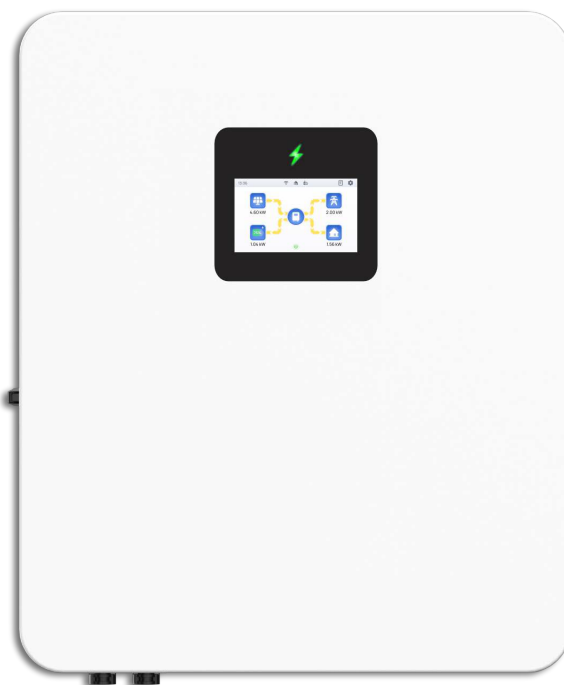


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# SINGLE PHASE HYBRID INVERTER

OX SUN-3/3.6/3.68/4.6/5/6KHB-D1/LV



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## Features

LCD touch color screen, easy to operate

Support high power PV panel with 18A PV input current

Max battery charge/discharge current of 135A

Support generator/smart load/AC coupling

Support up to 9pcs in parallel

Plug and play for easy installation

IP65: Indoor or outdoor installation



| Model                             | OX 3KHB-D1/LV                                                                                               |  | OX 3K6HB-D1/LV    |  | OX 3K68HB-D1/LV   |          | OX 4K6HB-D1/LV    |  | OX 5KHB-D1/LV     |  | OX 6KHB-D1/LV     |  |                |  |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------|--|-------------------|--|-------------------|----------|-------------------|--|-------------------|--|-------------------|--|----------------|--|
| Efficiency                        |                                                                                                             |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Max. Efficiency (PV to AC)        |                                                                                                             |  |                   |  |                   | 97.3%    |                   |  |                   |  |                   |  |                |  |
| Eur. Efficiency (PV to AC)        |                                                                                                             |  |                   |  |                   | 96.8%    |                   |  |                   |  |                   |  |                |  |
| Max. Efficiency (BAT to AC)       |                                                                                                             |  |                   |  |                   | 94.3%    |                   |  |                   |  |                   |  |                |  |
| Input (PV)                        |                                                                                                             |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Max. PV Input Power               |                                                                                                             |  |                   |  |                   | 10,000W  |                   |  |                   |  |                   |  |                |  |
| Max. PV Voltage                   |                                                                                                             |  |                   |  |                   | 550V     |                   |  |                   |  |                   |  |                |  |
| Start-up Voltage                  |                                                                                                             |  |                   |  |                   | 90V      |                   |  |                   |  |                   |  |                |  |
| MPPT Voltage Range                |                                                                                                             |  |                   |  |                   | 70V-540V |                   |  |                   |  |                   |  |                |  |
| Max. Input Current                |                                                                                                             |  |                   |  |                   | 18A/18A  |                   |  |                   |  |                   |  |                |  |
| Max. Short Circuit Current        |                                                                                                             |  |                   |  |                   | 25A/25A  |                   |  |                   |  |                   |  |                |  |
| Nos. of MPPT                      |                                                                                                             |  |                   |  |                   | 2        |                   |  |                   |  |                   |  |                |  |
| String per MPPT                   |                                                                                                             |  |                   |  |                   | 1/1      |                   |  |                   |  |                   |  |                |  |
| Input/Output (BAT)                |                                                                                                             |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Battery Type                      | Lithium-ion/Lead-acid                                                                                       |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Nominal Battery Voltage           | 48V                                                                                                         |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Battery Voltage Range             | 40V-65V                                                                                                     |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Max. Charging/Discharging Current | 75A/75A                                                                                                     |  |                   |  |                   |          |                   |  | 110A/110A         |  |                   |  | 135A/135A      |  |
| Max. Charging/Discharging Power   | 4,000W/4,000W                                                                                               |  |                   |  |                   |          |                   |  | 5,500W/ 5,500W    |  |                   |  | 6,600W/ 6,600W |  |
| Input/Output (Grid)               |                                                                                                             |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Nominal AC Output Power           | 3,000W                                                                                                      |  | 3,600W            |  | 3,680W            |          | 4,600W            |  | 5,000W            |  | 6,000W            |  |                |  |
| Max. AC Apparent Power            | 3,300VA                                                                                                     |  | 3,960VA           |  | 3,680VA           |          | 4,600VA           |  | 5,500VA           |  | 6,600VA           |  |                |  |
| Max. AC Output Power (PF=1)       | 3,300W                                                                                                      |  | 3,960W            |  | 3,680W            |          | 4,600W            |  | 5,500W            |  | 6,600W            |  |                |  |
| Max. AC Output Current            | 15A                                                                                                         |  | 18A               |  | 16.7A             |          | 21A               |  | 25A               |  | 28.7A             |  |                |  |
| Max. Input Power From Grid        | 9,000W                                                                                                      |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Max. Input Current From Grid      | 41A                                                                                                         |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Rated Grid Voltage                | 220V/230V/240V, L+N+PE                                                                                      |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Grid Voltage Range                | 150V-300V (Adjustable)                                                                                      |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Rated Grid Frequency              | 50Hz/60Hz                                                                                                   |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| AC Frequency Range                | 45Hz-55Hz/55Hz-65Hz (Adjustable)                                                                            |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Power Factor                      | > 0.99 @rated power (Adjustable 0.8 LD - 0.8 LG)                                                            |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| THDI                              | <3% (Rated Power)                                                                                           |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Output (Back up)                  |                                                                                                             |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Nominal Output Power              | 3,000W                                                                                                      |  | 3,600W            |  | 3,680W            |          | 4,600W            |  | 5,000W            |  | 6,000W            |  |                |  |
| Rated AC Output Current           | 13.6A/13.0A/12.5A                                                                                           |  | 16.4A/15.7A/15.0A |  | 16.7A/16.0A/15.3A |          | 20.9A/20.0A/19.2A |  | 22.7A/21.7A/20.8A |  | 27.3A/26.1A/25.0A |  |                |  |
| Peak Output Power (@1min)         | 3,600VA                                                                                                     |  | 4,320VA           |  | 4,416VA           |          | 5,520VA           |  | 6,000VA           |  | 7,200VA           |  |                |  |
| Peak Output Power (@10S)          | 6,000VA                                                                                                     |  | 7,200VA           |  | 7,360VA           |          | 9,200VA           |  | 10,000VA          |  | 10,000VA          |  |                |  |
| Nominal Output Voltage            | 220V/230V/240V, L+N+PE                                                                                      |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Nominal Output Frequency          | 50Hz/60Hz                                                                                                   |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Transfer Time                     | 10ms (typical)                                                                                              |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| THDV                              | <3% (@100% R Load)                                                                                          |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Protection                        |                                                                                                             |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Protection Category               | Class I                                                                                                     |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| DC Switch                         | Yes                                                                                                         |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Anti-islanding Protection         | Yes                                                                                                         |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| AC Over Current Protection        | Yes                                                                                                         |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| PV/AC Over Voltage Protection     | DC Type II, AC Type III                                                                                     |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| AC Short Circuit Protection       | Yes                                                                                                         |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| PV Reverse Protection             | Yes                                                                                                         |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Surge Arrester                    | DC Type III, AC Type III (Type II Optional)                                                                 |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Insulation Detection              | Yes                                                                                                         |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Leakage Current Protection        | Yes                                                                                                         |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| General                           |                                                                                                             |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Max. Operation Altitude           | 4000m (>2000m derating)                                                                                     |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Protection Degree                 | IP65                                                                                                        |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Operating Temperature Range       | -25℃~60℃ (>45℃ derating)                                                                                    |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Relative Humidity                 | 0~100%                                                                                                      |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Cooling                           | Natural Cooling                                                                                             |  |                   |  |                   |          |                   |  |                   |  | Smart Fan Cooling |  |                |  |
| Mounting                          | Wall bracket                                                                                                |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Dimensions (W*H*D)                | 377mm*452mm*206mm                                                                                           |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Weight                            | 20Kg                                                                                                        |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| HMI & COM                         |                                                                                                             |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Display                           | LED, LCD (Optional)                                                                                         |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Communication                     | RS485/CAN (for BMS), RS485 (for Meter), DRMs, CAN (for parallel), 2*DO, 2*DI, USB (for Wi-Fi/LAN, optional) |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Certification                     |                                                                                                             |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Grid                              | IEC 61727/62116/61683/60068, NRS 097-2-1, G98, G99, VDE4105, EN50549-1/-10, AS4777.2                        |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Safety                            | IEC/EN 62109-1&2                                                                                            |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| EMC                               | IEC/EN 61000/62920                                                                                          |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |
| Warranty                          | 5 Years/10 Years (Optional)                                                                                 |  |                   |  |                   |          |                   |  |                   |  |                   |  |                |  |

Remarks: · The range of output voltage and frequency may vary depending on different grid codes.  
· Specifications are subject to change without advanced notice.



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