EXAMPLE STAND ALONE SOLAR POWER LOG SHEET (for PL60 regulator)

Date	PL60 daily IN (Ah)	PL60 daily IN converted to kWh (Ah x system Volts / 1000)	PL60 daily OUT (Ah)	Output Meter Reading in kWh	Battery Specific Gravity (S.G.)	Notes
	This is what the system received from the sun today	This is the Ah figure multiplied by the system voltage (24 or 48) then divided by 1000	This is the amount the system has supplied the house today in Ah	This is the total amount the system has supplied the house in kWh (one reading minus the previous days reading gives that day's usage)	Measure the battery electrolyte with the hydrometer - 1260 is full, below 1200 is time to start the generator	Write anything relevant here, such as previous weather conditions or heavy loads on the system.
15/06/2008	88	4.22	83	4	1260	the first day
16/06/2008	167	8.02	158	11.6	1255	sunny day
17/06/2008	65	3.12	213	21.8	1240	did 6 loads with the washing machine, little sunshine
18/06/2008	212	10.18	85	25.9	1265	full sun

Fill the log sheets in at the same time each day - preferably at the end of the day.
You will see as you fill in the log sheets that you will require about 20 % more power to come in from the sun than you use, to keep the batteries fully chargec
If you use more power than you collect from the sun each day, the state of charge of the batteries will decline
You can compare the PL60's IN and OUT Amp Hour (Ah) figures, or fill in the column that converts the PL60's IN Ah figure to Kilowatt Hours (kWh),
and compare this with the increase in the Output Meter's Kwh figure since the previous day