# solar&wind applications

# **Performance Study**

for

### **Your Name**

Your Address And Postcode

DATE



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ayr@solarwindapplications.com www.solarwindapplications.com This report outlines the performance of your system compared to your provided yield estimate alongside what Solar and Wind Applications deem to be a good estimate of yield for your installation.

#### **Your System**

Your system consists of 14 Solsonica modules located across 2 roof pitches. 6 Modules located on the ESE pitch at the front of the house, and 8 located on the SSW pitch at the side of the house.

These are connected to an Omnik inverter in the attic.

You provided the following readings for the yield of your system since installation in in July 2013:

Date	Reading (kWh)	
July 2014	2303	
July 2015	+2505	
June 2016	+1559	

You were provided a yield estimate of 3,140kWh for your system.

From this we are below the annual yield by the below percentages:

Year 1	27% below estimate
Year 2	20% below estimate

This is certainly consistently outside a reasonable margin of error from the expected yield for your system.

# **Our Opinion**

Solar and Wind Applications have deemed that given your actual roof pitches, orientations and likely shading that a realistic yield estimate is in the order of 2,900kWh for your system as built.

This is lower than the yield estimate provided at the time of sale of your system by your installer, but we believe our estimate to be accurate and achievable based on the information provided.

As your performance is relatively consistent between years, we do not anticipate any significant failures on the system.



The Omnik inverter you have features 2 trackers, so it is likely that the system is correctly running one per roof space. In some cases split orientation systems are installed on a single tracker inverter which can be a cause of yield loss.

Because the system is also performing below our estimate we estimate you currently have a yield loss due to underperformance of around 400kWh per year.

This is likely to be worth further investigation to try to increase the performance of your system to nearer our estimate of 2,900kWh.

Please find a quotation attached, along with details of what is included with this.

Also attached for your interest is a Case Study summary of a similar piece of work recently carried out by the company.