

task_f64r8g2jf4pdomfi_with_calculation

Student Group

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Exercise E10 Conversion: Energy, Power and Area

2. **Task:** Write the panels and storage capacity of the proposed system (date of installation, average 100~{\rm kWh} and an usable battery capacity of 60~{\rm kWh}). Solar panels produces per \$1~{\rm m}^2\$ in average in December $0.2~{\{\{\rm kWh\}}\over{\{\rm m}^2\}}}$. The car is driven 50~{\rm km} per day. The size of a distinct solar module with 460~{\rm W_p} (Watt peak) is 1.9~{\rm m} \times 1.1~{\rm m}.

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\begin{align*} A &= 402 \times 10^6 \text{ (MW\#226)} \end{align*}
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.. What is the average power consumption of the car per day?

[illegible]
$$\frac{B_{20} \{ \text{align*} \{ \text{V} \} \text{panel} \{ \text{align*} \{ \text{A} \} \} \} \over A_2 \{ \text{r} \{ \text{panel} \} \text{V} \} \} \{ \text{solution} \{ 2 \} \} \} \over 2.0 \sim \{ \text{r} \{ \text{mm}^{\{ 2 \} } \} \text{panel} \{ \} \} \text{gh}^* = 19.04 \sim \{ \text{r} \{ \text{panels} \} \} \rightarrow 20 \sim \{ \text{r} \{ \text{panels} \} \} \end{align*}$$

$$\begin{aligned} \frac{W}{l} &= \frac{16 \sim \text{km}}{100 \sim \text{km}} = 0.16 \\ \frac{\sim \text{km}}{\sim \text{km}} \parallel W &= 50 \sim \text{km} \cdot 0.16 \frac{\sim \text{km}}{\sim \text{km}} = 8 \sim \text{km} \end{aligned}$$

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