

# MERLIN EXTREME DUTY INVERTERS [ 2000W - 3500W ]

Merlin Extreme Duty Inverters utilise hybrid power conversion technology to provide significant benefits over low-cost, leisure style, switch-mode inverters and are designed specifically for mission critical applications where lives and livelihoods depend on power.

Designed & manufactured in Europe, Merlin Extreme Duty Inverters are built with leading brand components to provide a superlative inverter that outperforms all others and last years in everyday applications. Merlin Extreme Duty Inverters carry a full 5 year warranty.

Merlin Extreme Duty Inverters are highly configurable. Using simple windows-based software, an internal relay can be set-up to activate external devices (such as an automatic generator start facility) when any internal alarm is triggered. Various set points and configurable neutral/earth bonding ensures that you are able to conform to 18th Edition wiring regulations. Automotive e-mark also ensures legal fitting aboard road-going vehicles.

- **Significantly improved reliability** which is translated to the warranty term of 5 years.
- **High performance** in their ability to provide greater than their rated output for lengthier periods of time.
- **Withstands inductive AC loads** without inverter damage.
- **Advanced protection** against short circuits, overloading, and high temperatures.
- **Wide variety of sizes** combined with the robust industrial design, helps in finding the right model for every application.



PART#	30-1022	30-1026	30-1024	30-1028
RATING	2000W, 12V	3000W, 12V	2500W, 24V	3500W, 24V
<b>AC OUTPUT</b>				
OUTPUT POWER (CONTINUOUS)	1800W	2600W	2000W	2800W
OUTPUT POWER (10 MINS)	2100W	3200W	2500W	3800W
OUTPUT POWER (SURGE)	4000W	5000W	5500W	6500W
OUTPUT VOLTAGE/FREQUENCY	230V AC $\pm$ 2% 50HZ $\pm$ 0.05%	230V AC $\pm$ 2% 50HZ $\pm$ 0.05%	230V AC $\pm$ 2% 50HZ $\pm$ 0.05%	230V AC $\pm$ 2% 50HZ $\pm$ 0.05%
OUTPUT WAVEFORM	TRUE SINEWAVE (THD <5%)	TRUE SINEWAVE (THD <5%)	TRUE SINEWAVE (THD <5%)	TRUE SINEWAVE (THD <5%)
PEAK EFFICIENCY	92%	92%	93%	93%
<b>DC INPUT</b>				
VOLTAGE (NOMINAL)	12VDC	12VDC	24VDC	24VDC
OPERATION RANGE	10. 52VDC - 16VDC	10. 52VDC - 16VDC	20.0VDC - 33.0VDC	20.0VDC - 33.0VDC
CURRENT (NO LOAD, ASB)	<19W [2.0W]	<19W [2.0W]	<20W [2.0W]	<20W [2.0W]
ASB THRESHOLD	POUT=20W	POUT=20W	POUT=20W	POUT=20W
<b>TEMPERATURE</b>				
OPERATING TEMP. RANGE	-20°C ... +50°C	-20°C ... +50°C	-20°C ... +50°C	-20°C ... +50°C
STORAGE TEMP. RANGE	-40°C ... +80°C	-40°C ... +80°C	-40°C ... +80°C	-40°C ... +80°C
COOLING	VARIABLE SPEED FAN	VARIABLE SPEED FAN	VARIABLE SPEED FAN	VARIABLE SPEED FAN
<b>PROTECTION</b>				
HIGH/LOW BATTERY VOLTAGE	YES	YES	YES	YES
HIGH INPUT RIPPLE VOLTAGE	YES	YES	YES	YES
OUTPUT SHORT CIRCUIT	YES	YES	YES	YES
HIGH TEMPERATURE	YES	YES	YES	YES
OVERLOAD	YES	YES	YES	YES
<b>INDICATIONS</b>				
POWER ON	YES	YES	YES	YES
OUTPUT POWER BAR	YES	YES	YES	YES
ERROR	YES	YES	YES	YES
ASB MODE	YES	YES	YES	YES
<b>ENCLOSURE</b>				
DC INPUT CONNECTIONS	M10 BOLT TERMINALS	M10 BOLT TERMINALS	M10 BOLT TERMINALS	M10 BOLT TERMINALS
AC OUTPUT CONNECTIONS	SCREW TERMINALS	SCREW TERMINALS	SCREW TERMINALS	SCREW TERMINALS
ENCLOSURE BODY SIZE (MM)	370 X 431 X 132	370 X 431 X 132	370 X 431 X 132	370 X 431 X 132
TOTAL WEIGHT (KG)	18.2	18.5	18.2	18.5
PROTECTION CLASS	IP21	IP21	IP21	IP21
STANDARDS	CE MARK MEETING EMC DIRECTIVE 2004/1008/EC & LVD 2006/95/EC COMPLYING WITH EN60335-1, E4-95/54/EC, ROHS 2002/95/EC			