Weather Conditions

Weather Conditions:

Date: 2020-02-14

Sunlight Hours: 24

Average Temperature: 27.23°C

Average Wind Speed: 7.74 m/s

Most Frequent Wind Direction: 135°

Total Rainfall: 0.0 mm

Air Quality Data

Air Quality Data:

Average PM1: 2.19 µg/m³

Average PM2.5: 0.3 µg/m³

Average PM4: 0.23 µg/m³

Average PM10: $0.03 \, \mu g/m^3$

Average Particulate Concentration: 0.47 particle/m³

Energy Generation Data

Energy Generation Data:

Total Energy Generated AC: 49.44 kWh

Total Energy Generated DC: 50.15 kWh

Conversion Efficiency Rate: 98.58%

Peak hour: 12:00: 7.02 kWh

Hourly Energy Generation:

00:00: 0.00 kWh

01:00: 0.00 kWh

02:00: 0.00 kWh

03:00: 0.00 kWh

04:00: 0.00 kWh

05:00: 0.06 kWh

06:00: 0.99 kWh

07:00: 1.89 kWh

08:00: 4.17 kWh

09:00: 5.55 kWh

10:00: 4.00 kWh

11:00: 6.73 kWh

12:00: 7.02 kWh

13:00: 5.02 kWh

14:00: 6.18 kWh

15:00: 4.10 kWh

16:00: 3.03 kWh

17:00: 0.67 kWh

18:00: 0.03 kWh

19:00: 0.00 kWh

20:00: 0.00 kWh

21:00: 0.00 kWh

22:00: 0.00 kWh

23:00: 0.00 kWh

Environmental Impact

Environmental Impact:

CO2 Savings: 37.47 kg

Alerts and Notifications

Alerts and Notifications:

Performance Alerts: None

Weather Warnings: None

Summary and Recommendations

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Summary: Energy generation was strong, with a peak at 12:00 PM. No maintenance issues reported.

Recommendations: Consider checking panel angles to optimize for longer daylight hours.