

Along with the society's progress, people's aesthetic ideas and awareness of health and environmental-protection have been improved. solar water heater is more and more favored by high-end consumers.

The solar energy is an energy which continuously unceasing nuclear fusion reaction process in the solar interior produces. Solar average radiation intensity on the earth's orbit is $1367\text{kw}/\text{m}^2$. The perimeter of terrestrial equator is 40000km , thus it may calculate, the Earth obtaining the energy may reach $173,000\text{TW}$. The standard peak intensity in the sea level is $1\text{kw}/\text{m}^2$. Some 24h annual average radiation intensity on the earth's surface is $0.20\text{kw}/\text{m}^2$, which is equal to have $102,000\text{TW}$ the energy .

The solar energy has some advantages: Firstly, economy. The sunlight does not need to spend, thus it can save much spending of coal gas or the electrical bill. Secondly, safty. Don't fear poisoning on gas and the leakage. Thirdly, convenient. Basically all days have the sunshine. Fourthly, environmental protection. It don't bring the exhaust gas, and it doesn't pollute the environment. It is the product of environmental protection and energy conservation.