

immerSUN and Power Diverter compared

| Attribute | immerSUN | Power Diverter | Comments |
|---|------------|--------------------|---|
| Manufacturer | 4eco Ltd | Power Diverter Ltd | 4eco Ltd have been manufacturing microgeneration power diversion devices since 2012. The award winning <i>immerSUN</i> is the most sophisticated device on the market, is easy to install and is the number one choice for installers |
| Power control method is employed? | PWM | Phase angle | Using pulse width modulation ensures that the power going to the load is a non-distorted true sine wave |
| No side effects using this technology | ✓ | ✗ | Phase angle devices that deal with loads of up to 3kW, can create electromagnetic interference (EMI), this can interfere with inverters and other electronic devices in the home |
| Full EMC & safety testing | ✓ | ✗ | Test reports for the <i>immerSUN</i> , relating to Safety Testing & EMC testing can be downloaded from the <i>immerSUN</i> website |
| Installation verification & error detection | ✓ | ✗ | Many installation faults are automatically detected by the <i>immerSUN</i> , reducing the need for site revisits |
| Graphical backlit LCD display | ✓ | ✗ | The <i>immerSUN</i> enables the end user to view the following; <ul style="list-style-type: none"> • Grid import/export in kW • Diverted energy in kW • Savings £ & kWh |
| Multifunction relay | ✓ | ✗ | The <i>immerSUN</i> has a multifunctional relay can be used for many purposes; <ul style="list-style-type: none"> • Export threshold control for switching on/off other appliances • Pump operation • Boiler control • Fault signal |
| Supports multiple loads | ✓ | ✗ | The <i>immerSUN</i> can sequentially control up to 3 separate resistive loads. The Power Diverter supports just one |
| Short-circuit protection | ✓ | ✗ | The <i>immerSUN</i> has guaranteed integral short-circuit protection in case of immersion heater failure The Power Reducer has an internal fuse which would be ineffective at protecting the unit from damage |
| Data monitoring available | ✓ | ✗ | <i>myimmerSUN</i> remote monitoring enables homeowners to monitor all aspects of their household power distribution in real time; import/export, generation, power diverted, and household consumption. |
| Programmable boost timer | ✓ | ✗ | The <i>immerSUN</i> has a built-in seven-day programmable boost timer function as well as a manual boost option Only manual boost is supported by the Power Diverter |
| Multiple units can be linked | ✓ | ✗ | Up to 5 <i>immerSUN</i> devices can be wirelessly linked, enabling 15kW of surplus power to be self-consumed on each phase. The Power Diverter does not have this capability so only can only manage up to 3kW of surplus power |
| <i>trusine</i> technology | ✓ | ✗ | The <i>immerSUN</i> 's <i>trusine</i> power control technology, gives fast smooth automatic power adjustment, it will not cause interference with other appliances or affect the operation of inverters |
| Advanced installations supported | ✓ | ✗ | The <i>immerSUN</i> has additional features to support more advanced installations such as; <ul style="list-style-type: none"> • Immersion control with heat pumps • Electric underfloor heating systems • Multi-tariff metering (e.g. economy 7) |