15°C
Max. collector angle	75°C

Specifications

Model	MPI3.0A-FP
Collector type	pre-assembled collector
Installation type	roof-mounted, in-roof
Height	2000 mm
Width	1000 mm
Depth	95 mm
Gross surface area	2.03 m ²
Opening surface area	1.84 m ²
Absorber surface area	1.73 m ²
Empty weight	41.6 kg
Collector glazing	4 mm tempered texture glass
- dimension HxW	1970 x 970 mm
- transmissivity	0.85 ~ 0.87
- pressure endurance	1 kPa
Absorber	black chromed / blue sputtered or other highly-selective vacuum coating
- dimension HxW	1840 x 950 mm
- material	copper
- construction	fin & tube (ultrasonic welding)
- header	copper T2
- header tube size	Φ 25mm, 0.8mm thick, 2 pcs
- riser material	copper
- riser tube size	Φ 10mm, 0.6mm thick, 8 pcs
Heat transfer medium	water-glycol
Absorptance (α)	0.94 ~ 0.96
Emittance (ϵ)	0.04 ~ 0.06
Collector capacity	1.8 L (including header pipe)
Heat insulation	50mm fibre glass insulation, rear wall insulation
Housing	aluminum alloy
- rear plate	0.21mm galvanized steel
- max. operation temperature	200 °C
- max. pressure	1400 kPa
- sealing gasket	EPDM