

## 15KW INVERTER WITH DYNAMIC SMART EV CHARGING

The Microcare 15kW Inverter with Dynamic Smart EV Charging represents the next evolution in integrated solar and electric vehicle infrastructure. Designed and manufactured in South Africa, this intelligent system combines Microcare's trusted bi-directional, transformer-based inverter technology with advanced EV charging software. It delivers power simultaneously to connected loads and an electric vehicle, intelligently prioritizing distribution based on user-defined settings, real-time energy availability, and system demand. Whether used in residential, commercial, or industrial environments, this inverter allows users to fully capitalize on solar energy while preparing for a future of electrified transport.

Engineered for versatility and resilience, the Microcare 15kW Inverter adapts automatically between solar, grid, and battery modes—charging from the grid when solar is insufficient, and providing seamless power transfer with built-in circuit pre-charging for sensitive or high-demand equipment. Thanks to its transformer-based design, the system is highly tolerant of grid instability, voltage fluctuations, and surges—making it ideal for challenging African conditions. A robust construction, local servicing, and a 5-year warranty offer peace of mind for long-term performance and support.

What sets this inverter apart is its smart EV charging capability, built directly into the unit. The inverter dynamically adjusts charging rates based on EV demand and available power, while offering scheduled charging and overload protection. It retrofits easily to any standard Microcare 48V inverter system and includes built-in Wi-Fi for remote monitoring and control. By integrating EV charging into the inverter infrastructure, Microcare simplifies installation, reduces equipment costs, and future-proofs your energy system.



## **KEY FEATURES**

- 15kW Bi-directional Transformer-Based Inverter
- Integrated Smart EV Charging with Dynamic Load Prioritization
- Simultaneous Load and EV Charging Support
- Built-in High-Rate Multi-Stage Battery Charger
- Auto-detection of Solar (DC) and Grid (AC) Supply
- Pure Sine Wave Output with Auto Transfer Delay for Grid Fluctuation Protection
- Wi-Fi Enabled for Remote Monitoring & Management
- Time-Scheduled EV Charging Functionality
- 3-Attempt Auto Restart on Overload with Auto Shutdown Protection
- Compatible with Lithium-Ion Batteries and Generators
- Transformer Allows High Inrush Current and Surge Capacity
- Local Manufacturing and Servicing Since 1990
- 5 Year Factory Warranty
- Built-in Fan Cooling for Enhanced Component Longevity
- Audible Buzzer for Faults and Operational Status





## 15KW INVERTER WITH DYNAMIC SMART EV CHARGING

	MODEL	15kW
CAPACITY	Watt (W)	15 000W
DC INPUT	Voltage (VDC)	48V
	Peak current draw (IDC)	375A
	Standby power draw (W)	150W
AC OUTPUT	Voltage (VAC)	230V
	Amps (A)	65A (80A at 200% output)
	Peak Power	200%
	Voltage regulation	< 3% RMS for full battery voltage range
	Frequency (Hz)	50Hz
	Power factor	1
	Wave form	Pure Sine Wave
	Peak efficiency (%)	< 94%
	Hardware protection	Circuit Breaker
	Overload protection	Programmable Overload Levels & Auto Retry
DC CHARGER	Voltage float (V DC )	51.6 - 55.2V
	Voltage boost (VDC)	51.6 - 62V
	Peak Current (I DC)	100A
	Boost Time (Hours)	1 - 3 hrs (Selectable)
EV CHARGER	Charge Current	6A - 32A
	Inverter Power Capacity when Charging	20760 W
	Automatic Charge Current Adjusting	Yes
	SAE 1772 Plug Compatible (North America)	Yes
	Type 2 Mennekes Plug Compatible (Europe & International)	Yes
	Dedicated LCD for EV Monitoring	Yes
	Time Scheduled Charging	Yes
	Wi-Fi User Application	Yes
DIMENSIONS	LxWxD	105 x 52 x 45cm
WEIGHT	Kg	?

