

CM3.0L-LV INVERTER CHARGER

The CM3.0L-LV inverter charger boasts numerous features, including a true sine wave inverter, adaptive charging, hybrid technology, and various system integration capabilities. The CM3.0L-LV is fully programmable, making it both a flexible and scalable solution in many applications.

DETAILS AND BENEFITS

- ⚡ Pure sine wave output with high efficiency up to 96%.
- ⚡ Outstanding overload capability for all kinds of inductive load.
- ⚡ Extremely low idle power consumption.
- ⚡ Powerful charger for a quick charge.
- ⚡ Battery charging algorithm suitable for various battery chemicals including LPE.
- ⚡ UPS class transfer speed, 0ms.
- ⚡ Automatic ON with AC input
- ⚡ Fully programmable.



QUIET AND DURABLE PERFORMANCE

The thermal-controlled fan design ensures it operates with minimal noise while maintaining top performance. This quiet and robust inverter is perfect for noise-sensitive environments, providing users with a more comfortable and reliable power experience.

POWER CONTROL AND POWER ASSIST

This feature allows for shared power between AC input (shore or generator input) and the battery, which helps the system handle high-surge loads by combining power from both the battery and AC input. Additionally, Automatic Energy Allocation (AEA) provides limited AC shore power, adjusting the charging current to prevent overloading the AC connection.



TBB CM3.0L-LV	
Power Assist (Hybrid)	Yes
AC Input Voltage Range	85 ~ 140 VAC
AC Input Frequency Range	55 ~ 65 Hz
AC Input Current (transfer switch)	50A

INVERTER	
Nominal Battery Voltage	12 VDC
DC Input Voltage Range	10.5 ~ 17 VDC
Output	100/115/120 VAC \pm 2%
Harmonic Distortion	<2%
Power factor	1.0
Cont. Output Power @ 25°C	2400 W
Output Power (90 min) @ 25°C	3000 W
Peak Power	6000 W
Cont. Output Power @ 40°C	2200 W
Maximum Efficiency	93%
Zero Load Power	16 W

CHARGER	
Charge Voltage 'absorption'	14.4 VDC
Charge Voltage 'float'	13.5 VDC
Battery Types	AGM/GEL/OPZV/ Lead-carbon/Li-ion/ Flooded
Battery Charge Current	150 A
Temperature Compensation	Yes

GENERAL	
AC Out Current	50A
Transfer time	<4ms (<15ms when Weak Grid Mode)
Remote on-off	Yes
Programmable Relay	2x
Protection	a) Output short circuit b) Overload c) Battery voltage over voltage d) Battery voltage under voltage e) Over temperature f) Fan block g) Input voltage out of range h) Input voltage ripple too high
General Purpose Com Port	RS485
Operating Temperature Range	-20°C to +65°C
Storage Temperature Range	-40°C to +70°C
Relative Humidity in Operation	95% without condensation
Altitude	2000m/6562'

MECHANICAL DATA	
Dimensions	510mm x 245mm x 135mm/ 20.12" x 9.6" x 5.3"
Net Weight	20kg/44lbs
Cooling	Forced fan
Protection Index	IP20

STANDARDS	
Safety	UL458 & CSA107.1
EMC	FCC Part 15 Class B

THE TBB + FUTURE SOLUTIONS ADVANTAGE

Future Solutions is proud to feature TBB Power Mobile's advanced energy products as part of our tailored power solutions. Our exclusive relationship allows us to offer their innovative products – from energy generation to intelligent monitoring – ensuring optimized performance, efficient integration, reduced long-term costs, and reliable power designed for your unique requirements.

