Interpretation of watt classes

The comparison of solar modules

How is the degree of space utilisation determined

The reason for the different watt classes of modules is usually the different size of the module and not always, as is often assumed, possible technological leaps. This is because it is often not a case of a technologically more valuable module, but simply a larger module that enables a higher wattage due to its size.

By calculating the area utilisation factor solar modules of different watt classes can be compared.

The area efficiency of solar modules can be calculated by dividing the watt class of the solar module by the area of the module in square metres. The comparison of the modules with each other can thus be precisely calculated and verifiably confirmed.

The formula to calculate by yourself

$$\text{Space utilisation level} = \frac{\text{Watt class}}{\text{Module area } (m^2)}$$

solar fabrik

Creating a Powerful Future

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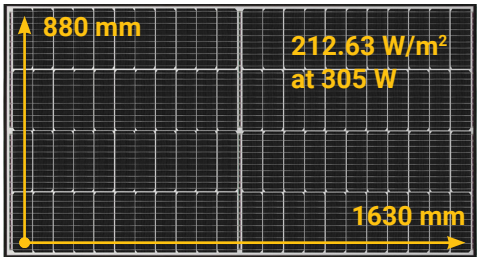
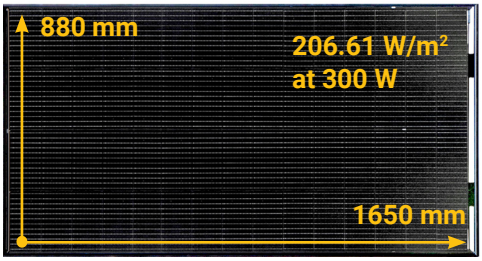
EUPD RESEARCH TOP BRAND PV MODULES GERMANY 2023

SOLAR PRO SUMER AWARD GERMANY >22.000 RATINGS MODULES PURCHASE RECOMMENDATION EUPD Research 2022/23

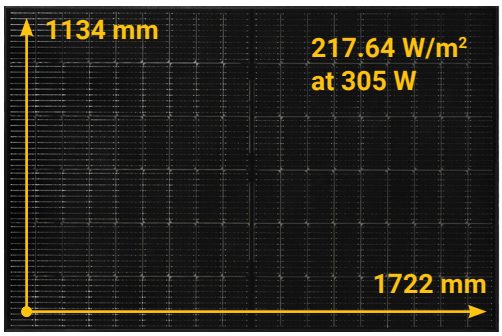
Solar Fabrik solar modules



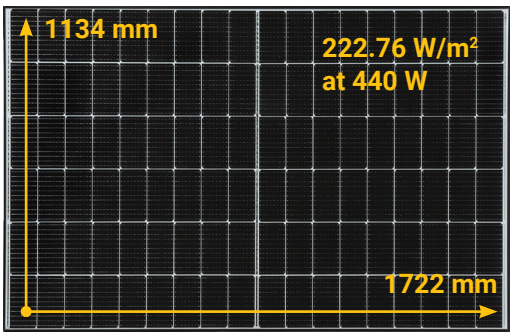
Mono S5 Triplecut | Installer Series N
300W / 305W
88 N-Type bifacial monocrystalline triple cells [MBB]



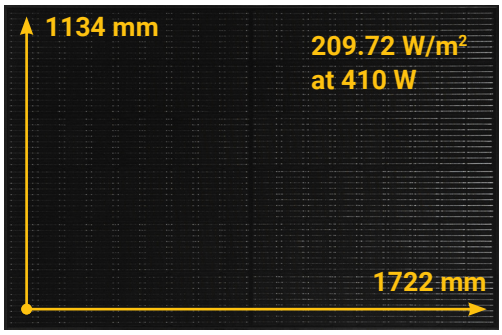
Mono S5 Halfcut | Installer Series
300W
60 bifacial monocrystalline half cells [MBB]



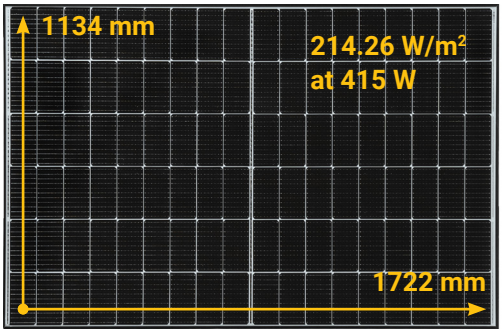
Mono S4 Halfcut | Innovation Powerline N
415W / 420W / 425W
108 N-Type bifacial monocrystalline half cells [MBB]



Mono S4 Halfcut | Trend Powerline N
440W
108 N-Type bifacial monocrystalline half cells [MBB]



Mono S4 Halfcut | Black-Black
405W / 410W
108 monocrystalline half cells [MBB]



Mono S4 Halfcut | Black-White
405W / 410W / 415W
108 monocrystalline half cells [MBB]

Comparison at module level	Watt class [W]	Area [m²]	Weight [kg]	Space utilisation [W/m²]
Mono S4 Halfcut Innovation Powerline N	425	ca. 1.95	ca. 23.7	217.64
Mono S4 Halfcut Trend Powerline N	435	ca. 1.95	ca. 24.2	222.76
Mono S4 Halfcut Black-White	415	ca. 1.95	ca. 21.2	214.26
Mono S5 Triplecut Installer Series	305	ca. 1.43	ca. 23.0	212.63
Mono S5 Halfcut Installer Series	300	ca. 1.43	ca. 18.5	206.61
Mono S4 Halfcut Black-Black	410	ca. 1.95	ca. 21.4	209.72

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