

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 1.5kw 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 home and commercial grid connected systems. The 1.5kw inverter has one MPPT tracker 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 96.5%
- Hi Quality Display with backlight
- Standby current < 5 watt
- Wide MPPT input voltage range 110v to 430v 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	1500 Watt
Input data	
Max.DC power	1750W
Max.DC voltage	450V
Recommended system voltage	360V
System start-up voltage	150V
PV voltage range MPPT	110V-430V
Full load voltage range MPPT	200V-360V
Max.input current	9A
DC voltage ripple	< 5%
Output data	
Nominal AC output	1500W
Max.AC power	1650W
Max.output current	9A
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
Efficiency	
Max. efficiency	96.50%
MPPT efficiency	99.50%
Device protection	
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
General data	
Dimensions (height x width x depth)	360/500/155
Weight	14kg
Noise level	<30 dB
Power consumption night	< 0.2W
Power consumption standby	4W
Cooling	free convection
Features	
On/off mode	Auto
Display	LCD/LED
Accessory interfaces	RS485/RS232