

## 1kW | 2kW | 3kW Bi-Directional Inverters

### Locally Manufactured & Serviced

- Microcare is a local brand of Solar Products designed, developed & manufactured in South Africa since 1990. The Microcare 10kW & 15kW Inverters are Bi-Directional Transformer-Based Solar Inverters with built-in battery chargers. Products are locally serviced at the factory & the Inverters carry a 5-year warranty.

### Bi-Directional

- The Inverter automatically detects the availability of solar (DC) power and/or grid (AC) supply & adapts the operation mode from Inverter to charger as per the load requirements.
- The Inverter will charge the battery using AC supply if solar (DC) power is not available.
- All Microcare Inverters come standard with a Built-in, high-rate, multi-stage battery charger.

### Transformer-Based

- The Microcare Inverter is able to handle a large inrush of power & tolerate any high & low spikes from the grid thanks to the built-in transformer.
- The Inverter will anticipate load failure by pre-charging the circuits for rapid high speed AC transfer of power and change-over.
- This allows for an uninterrupted power supply to a wide range of applications from a sensitive server room to a robust industrial machine.
- When the grid power returns with a fluctuating voltage, the Microcare Inverter can delay the auto-transfer to a set connection time to avoid any load damage.

### Built for Africa

- Microcare Inverters are highly robust, reliable products with a high efficiency rating, low standby current required & short circuit protection.
- Units are Compatible with Generators and generate high surge capacity for any motor start.
- If the unit is overloaded a 3-Attempt auto restart will commence before a timed overload will begin a shutdown.
- Units come with additional fan cooling for optimum performance and component longevity.

### Adaptable & Versatile

- The Microcare Inverter can be used in UPS, Solar, Hybrid or Loadshed mode.
- All Inverters are compatible with Lithium Ion Batteries.
- And come with a built-in Comms Module for online solar monitoring.
- Inverters are Three-Phase capable when the master Inverter is paralleled with 2 slave Inverters.
- This Pure Sine Wave Inverter comes with an audible buzzer indicating faults, overload and status.



	MODEL	1kW				2kW				3kW		
CAPACITY	Watt (W)	1000W				2000W				3000W		
DC INPUT	Voltage (V <sub>DC</sub> )	12	24	36	48	12	24	36	48	24	36	48
	Peak current draw (IDC)	100	50	33	25	200	100	66	50	150	100	75
	Standby power draw (W)	15W				25W				40W		
AC OUTPUT	Voltage (V <sub>AC</sub> )	230V										
	Amps (A)	5A				10A				14A		
	Voltage regulation	< 3% RMS for full battery voltage range										
	Frequency (Hz)	50Hz										
	Frequency Regulation	±0.1Hz										
	Power factor	1										
	Wave form	Pure Sine Wave										
	Peak efficiency (%)	< 94%										
	Hardware protection	Circuit Breaker										
	Overload protection	Programmable Overload Levels & Auto Retry										
DC CHARGER	Float Voltage (V <sub>DC</sub> )	13.8	27.6	41.4	55.2	13.8	27.6	41.4	55.2	27.6	41.4	55.2
	Maximum Current (A)	40	20	15	10	80	40	30	20	60	40	30
	Boost Time (Hours)	1 – 3 hrs (Selectable)										
DIMENSIONS	L x W x D	46 x 29 x 20cm				56 x 36 x 25cm				56 x 36 x 25cm		