

# AC-coupled Inverter

## A1-3K-OS



Die-casting case design  
Safer and more reliable



Lead acid & lithium battery compatible  
Sufficient UPS backup



Precise reverse flow prevention  
Adjustable self-consumption ratio



Compatible with on-grid system  
Easy PV-storage retrofits

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# Technical Data

## A1-3K-OS

| Type                                       | A1-3K-OS  |
|--|---|
| AC parameters (grid-connected)             |   |
| Max. AC Power [VA]                         | 3000  |
| Max. AC Current [A]                        | 13.1  |
| Nominal AC voltage [V]                     | 230   |
| Grid frequency [HZ]                        | 50/60   |
| AC voltage range [V]                       | 180-270   |
| Grid frequency range [HZ]                  | 50/60±5   |
| Overload protection                        | 1.5*Pnom:10S; 1.2*Pnom:30S  |
| AC parameters (off-network)                |   |
| Max. AC Power [VA]                         | 3000  |
| Nominal AC voltage [V]                     | 220/230±1%  |
| Rated output Frequency [HZ]                | 50/60   |
| Output Voltage Harmonic Component [THDV]   | <3%(for linear load) / <5%(for non-linear load)                                       |
| Output Voltage DC Component [mV]           | <100  |
| Battery Data                               |   |
| Battery Type                               | Li-ion battery / Lead-acid battery  |
| Battery Voltage/Range of Voltage [V]       | 48 (40~58, software setting)  |
| Max. Charging & Discharging Current [A]    | 60/60   |
| Max. Charging Power [W]                    | 2500  |
| Battery Capacity [AH]                      | > = 100 (configure as per the demand)   |
| Charging Curve                             | 3-Stage Adaptive With Maintenance   |
| Max. Battery Charging Efficiency           | 94.0%   |
| Max. Battery Discharging Efficiency        | 94.0%   |
| Protection                                 |   |
| Battery Overvoltage/Overcurrent Protection | Integrated  |
| AC Voltage Low Protection                  | Integrated  |
| AC Short Circuit Protection                | Integrated  |
| High Temperature Protection                | Integrated  |
| Certificates and standards                 |   |
| Safety/EMC                                 | CE  |
| General Data                               |   |
| Dimensions (H*W*D) [mm]                    | 389*367*143   |
| Net Weight [kg]                            | 12.5  |
| Mounting                                   | Rear Panel  |
| Operating Temperature Range                | -40°C to +60°C (running in reduced load condition when the temperature is above 45°C) |
| Relative humidity                          | 0~95%   |
| Max. Operating Altitude                    | 4000m (>3000m power derating)   |
| Ingress Protection                         | IP65  |
| Topology                                   | High-frequency isolation  |
| Consumption at Night [W]                   | <8  |
| Cooling Method                             | Natural Convection  |
| Noise [dBA]                                | <25   |
| Display                                    | LED   |
| Monitoring                                 | APP   |
| Communication                              | RS232+RS485;GPRS/ WiFi/Ethernet [optional]  |
| Standard Warranty [Year]                   | 5 (standard)/10/15/20/25 (Optional)   |

\* Products are continuously upgraded and parameters are for reference only.