Global Energy Collaborations

[Solar Air Conditioners]

Operational Assessment of Solar Air Conditioner

(GEC Optimum Solar Air Conditioners)

1.The different charges between solar air conditioner and China standard general air conditioner:

SF F(R)-52GW Type：

Item / Product	Cooling (W)	Power (W)	EER	Unit price of electric fee(RMB/kh)	Charge for one day/12 hours(RMB)	Charge for 180 days（RMB）	Save
General A/C	5200	2080	2.5	0.7	17.475	3145.5	--
Solar A/C	5200	1500	3.47	0.7	12.6	2268	28%

we can get the conclusion base on the analyst: the solar air-conditioner can save the energy about 28% more than the air-conditioner(general) with the 5 class of the energy standard , and the exact calculation as below:

one unit air-conditioner :（2080-1500）÷2080≈28%，

So we can save the operate charge every year is : 28%×3145.5=880.74 , and it isn't include the compressor startup power of the solar air-conditioner, and the startup current also is lower than the general air-conditioner, the safe guard and the design life is high than the general air-conditioner standard requirement. And on the max operation condition of the national standard policy, the solar air-conditioner take the advantage of their special design absolutely , and protect the system more efficiency and safety. Compared with the general air-conditioner, it already excess the national standard range far away.

2. During the actually operate process, the OPTIMUM solar air-conditioner operate charge might be reduce based on the ambient conditioner, it would save the energy more than 30% , and the cost which expensive than the general air-conditioner, could take back within 18 months absolutely.

Attach 1：SF F(R)）-32GW

Item / Product	Cooling (W)	Power (W)	EER	Unit price of electric fee(RMB/kh)	Charge for one day/12 hours(RMB)	Charge for 180 days（RMB）	Save
General A/C	3200	1280	2.5	0.7	10.75	1935	--
Solar A/C	3200	860	3.72	0.7	7.225	1300.5	32.8%

Attach 2：SF F(R)）-35GW

Item / Product	Cooling (W)	Power (W)	EER	Unit price of electric fee(RMB/kh)	Charge for one day/12 hours(RMB)	Charge for 180 days（RMB）	Save
General A/C	3500	1400	2.5	0.7	11.76	2168.8	--
Solar A/C	3500	986	3.55	0.7	8.28	1490.4	29.6%

Attach 3：SF F(R)）-72GW

Item / Product	Cooling (W)	Power (W)	EER	Unit price of electric fee(RMB/kh)	Charge for one day/12 hours(RMB)	Charge for 180 days（RMB）	Save
General A/C	7200	2880	2.5	0.7	24.192	4354.56	--
Solar A/C	7200	1950	3.69	0.7	16.38	2948.4	32%

Attach 4：SF F(R)-120GW

Item / Product	Cooling (W)	Power (W)	EER	Unit price of electric fee(RMB/kh)	Charge for one day/12 hours(RMB)	Charge for 180 days（RMB）	Save
General A/C	12000	4800	2.5	0.7	40.32	7257.6	--
Solar A/C	12000	3410	3.52	0.7	28.644	5155.9	29%