

# MICRO CARE®

## SOLAR COMPONENTS



MPPT Regulators, Pure Sine Wave Bi-Directional inverters, Grid Tied Inverters, and Grid Tied Limiters are designed, developed, and manufactured by J&J Electronics in Port Elizabeth, South Africa

### Microcare 5kw Grid Tied Inverter

Microcare Inverters have been made in South Africa for the last 20 years. During this period J&J has manufactured and sold thousands of inverters locally and internationally. The technology has now been upgraded and a range of Grid Tied Inverters using High Frequency Pulse Width Modulation (PWM) to regulate the output of the inverter has been introduced. The 1.5kw to 5 kw series are applicable to all small commercial grid connected systems. This series of inverters have two MPPT trackers and three level technology which includes boosting for low panel voltages which gives the inverter a very wide input voltage operation. Using transformerless technology efficiencies of greater than 95% can be achieved.

#### Features:

- Maximum Efficiency of 97.6%
- Hi Quality Display with backlight
- Standby current < 5 watt
- Wide MPPT input voltage range 110v to 530v volts.
- Integrated multi-communication interfaces.
- Long service life ensured by using film capacitors.
- VDE and CE certifications.
- Complies with local NRS 097-2-1 regulations.
- IP 65 Protection rated
- Minimum Service Turnaround
- 7 Year Warranty



## Specifications

Specifications	5000 Watt
<b>Input data</b>	
Max.DC power	5200W
Max.DC voltage	550V
Recommended system voltage	383V
System start-up voltage	150V
PV voltage range MPPT	110V-530V
Full load voltage range MPPT	280V-440V
Max.input current	19A
DC voltage ripple	< 5%
<b>Output data</b>	
Nominal AC output	4900W
Max.AC power	4900W
Max.output current	23A
THD of AC current	< 3%
Norminal grid voltage	220V/230V/240V
Norminal grid frequency	50Hz
Power factor (cos φ)	0.99
Number of feed-in phases	single-phase
<b>Efficiency</b>	
Max.efficiency	97.60%
MPPT efficiency	99.50%
<b>Device protection</b>	
Reverse polarity protection	short-circuit diode
DC switch	Yes
Short-circuit proof	Yes
Ground fault monitoring	Yes
Grid monitoring	Yes
Over-voltage protection	Yes
Over-current protection	Yes
Active anti-islanding	Yes
Ground fault current detection	Yes
<b>General data</b>	
Dimensions (height x width x depth)	360/500/194
Weight	18.4kg
Noise level	<30 dB
Power consumption night	< 0.2W
Power consumption standby	6W
Cooling	free convection
<b>Features</b>	
On/off mode	Auto
Display	LCD/LED
Accessory interfaces	RS485/RS232