

# MERLIN EXTREME DUTY INVERTERS [ 1000W - 1800W ]

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#	30-1014	30-1018	30-1016	30-1020
RATING	1000W, 12V	1600W, 12V	1400W, 24V	1800W, 24V
<b>AC OUTPUT</b>				
OUTPUT POWER (CONTINUOUS)	850W	1300W	1000W	1400W
OUTPUT POWER (10 MINS)	1050W	1600W	1450W	1800W
OUTPUT POWER (SURGE)	2000W	2500W	2800W	3000W
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%	92%	92%
<b>DC INPUT</b>				
VOLTAGE (NOMINAL)	12VDC	12VDC	24VDC	24VDC
OPERATION RANGE	10 . 52VDC - 16 vDc	10. 52VDC - 16VDC	21VDC - 32VDC	21VDC - 32VDC
CURRENT (NO LOAD, ASB)	<9.6W [2.5W]	<9.6W [2.5W]	<12W [3.5W]	<12W [3.5W]
ASB THRESHOLD	POUT=10W	POUT=10W	POUT=10W	POUT=10W
<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>				
LOW BATTERY 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	2 X 25MM <sup>2</sup>	2 X 35MM <sup>2</sup>	2 X 25MM <sup>2</sup>	2 X 35MM <sup>2</sup>
AC OUTPUT CONNECTIONS	SCREW TERMINALS	SCREW TERMINALS	SCREW TERMINALS	SCREW TERMINALS
DIMENSIONS (MM)	351 X 210 X 114	351 X 210 X 114	351 X 210 X 114	351 X 210 X 114
WEIGHT (KG)	10.2	10.5	10 .2	10.5
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			