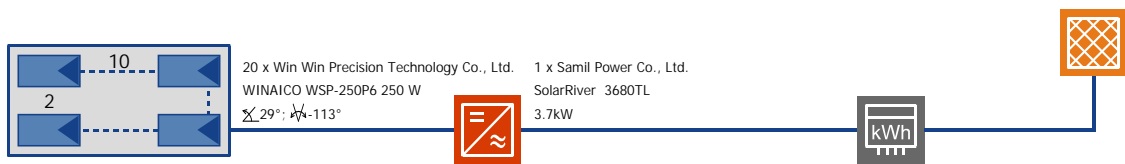


Project Name: 5kW system in Willaston, Nantwich
 Variant Reference:
 Designer: Stuart Reid

22/02/2014



Location: Nantwich
 Climate Data Record: Crewe & Nantwich (1981-2000)
 PV Output: 5.00 kWp
 Gross/Active PV Surface Area: 33.27 / 33.26 m²

PV Array Irradiation: 26,596 kWh
 Energy Produced by PV Array (AC): 3,434.4 kWh
 Grid Feed-in: 3,434.4 kWh
 Yield Reduction Due to Shading: 2 %

System Efficiency: 12.9 %
 Performance Ratio: 85.6 %
 Inverter Efficiency: 94.5 %
 PV Array Efficiency: 13.6 %
 Specific Annual Yield: 684.1 kWh/kWp
 CO2 Emissions Avoided: 3,031 kg/a

The results are determined by a mathematical model calculation. The actual yields of the photovoltaic system can deviate from these values due to fluctuations in the weather, the efficiency of modules and inverters, and other factors. The System Diagram above does not represent and cannot replace a full technical drawing of the solar system..

Simulation Results for Total System:

Irradiation onto Horizontal:	31,211 kWh	Own Use:	14.0 kWh
PV Array Irradiation:	26,596 kWh	Energy Produced by PV Array:	3,620 kWh
Irradiation minus Reflection:	24,799 kWh	System Efficiency:	12.9 %
Irradiation without Shade:	27,048 kWh	Performance Ratio:	85.6 %
Energy from Inverter (AC):	3,434 kWh	Final Yield:	1.9 h/d
Consumption Requirement:	0 kWh	Specific Annual Yield:	684 kWh/kWp
Energy from Grid:	14 kWh	Array Efficiency:	13.6 %

