

# MERLIN SOLARPLEX MONO HIGH DENSITY FLEXI PANELS

Manufactured using the latest solar cell technology to create super efficient power generation, Merlin's Mono High Density (MHD) Flexi Solar Panels are hard wearing and ultra lightweight which makes it perfect for a campervan or boat.

With industry-leading guarantees, Merlin's MHD SolarPlex range incorporate innovative solar cell technology that eliminates spacing in the panels by overlapping the small cells. In addition, the passive rear solar cell contact replaces the conventional electrical ribbon seen on the surface of most other panels. As a result, more sunlight is captured by the cells and shading losses and hotspots are reduced. So, the higher energy density creates more power in a smaller space.

Certified and tested to ASTM B117-ISO 9227 standards in an independent laboratory, Merlin MHD SolarPlex panels have been tested in extreme conditions, more hostile than a solar panel will likely encounter even in the wildest oceans. This is to guarantee that Merlin's MHD SolarPlex are the perfect choice for those seeking durability and exceptional performances.

- **Exceptional technology** used within the MHD panels allows more sunlight to be captured by the cells, minimising shading losses and hotspots.
- **Completely IP67 waterproof** protecting the solar cell circuit from extreme conditions.
- **Expert design** with a depth of just 2mm making them the perfect solution for flat, or slightly curved surfaces, where minimising weight is a must.
- **Salt water & UV tested and certified** to ensure long performance of the SolarPlex panels in the harshest of environments.
- **The greatest amount of bend offered** in a semi-flexible panel, Merlin's SolarPlex MHD panels closely hug a curved surface providing the utmost versatility.
- **Available in a variety of sizes** from 110w to 290w with a choice of top or rear cable entry.

MERLIN  
POWER



| POWER           | SIZE (MM)      | WEIGHT (KG) | WATTS PER DAY (W) | AMP HOURS PER DAY (A) | CHARGE CONTROLLER | VMP (VDC) | IMP (A) | VOC (V) | ISC (A) |
|-----------------|----------------|-------------|-------------------|-----------------------|-------------------|-----------|---------|---------|---------|
| <b>110W</b>     | 1080 X 540 X 2 | 2.01        | 660               | 36.72                 | 10Ah              | 18        | 6.12    | 21.2    | 6.48    |
| <b>110W (R)</b> | 1050 X 550 X 2 | 2.01        | 660               | 35.52                 | 10Ah              | 18.6      | 5.92    | 22      | 6.27    |
| <b>150W</b>     | 1440 X 560 X 2 | 2.3         | 900               | 48.42                 | 10Ah              | 18.6      | 8.07    | 22      | 8.55    |
| <b>150W (R)</b> | 1390 X 560 X 2 | 2.7         | 900               | 48.42                 | 10Ah              | 18.6      | 8.07    | 22      | 8.55    |
| <b>200W</b>     | 1435 X 710 X 2 | 3.5         | 1200              | 49.2                  | 20Ah              | 24.4      | 8.2     | 28.8    | 8.69    |
| <b>200W (R)</b> | 1380 X 890 X 2 | 3.4         | 1200              | 49.2                  | 20Ah              | 24.4      | 8.2     | 28.8    | 8.69    |
| <b>250W</b>     | 1475 X 890 X 2 | 4.5         | 1500              | 61.5                  | 20Ah              | 24.4      | 10.25   | 28.8    | 10.86   |
| <b>250W (R)</b> | 1420 X 890 X 2 | 4.1         | 1500              | 64.14                 | 20Ah              | 23.4      | 10.69   | 27.6    | 11.32   |
| <b>290W</b>     | 1650 X 890 X 2 | 5.2         | 1740              | 63.54                 | 20Ah              | 27.4      | 10.59   | 32.3    | 11.22   |
| <b>290W (R)</b> | 1710 X 890 X 2 | 4.6         | 1740              | 71.34                 | 20Ah              | 24.4      | 11.89   | 28.8    | 12.6    |

Merlin's MHD SolarPlex panels can be supplied in a variety of ways - from panel only to bulk packs - see what is included in each kit below:

**- Panel only**

Contents: Solar panel, 4m cable, fuse and fuseholder, instruction sheet. (Can be upgraded to include a controller).

**- Roof / Deck Kit**

Contents: Solar panel, 4m cable, shading diode, controller, bonding agent and instruction sheet.

**- Bulk Pack**

QTY of solar panels stated below.

| POWER           | ENTRY       | CONTROLLER          | PANEL ONLY | ROOF/DECK KIT | BULK PACK | BULK PACK QTY |
|-----------------|-------------|---------------------|------------|---------------|-----------|---------------|
| <b>110 Watt</b> | <b>TOP</b>  | NO CONTROLLER       | 07-1010    | N/A           | 07-1106   | 2             |
|                 |             | 10A DUAL CONTROLLER | 07-1011    | 07-1208       | N/A       | N/A           |
|                 |             | 15A MPPT CONTROLLER | N/A        | 07-1209       | N/A       | N/A           |
| <b>110 Watt</b> | <b>REAR</b> | NO CONTROLLER       | 07-1012    | N/A           | 07-1107   | 2             |
|                 |             | 10A DUAL CONTROLLER | 07-1013    | 07-1210       | N/A       | N/A           |
|                 |             | 15A MPPT CONTROLLER | N/A        | 07-1211       | N/A       | N/A           |
| <b>150 Watt</b> | <b>TOP</b>  | NO CONTROLLER       | 07-1014    | N/A           | 07-1108   | 2             |
|                 |             | 10A DUAL CONTROLLER | 07-1015    | 07-1212       | N/A       | N/A           |
|                 |             | 15A MPPT CONTROLLER | N/A        | 07-1213       | N/A       | N/A           |
| <b>150 Watt</b> | <b>REAR</b> | NO CONTROLLER       | 07-1016    | N/A           | 07-1109   | 2             |
|                 |             | 10A DUAL CONTROLLER | 07-1017    | 07-1214       | N/A       | N/A           |
|                 |             | 15A MPPT CONTROLLER | N/A        | 07-1215       | N/A       | N/A           |
| <b>200 Watt</b> | <b>TOP</b>  | NO CONTROLLER       | 07-1018    | N/A           | 07-1110   | 2             |
|                 |             | 15A MPPT CONTROLLER | N/A        | 07-1217       | N/A       | N/A           |
|                 |             | 20A DUAL CONTROLLER | 07-1019    | 07-1216       | N/A       | N/A           |
| <b>200 Watt</b> | <b>REAR</b> | NO CONTROLLER       | 07-1020    | N/A           | 07-1111   | 2             |
|                 |             | 15A MPPT CONTROLLER | N/A        | 07-1219       | N/A       | N/A           |
|                 |             | 20A DUAL CONTROLLER | 07-1021    | 07-1218       | N/A       | N/A           |
| <b>250 Watt</b> | <b>TOP</b>  | NO CONTROLLER       | 07-1022    | N/A           | 07-1112   | 2             |
|                 |             | 15A MPPT CONTROLLER | N/A        | 07-1221       | N/A       | N/A           |
|                 |             | 20A DUAL CONTROLLER | 07-1023    | 07-1220       | N/A       | N/A           |
| <b>250 Watt</b> | <b>REAR</b> | NO CONTROLLER       | 07-1024    | N/A           | 07-1113   | 2             |
|                 |             | 15A MPPT CONTROLLER | N/A        | 07-1223       | N/A       | N/A           |
|                 |             | 20A DUAL CONTROLLER | 07-1025    | 07-1222       | N/A       | N/A           |
| <b>290 Watt</b> | <b>TOP</b>  | NO CONTROLLER       | 07-1026    | N/A           | 07-1114   | 2             |
|                 |             | 15A MPPT CONTROLLER | N/A        | 07-1225       | N/A       | N/A           |
|                 |             | 20A DUAL CONTROLLER | 07-1027    | 07-1224       | N/A       | N/A           |
| <b>290 Watt</b> | <b>REAR</b> | NO CONTROLLER       | 07-1028    | N/A           | 07-1115   | 2             |
|                 |             | 15A MPPT CONTROLLER | N/A        | 07-1227       | N/A       | N/A           |
|                 |             | 20A DUAL CONTROLLER | 07-1029    | 07-1226       | N/A       | N/A           |