

Heat Transition Pipe Collector MPI58-2100-18-HT

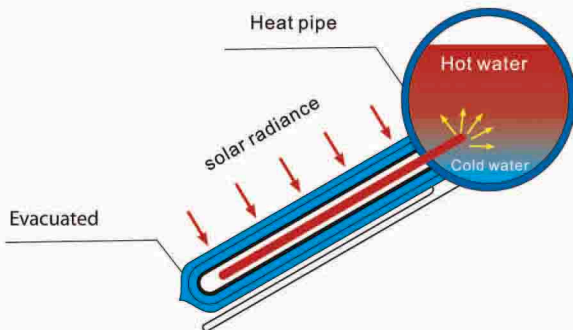
The heat transition pipe collector MPI58-2100-18-HT is a combination of features from all-glass evacuated tube and a copper heat pipe. The highly selective vacuum coating on its inner tube wall absorbs solar energy and transfers to the heat pipe by an aluminum fin. As long as sun energy is absorbed, cold water in the tank is heated.

Features MPI58-2100-18-HT

- Electricity outage and electric pump breakdown are not an issue
- System still operates in case of glass tube breakage
- High output due to vacuum glass insulation
- Reliable, simple structure, easy installation
- Daily average efficiency > 50%
- Borosilicate glass : high chemical and thermal shock resistance
- Withstands water pressure < 0.4MPa
- Very simple assembly process - low assembly costs
- No additional device for automatic filling water to the tank
- Auxiliary electric booster is optional - 1500W or 3000W
- Hot water can be used directly or as a pre-heat



Typical section diagram of MPI58-2100-18-HT



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|---------------------------|--|
| Daily average efficiency | >50% |
| Collector angle | 33° ~ 50° for flat roof 45° for tilted roof |
| Optional electric booster | 1500W or 3000W |
| Power supply | 170 ~ 240V |

Specifications MPI58-2100-18-HT

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|-----------------------------|--|
| Model | MPI58-2100-18-HT |
| Collector type | evacuated tube collector |
| Installation type | roof mounted or ground stand |
| Tube structure | all glass coaxial double-layer tubes |
| Outer tube diameter | Φ 58 ± 0.7mm |
| Inner tube diameter | Φ 47 ± 0.7mm |
| Outer tube thickness | 1.5 ± 0.15mm |
| Inner tube thickness | 1.5 ± 0.15mm |
| Tube length | 2100 ± 4mm |
| Unit tube weight | 1.35 ± 0.12kg |
| No. of tubes | 18 |
| Absorber surface area | 2.81m ² |
| Absorptance (α) | 0.94 ~ 0.96 |
| Emissance (ε) | 0.04 ~ 0.06 |
| Collector glazing | evacuated tubes (borosilicate glass) |
| Max. operating pressure | 10 bar (1MPa) |
| Normal operating pressure | 3 ~ 6 bar |
| Transmittance of outer tube | 0.91 |
| Idle temperature | 270 ~ 300 °C |
| Heat-loss coefficient | ≤ 10 W/m °C |
| Bearing hailstone ability | hail stone diameter Φ25mm |
| Pressure endurance | 0.4MPa |
| Outer shell of tank | 0.6mm thick galvanized steel |
| Inner tank | 316L Stainless Steel w/ argon welding |
| Inner tank thickness | 1.5mm |
| End cover | 2.0mm 316L Stainless Steel |
| Stand | 2.0mm thick galvanized steel |
| Insulation | 60 ~ 70 mm polyurethane integral foaming |
| Sealing rubber | 110 methyl silicone rubber with Vinyl |
| Tailstock | ABS |