

Grid-Tie Modules

Modules for grid-tie applications

The modules shown in this section of the catalog are primarily used in grid-tie applications. Many of them have higher output voltages and are designed specifically for use with string inverters having input voltages ranging from 300-550 Vdc. These solar modules will also perform well in off grid application, particularly when MPPT charge controllers are employed. Additional modules for off-grid application are on pages 23-29.

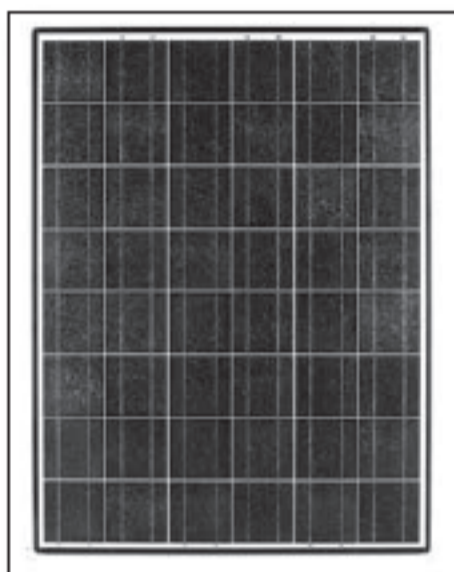
Sharp

Solar Modules

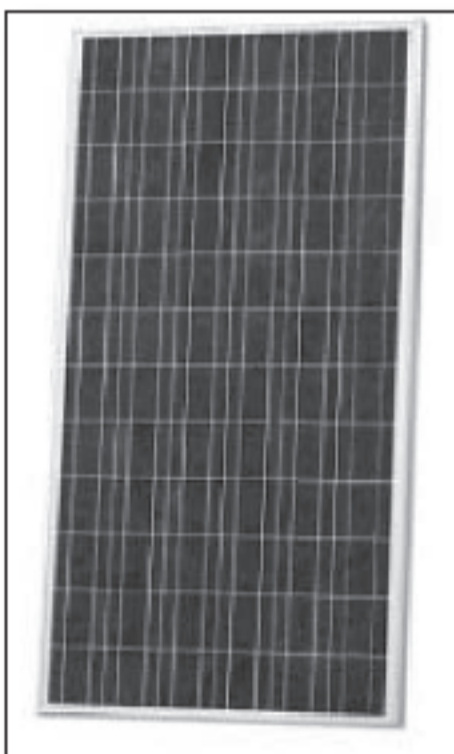
Sharp modules are designed for a variety of electrical power requirements. The modules have superb durability to withstand rigorous operating conditions. All are built in ISO 9001 certified facilities.

The 167, 140 and 70 watt models have black, anodized, aluminum frames. The 140 and 70 watt modules have an "L" hook design located along the perimeter of their frames. The triangular 70 watt modules are matched with 140's to offer design flexibility for roof line aesthetics. All three models are constructed with multi-crystal silicon cells. The 170 and 175 watt modules have clear anodized aluminum frames. Each module is constructed of 72 series cells. The 170 uses poly-crystalline and the 175 uses single crystal silicon cells.

All Sharp modules have bypass diodes to minimize power drop caused by shade. Each module comes with 51" #10 AWG lead wires with male and female Multi Contact® (MC) connectors. All modules are listed to UL1703 and cUL, and carry a 25-year warranty.

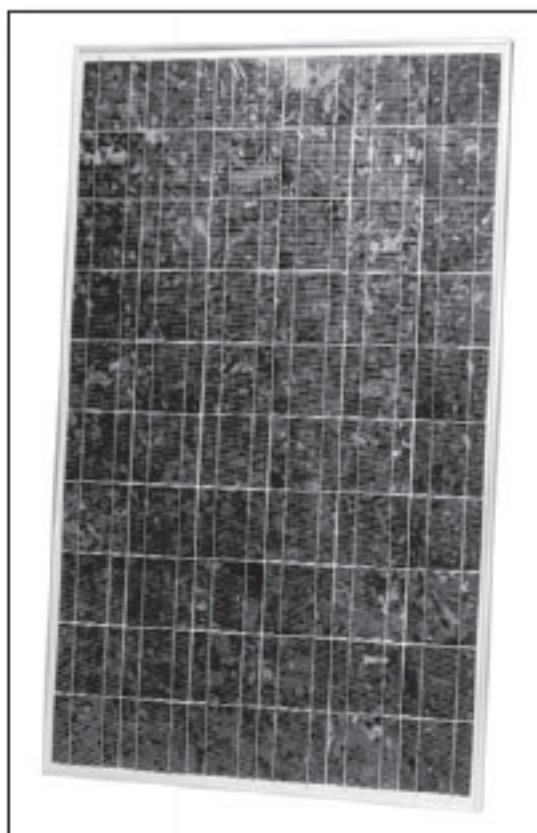


Sharp 167W module

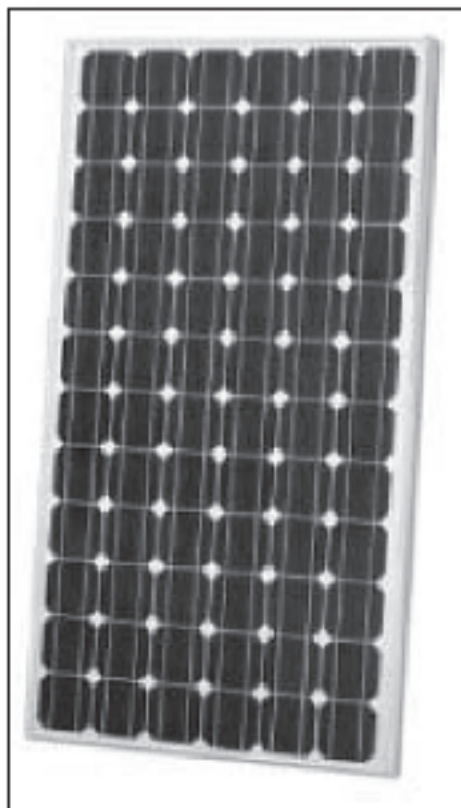


Sharp 170W module

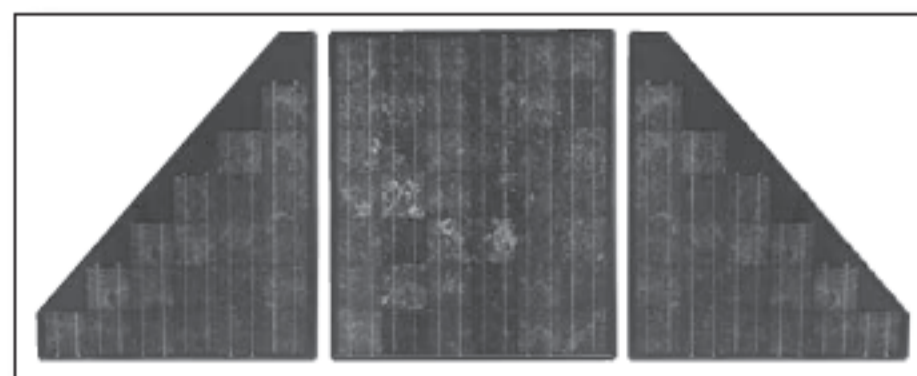
| Model | Watts | Vmp | Imp | Voc | Isc | Dimensions in. | Weight lb. |
|-------------------|-------|-------|------|-------|------|----------------------|------------|
| ND-070ERU (right) | 70 | 9.98 | 7.02 | 12.43 | 7.81 | 45.86 x 38.98 x 1.81 | 26.90 |
| ND-070ELU (left) | 70 | 9.98 | 7.02 | 12.43 | 7.81 | 45.86 x 38.98 x 1.81 | 26.90 |
| ND-N0ECU | 140 | 19.95 | 7.02 | 24.85 | 7.81 | 45.86 x 38.98 x 1.81 | 31.96 |
| ND-167U3A | 167 | 23.5 | 7.10 | 29.00 | 7.91 | 51.90 x 39.10 x 1.81 | 35.27 |
| NE-170U1 | 170 | 34.8 | 4.90 | 43.20 | 5.47 | 62.01 x 32.52 x 1.81 | 37.49 |
| NT-175U1 | 175 | 35.4 | 4.95 | 44.40 | 5.55 | 62.01 x 32.52 x 1.81 | 37.49 |
| ND-208U1 | 208 | 28.5 | 7.30 | 36.10 | 8.13 | 64.60 x 39.10 x 1.81 | 46.30 |



Sharp 208W module



Sharp 175W module



Sharp 70W and 140W modules