

Item	Quantity	Description	Total
		<p><b>Mono S4 Halfcut BC Full Black 475-480W</b></p> <p>The Solar Fabrik Mono S4 Halfcut Trend Full Black module with a maximum system voltage of 1500 V is a double-glass module with bifacial monocrystalline half-cells, back contact, and anti-shading technology.</p> <p><b>Mechanical design</b></p> <ul style="list-style-type: none"> <li>- Bifacial glass-glass module (black mesh)</li> <li>- Dimensions L x B x D: 1,800 x 1,134 x 30 mm</li> <li>- Weight: approx. 25.0 kg</li> <li>- Front glass: 2.0 mm tempered solar glass with anti-reflective coating</li> <li>- Back glass: 2.0 mm tempered solar glass</li> <li>- Frame: black anodized aluminum with hollow chamber profile</li> <li>- Mechanical load capacity (according to IEC 61215): load capacity up to 5,400 Pa = 550 kg/m<sup>2</sup></li> </ul> <p><b>Electrical design</b></p> <ul style="list-style-type: none"> <li>- Solar cells: 108 pieces, monocrystalline, N-type, bifacial technology (6 x 18 mm)</li> <li>- Connection technology: central, IP68, cable 1200 mm / 4 mm<sup>2</sup>, MC4 Stäubli EVO 2</li> <li>- Protection class: II (according to IEC 61140)</li> <li>- Max. system voltage: 1,500 V</li> <li>- Reverse current carrying capacity I<sub>R</sub>: 30 A</li> </ul> <p><b>Electrical properties at STC (1,000 W/m<sup>2</sup>, 25±2°C, AM 1.5)</b></p> <ul style="list-style-type: none"> <li>- Nominal power P<sub>max</sub>: 475 – 480 Wp (100% plus sorting, ±3 % measurement tolerance)</li> <li>- Current at maximum power I<sub>mpp</sub>: 14.23 – 14.33 A (±3 % measurement tolerance)</li> <li>- Open-circuit voltage U<sub>oc</sub>: 40.42 – 40.53 V (±3 % measurement tolerance)</li> <li>- Short-circuit current I<sub>sc</sub>: 14.88 – 14.98 A (±3 % measurement tolerance)</li> <li>- Efficiency η<sub>m</sub>: 23.30 – 23.50 % (±3 % measurement tolerance)</li> <li>- Bifaciality coefficient: P<sub>max</sub>: 80% ± 10%</li> </ul> <p><b>Thermal properties</b></p> <ul style="list-style-type: none"> <li>- Operating temperature range: -40°C ~ +85°C</li> <li>- Temperature coefficient P<sub>max</sub>: -0.260 %/°C</li> <li>- Temperature coefficient U<sub>oc</sub>: -0.200 %/°C</li> <li>- Temperature coefficient I<sub>sc</sub>: 0.050 %/°C</li> <li>- Nominal operating temperature of the cell: 45°C ± 2° C</li> </ul> <p><b>Product and company certificates</b></p> <ul style="list-style-type: none"> <li>- IEC 61215-1/-1-1/-2:2016 and IEC 61730-1/-2:2016 (including protection class II)</li> <li>- Fire protection class A (according to IEC 61730-2/UL 790, UL 1703)</li> <li>- Hail protection class 4: Ice balls with a maximum diameter of 40 mm and a speed of up to 29.2 m/s</li> </ul> <p><b>Warranties in accordance with the “Warranty Conditions for Glass-Glass Modules”</b></p> <ul style="list-style-type: none"> <li>- 30-year product warranty</li> <li>- 30-year linear performance warranty</li> </ul> <p><b>Special product features</b></p> <ul style="list-style-type: none"> <li>- Maximum yield reliability over the entire product life cycle thanks to: <ul style="list-style-type: none"> <li>o Durability and fire safety due to glass front and back</li> <li>o Resistance to ammonia, salt, and hail</li> </ul> </li> </ul> <p>Easy product handling and uncomplicated return</p>	