

ONEBOX 75

Designed to address all issues encountered by vehicle OEMs during integration of electrics on vehicles that employ Euro 6/7 technologies, OneBox 75 is a complete power management system that incorporates:

With over 25 years of split charging experience, Merlin designed OneBox 75 to incorporate an industrial grade DC-DC converter to provide charging to high capacity and advanced lead-acid open, gel, AGM, and lithium-ion batteries. By incorporating a conventional parallel contactor (that operates only when the alternator is in full power mode), OneBox 75 can deliver up to 350A of charge for rapid recharging and allows emergency jump-starting in the event of chassis battery failure.

Using advanced power management techniques, OneBox 75 monitors:

- status of the engine battery,
- charging and load requirements of the auxiliary battery,
- performance of it's internal DC-DC converter,

to continuously deliver the maximum possible charge output without compromising vehicle or unit reliability.

- **DC-DC Charging (100A rated)** at 75A continuous.
- **Charging and use of auxiliary batteries** whilst driving.
- **Up to 350A charging** when the vehicle alternator is active.
- **Emergency parallel** for jump-starting from auxiliaries.
- **Remote battery switching & flat battery protection** for auxiliary batteries.
- **Multiple inputs and outputs** for interlocking and inhibiting features.
- **CANbus interface**



PART

04-8720

NOMINAL VOLTAGE RATING (V)	12.6
OPERATIONAL INPUT VOLTAGE RANGE (V)	8.0 TO 20.0
DC-DC CONVERTER OPERATIONAL INPUT VOLTAGE RANGE (V)	11.0 TO 16.0*
DC-DC CONVERTER MAXIMUM INPUT CURRENT (A)	100
STORAGE TEMPERATURE	-25 ... +85°C
OPERATING TEMPERATURE RANGE WITH LIMITED DC-DC CONVERTER OUTPUT	-25 ... +70°C
MAXIMUM OUTPUT CURRENT (PARALLEL MODE):	
CONTINUOUS (A)	200
PEAK (A)	350
STANDBY CURRENT CONSUMPTION:	
HIBERNATE MODE (MA)	6**
SLEEP MODE (MA)	8**
IDLE MODE (MA)	21**
MAXIMUM NUMBER OF BATTERY BANKS	
VOLTAGE READING RANGE	0 TO 20.0
VOLTAGE READING ACCURACY	0.3% ± 1 LSD
CURRENT MEASUREMENT RANGE (DC CONVERTER ONLY)(A)	0 TO 100
ACCURACY(±%)	5%
LED OUTPUT	5VDC SOURCE WITH 1K SERIES LIMITING RESISTOR
PC COMMUNICATIONS	USB TYPE B SOCKET
CAN COMMUNICATIONS	J1939 CAN ENABLED
DIMENSIONS (MM)	323 X 202 X 100
WEIGHT (KG)	4.75

* LIMITED OUTPUT CAPABILITY AT 11 TO 12V INPUT. ** AVERAGE WITHOUT LEDS CONNECTED AT 12.6VDC.