Keep to Success
  * Show up
  * Do your homework
  * Study regularly
  * Stay fit by exercising

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Solar Colo ppt

Portable panel

Tested at 1 kW/m² solar radiation

- \( P_{\text{max}} = 31.0 \text{ W} \)
- \( n \times 4 = 36 \) cells in series
- \( V_{\text{mp}} = 16.9 \text{ V} \)
- \( I_{\text{mp}} = 1.84 \text{ A} \)

Each cell = 11.4 cm \( \times \) 5.7 cm = 65.0 cm\(^2\) (less \( \approx 4\% \) coverage)

\[
65 \text{ cm}^2 \times 36 = 2340 \text{ cm}^2 = 0.234 \text{ m}^2
\]

1 kW/m\(^2\) \times 0.234 m\(^2\) = 234 W

\[
\eta = \frac{31 \text{ W}}{234 \text{ W}} = 13.25 \%
\]