

ORVALDI Series MKS is a multifunctional device that combines the functions of a DC / AC converter, controller solar charge (MPPT) and DC charger. Easy to read LCD display indicates the current operating parameters, as well as allows programming of the device. The unit offers three operating modes:

- Solar mode (SOL), where the main source of energy are solar panels. They power the connected loads and charge the batteries. If solar energy is missing or batteries are discharged device automatically switches to the AC mains.
- SBU Mode (Solar panels – battery – utility). In this mode, the energy from the PV cells supplies the receivers recharges the batteries. The unit switches to the AC mains after discharge batteries.
- AC mode (UTY). The main source of supply to the loads is AC mains. Solar panels and batteries will provide power to the loads only when utility power is not available.

Product features:

- built in solar chargé controller MPPT,
- pure sinewave output,
- configurable of priority via LCD,
- compatible to generator power,
- parallel operation (up to 6 units) only in 4/5kVA models,
- auto restart while AC is recovering,
- cold start function,
- overload and short cuircuit protection,
- smart battery charger,
- AC/DC charger can be switched off,
- optional remote panel LCD and SNMP available,



Apply:

- house hold electronics,
- emergency lighting,
- alarm system,
- telecommunications equipment,
- fiscal devices,
- servers and small networks (active and passive PFC),
- measuring and control devices,



Technical data:

MODEL	ORVALDI MKS2K/MKS3K	ORVALDI MKS4K/MKS5K
Rated power	2000VA/1600W 3000VA/2400W	4000VA/3200W 5000VA/4000W
Solar charger (MPPT)		
Max power of MPPT	600W	3000W
Max charging current	25A	60A
Nominal DC voltage	24V	48V
MPPT operating range voltage	30~66V	60~115V
Max PV Array Open Circuit Voltage	75V	145V
Max efficiency	98%	
Standby Power Consumption	2W	
AC charger		
Max charging current	20/30A	
Floating charge voltage	27V	54V
Inverter		
Waveform	Pure sinewave	
Output voltage	230V \pm 5%	
Output frequency	50Hz	
Efficiency	90%	93%
Overload	5s \geq 150%, 10s 110~150%	
Surge	2 x max power (4000VA for MKS2k)	
Transfer time	10ms, 20ms max	
Min voltage of cold start	23V	46V
Power consumption	<25W	<50W
Power consumption in energy saving mode	<10W	<15W
Operating temperature	0°C to 55°C	
Storage temperature	-15°C~ 60°C	
Humidity	5%~95% (non-condensing)	
Dimension DxWxH mm	128 x 272 x 355	140 x 295 x 540
Net weight [kg]	7	12,5/13,5