



Hyperion High Frequency IGBT Rectifier / Battery Charger Technical Specifications

GENERAL		
Phase	Single-Phase	Three-Phase
Technology	High Frequency AC/DC Rectifier	
Control	IGBT Controlled	
INPUT		
AC Voltage	220/230/240 Vac (or 110/120/127 Vac)	380/400/415 Vac (or 208/480/600 Vac)
Voltage Tolerance	±15%	
Frequency	50 Hz / 60 Hz ±10%	
Power Factor	≥ 0.9	
THDi	≤3%	
Input Protection	MCB, Input High-Low Voltage Protection	
OUTPUT		
DC Voltage	12 / 24 / 48 / 72 / 110 / 220 / 400 Vdc (custom outputs available)	
Output Accuracy	±1%	
Current Adjustment	0 - 100% Digitally Adjustable	
Voltage Adjustment	0 - 100% Digitally Adjustable	
Charging Time	Digitally Adjustable (1 sec accuracy)	
Charging Protocol	Constant Current and Voltage	
Charging Stages	Boost, Equalize and Float	
Voltage Ripple	1% RMS	
Boost Voltage	2.4 Vdc for AGM, 1.60 for NiCd (can change with battery type)	
Float Voltage	2.2 Vdc for AGM, 1.40 for NiCd (can change with battery type)	
Boost Charging Timer	Digitally Adjustable	
Overload Operation	100% - 110% load: 30 sec, >125% load: 3 sec	
Output Protection	MCB, DC High/Low, Over Temp, Short Circuit, Earth Fault Optional	
Efficiency	>95% at Full Load	
CONTROL PANEL		
Display	LCD Graphic Display	
Displayed Parameters	Float/Boost Voltage, Operation/Boost Charging Timer, Alarms Adjust, Password	
Displayed Units	Float/Boost Charge Voltage, Charge Current Optional: Battery Capacity, Boost Charging Time	
Event Log	512 Events Recorded (Optional)	
COMMUNICATION		
Standard	Dry Contact Card (up to 10 adjustable relays), RS485 MODBUS	
Optional	SNMP, CANBUS, Profibus, IEC 61850, RS232, USB	
SAFETY and STANDARDS		
Over Voltage	IEEE 587 4500 A, Surge Arrestor (Optional)	
Interference	FCC Class A	
Safety	EN 61204, EN 60950-1, IEC 60146	
Standards	EN 50091-1 (Security), EN 61204-3 (EMC), ISO 9001, ISO 14001, CE	
ENVIRONMENT		
Operating Conditions	-10 C° / + 60 C°, 0 - 90% (non-condensing)	
Storage Conditions	-20 C° / + 70 C°, 0 - 90% (non-condensing)	
Noise Level	Less than 55 dB	
Protection Level	IP42 Indoor Type, IP56 Outdoor Type	
Cooling	Forced Air Cooling with Axial Fans	

Highlights

- IGBT Controlled
- High Frequency Switching
- Compact Size
- Small Footprint Cabinet
- Graphic LCD Digital Control Panel
- Quiet Operation
- Simple Program Menu
- Charges All Type of Batteries
- Parallel Operation up to 8 Units
- Automatic Start-Up After Power Cut
- DC Low/High Voltage Protection
- Earth Fault Protection
- Over Temperature Protection
- 3 Stage Charging
- Remote Monitoring
- Double or More Outputs
- Digital Current and Voltage Control
- 2 Years Warranty

General Features

Hyperion IGBT Controlled DC Rectifier - Battery Chargers are designed to be used in telecom applications, data centers and all kind of DC power supply requirements where small footprint is a must. Compact and light cabinet design offers scalability.

Hyperion IGBT rectifiers provide full protection for the DC load, including DC leakage and earth fault protections. Float and boost charging is available. Parallel operation is allowed up to 8 units. All parameters are adjustable from the control panel.

Wide communication options provide easy network integration. Smart software is included to monitor and remote control the unit.