

VISTER HIC-2000-12-120-50A Inverter/Charger



HDM's VISTER HIC-2000-12-120-50A Inverter/Charger is your complete power supply system on the road. It converts 12 volt DC power into 120 volt AC power to run onboard appliances and electronics, and then rapidly and cleanly charges your batteries when docked. HDM's patented pulse charging technology extends battery life and reduces battery charge time, while the inverter's high surge capacity handles demanding loads. An automatic transfer switch allows the power source to shift seamlessly between the batteries and shore power. Watertight and economical, the Vister HIC-2000-12-120-50A inverter/charger is a cleaner alternative to the APU and other diesel based power systems.



ELECTRICAL	
Modified Sine-Wave Inverter	
DC Input Nominal Voltage	12V _{DC}
DC Input Voltage Range	11 ~ 15V _{DC}
DC Input Under Voltage Lockout	< 10.5V _{DC}
DC Input Over Voltage Protection	> 15.5V _{DC}
No Load Current Draw	
ON state	3.5 ~ 5A _{DC} @ 12V _{DC}
Sleep Mode	< 0.2A _{DC} @ 12V _{DC}
AC Output Power	2000W Continuous
AC Output Surge Rating	6000W for 1 Seconds
AC Output Waveform	Modified Sine-Wave
AC Output Voltage	120(+10/-20)V _{AC}
AC Output Frequency	60(±4)Hz
High Temperature Shutdown	≥ +75(±5)°C (Internal Threshold)
High Temperature Auto-Recovery	45°C Hysteresis (Internal Reset)
Sleep Mode	I _{out} < 0.3(±0.2)A _{AC} for > 6 hours
Efficiency	90% Typ
Isolation (Input-Output)	1260V _{AC}
Battery Type	AGM, Flooded Lead Acid Batteries
Adaptive Battery Charger	
Charge Method	3-Stage with Temperature Derated Charger; Advanced Charging Algorithm for AGM, Flooded Lead Acid Batteries
AC Input Voltage / Frequency	115(±15)V _{AC} / 54 ~ 66 Hz
DC Charge Voltage Range	9 ~ 14.2V _{DC}
DC Charge Current	50(±5)A _{DC} max
Efficiency	85% Typ
Maximum AC Input/Bypass Current	20A _{AC} ¹
MECHANICAL	
Dimensions (LxWxH")	12.6 x 6.5 x 10.0"
Weight	28 lbs
Construction	Extruded Aluminum Case
INTERFACE	
DC Connection	(2) 3/8-16 Stud Terminal
AC Input Connection	12" 12AWG/3C Cable with Deutsch DTP04-4P Pin Receptacle
AC Output Connection	12" 12AWG/3C Cable with Deutsch DTP06-4S Socket Plug
Remote Connection	12" 18AWG/6C with Deutsch DT06-6S Socket Plug
Display And Control	60" 18AWG/6C with Deutsch DT04-6P Pin Receptacle
ENVIRONMENTAL	
Cooling	Top Side Mounted External Waterproof Fan
Operating Temperature	-40 ~ +65°C
Storage Temperature	-46 ~ +85°C
MTBF Prediction ²	300,000 Hrs

Industry-Leading Features

- High Density
- High Surge Capability
- Watertight Standard Design
- Advanced Charging Algorithm to Dramatically Improve Battery Charging
- Sleep Mode To Minimize Idling Drain Current (0.2A_{DC} vs 5A_{DC}) (Inverter)
- Multi-Stage Output Short Circuit Protection (Inverter)
- AC Input Surge Protection (Charger)
- Load Dump And Voltage Transient Protection
- External Waterproof Fans

Operational & Protection Features

Inverter

- Input Reverse Polarity Protection
- Input Low Voltage Shutdown
- Input Overvoltage Shutdown
- Output Over-Current Protection
- Output Short Circuit Protection
- Output Overvoltage Protection
- High Temperature Shutdown
- Auto-Recovery Function
- Sleep Mode

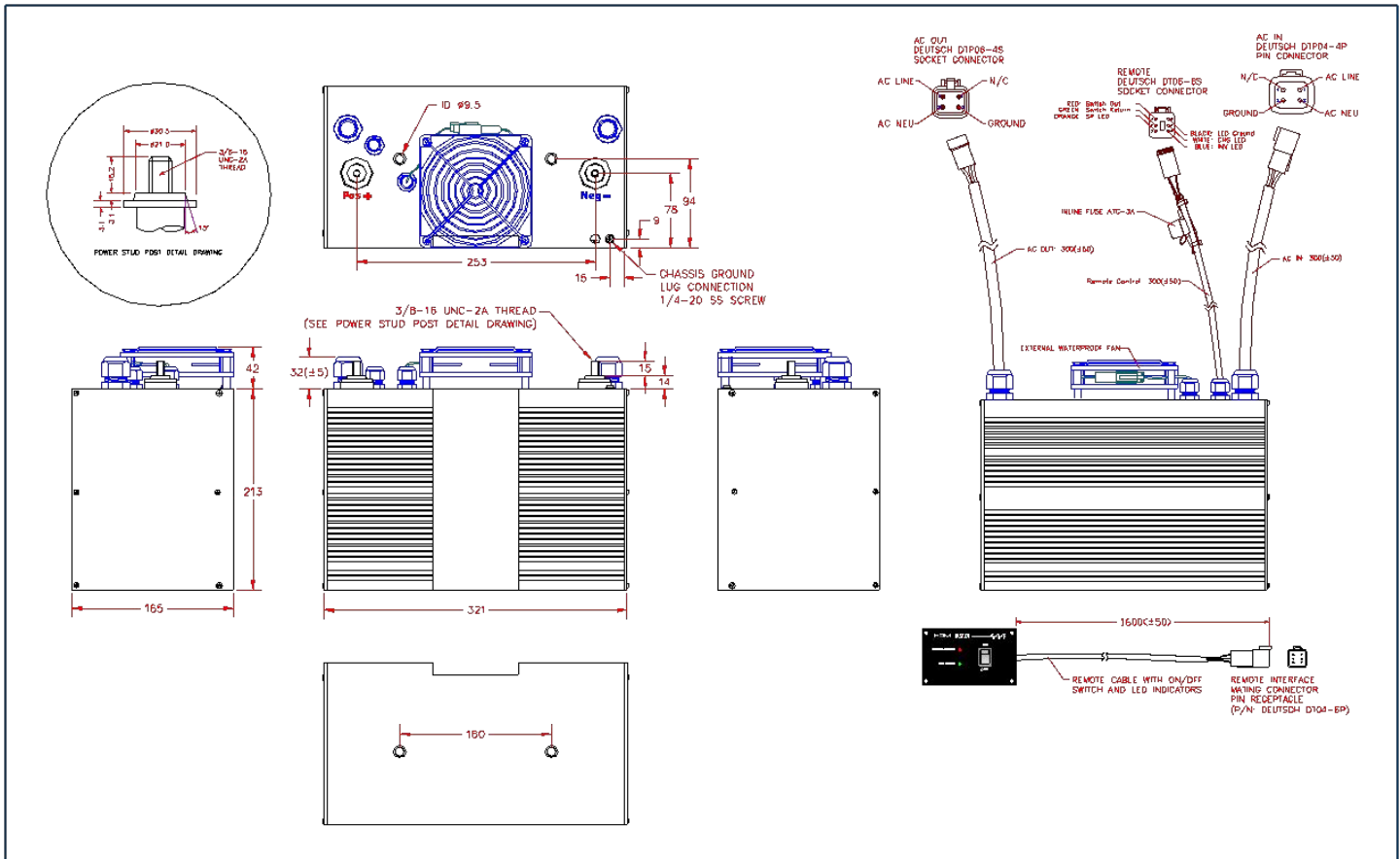
Charger

- Standby Mode
- Auto-Restart Mode
- Current Limiting
- Overload Auto-Shutdown
- Overvoltage Protection
- Short Circuit Protection
- Temperature Derated Charge
- Auto Maintenance Mode

Applicable Performance Requirements

- Ruggedization For SAE J1455 Chassis Mount Components
- Compliancy For ISO 7637-2 Electrical Transient

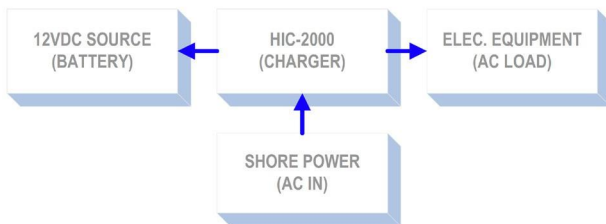




INVERTER MODE (CHARGER INACTIVE)



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Connection Block Diagram for HIC-2000-12-120-50A

MODEL
HIC-2000-12-120-50A
INVERTER
2000W
12VDC to 120 VAC
CHARGER
12VDC / 50ADC
DESCRIPTION
Isolated Inverter/ Isolated Charger

Specifications typical at 25°C unless otherwise stated and are subject to change without notice.

1. AC input/bypass current is shared among the internal charger and bypass applications.
2. Calculated per Bellcore TR-NWT-000332 method at 50% stress, +40°C. Products are covered by 1 year limited warranty.
3. External DC input fuse required.

All dimensions in millimeters unless otherwise specified.