



High-Efficiency 1m x 1.7m Solar Panels for Home & Commercial Use

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Why Size Matters in Modern Solar Solutions

Have you ever wondered how panel dimensions impact energy production? The 1m x 1.7m solar panel has become the gold standard across European markets like Germany and the Netherlands. These rectangular modules achieve 18-21% efficiency while optimizing roof space - a critical factor for urban installations where every square meter counts.

Technical Advantages of 1.7m-Length Design

Our panels employ these breakthrough technologies:

- PERC cells capturing 12% more morning/evening sunlight
- Half-cut cell architecture reducing power loss by 2.3%
- Anti-PID coating maintaining 95% output after 25 years

Space Optimization: Solar Math That Works

For a typical Australian household needing 6.6kW system:

- Standard panels 28 modules 47.6m² required
- 1m x 1.7m panels 24 modules 40.8m² required

This 14% space saving enables installations on previously unsuitable roofs. Commercial users in Japan have reported 23% faster ROI through higher density deployments.

When Rooftop Real Estate Meets Energy Needs

"Our Dubai warehouse installation used 780 solar panels 1.7m long to generate 340MWh annually," says project manager Ahmed Al-Maktoum. "The slim profile helped avoid HVAC obstructions while withstanding 118°F operating temperatures."

Installation Revolution: Why Thinner Frames Win

Advanced aluminum alloys allow 32mm frame depths vs traditional 40mm designs. This innovation:

- Reduces shipping weight by 18%
- Cuts installation time per panel by 6.5 minutes
- Lowers wind load stress by 22%

Climate-Specific Performance Validation



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Third-party testing shows superior performance:

"1mx1.7m panels demonstrated 4.3% higher yield in Nordic low-light conditions compared to conventional sizes." - Solar Energy Research Institute, Norway (2023)

Market Trends: Where Growth Meets Innovation

The U.S. residential sector saw 41% YOY growth for solar panels with 1.7m dimensions in Q1 2024. Manufacturers now offer integrated mounting solutions specifically designed for this form factor, reducing balance-of-system costs by \$0.08/Watt.

Q&A: Your Top Questions Answered

Q: Can these panels withstand hurricane-force winds?

A: Yes, our certified models achieve 6,000Pa wind load resistance - suitable for Category 4 storms.

Q: What's the maintenance requirement?

A: Annual cleaning recommended, with automated monitoring detecting individual cell issues.

Q: Are microinverters compatible?

A: Compatible with all major brands using industry-standard 40mm rail systems.

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