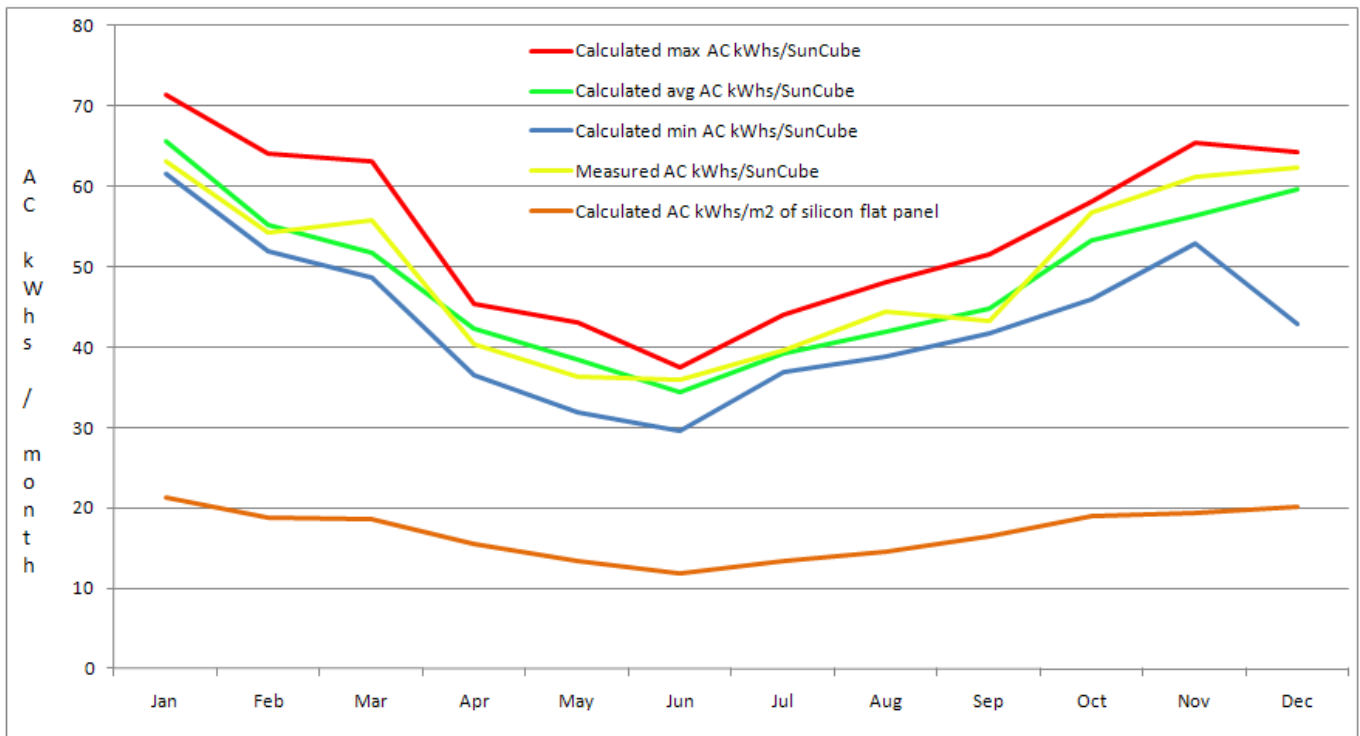


SunCube™ AC kWh / month output data versus a typical silicon flat panel

(26 Jan 2010)



Location: GGE SunCube test facility, 7 Provident Avenue, Glynde, South Australia, Australia

As can be seen in the graph above, the SunCube™ generates more power throughout the year than an identically sized fixed silicon based flat panel. In fact, the SunCube™ produces kilowatt-hours (kWh) of electricity at lower cost than any other PV product on the market today.

The SunCube™ is IEC 62108 certified, independently rated at 300 WDC STC and is produced in an ISO 9001:2008 certified, licensed, specifically designed and built manufacturing facility.

Detailed measurement data follows on the next page

Location: GGE SunCube test facility, 7 Provident Avenue, Glynde, South Australia, Australia

Two axis sun tracked concentrator DNI kWh/m2/day solar availability data

Nasa supplied	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Yearly
22-year avg kWh/m2/day	7.68	7.16	6.06	5.13	4.5	4.16	4.6	4.9	5.43	6.25	6.82	6.98	5.81
Minimum % variation	-6	-6	-6	-14	-17	-14	-6	-7	-7	-14	-6	-28	
Maximum % variation	9	16	22	7	12	9	12	15	15	9	16	8	
Min kWh/m2/day	7.22	6.73	5.70	4.41	3.74	3.58	4.32	4.56	5.05	5.38	6.41	5.03	3.58
Average kWh/m2/day	7.68	7.16	6.06	5.13	4.50	4.16	4.60	4.90	5.43	6.25	6.82	6.98	5.81
Max kWh/m2/day	8.37	8.31	7.39	5.49	5.04	4.53	5.15	5.64	6.24	6.81	7.91	7.54	8.37
Days in Mth	31	28	31	30	31	30	31	31	30	31	30	31	
Min/mth kWh/m2 input	224	188	177	132	116	107	134	141	151	167	192	156	1,886
Avg/mth kWh/m2 input	238	200	188	154	140	125	143	152	163	194	205	216	2,117
Max/mth kWh/m2 input	260	233	229	165	156	136	160	175	187	211	237	234	2,382
OnSun DC efficiency	30.6% as measured by GGE's inhouse Eko MP-160 IV Curve tracer												
DC to AC efficiency	90.0% Includes wiring and inverter losses												
OnSun AC Efficiency	27.5% Final system efficiency												
Min/mth AC kWhs out	62	52	49	36	32	30	37	39	42	46	53	43	519
Avg/mth AC kWhs out	66	55	52	42	38	34	39	42	45	53	56	60	583
Max/mth AC kWhs out	71	64	63	45	43	37	44	48	52	58	65	64	656

AC kWh / month data collected from 10 SunCubes by GGE at 7 Provident Ave, Glynde, South Australia

Kwh from power meter	631	543	558	404	363	359	396	444	433	567	613	624	5,935
Number of SunCubes	10												
AC kWhs /SunCube	63.1	54.3	55.8	40.4	36.3	35.9	39.6	44.4	43.3	56.7	61.3	62.4	594

Latitude tilt fixed flat panel kWh/m2/day solar availability data

Nasa supplied	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Yearly
22-year kWh/m2/day	6.53	6.35	5.67	4.91	4.11	3.77	4.12	4.48	5.22	5.79	6.12	6.18	5.26
OnSun DC efficiency	11.7% NOCT / OnSun efficiency (BP Solar Australian BP165 flat panel data sheet)												
DC to AC efficiency	90.0% Includes wiring and inverter losses												
OnSun AC efficiency	10.5% Final system efficiency												

Calculated silicon flat panel AC kWh / month data

Avg solar kWh/m2 in	202	178	176	147	127	113	128	139	157	179	184	192	1,922
Avg AC kWh/m2 out	21	19	19	16	13	12	13	15	16	19	19	20	202