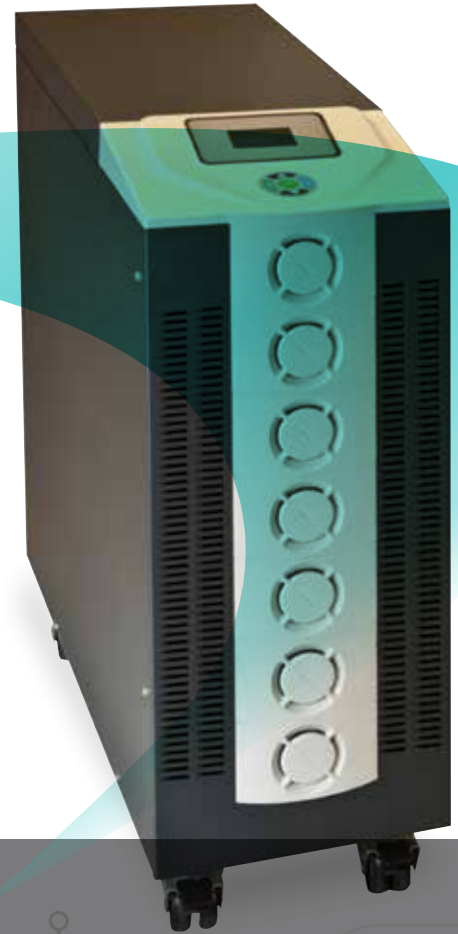


MPOWER UPS



GREEN TRIERA SERIES

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**10 years of uninterruptible power**

# GREEN TRIERA SERIES

**On-Line Double Conversion "3 Level Inverter" Technology. This technology results in a lighter, highly efficient system with both lower installation costs and lower running costs. 1 Phase in- 1 Phase out, 3 to 10 kVA. 3 Phase in- 1 Phase out 10kVA.**

- Real Digital Signal Processor (DSP) controlled IGBT Technology
- High Efficiency
- High Output power factor ( 0.9 )
- Increased Input Power Factor ( p.f. > 0.99 )
- Low Input Current THD ( <6% )
- Low Output Voltage THD
- Wide input voltage range
- Cold Start & Soft Start Features
- Able to start up from mains without batteries
- Intelligent battery management system extends the life time of batteries
- Transformerless Design and compact dimensions
- Smart fan speed regulation
- Multi-Functional LCD display
- Advanced LCD Panel Menu
- Event Log Display of up to 500 Events,
- Configurable as a 50/60Hz Frequency Converter from LCD Panel
- Advanced communication via RS232
- Management and monitoring software available for all operating systems
- SNMP, Modbus, USB Card, Dry Contact & EPO Card Options



## General

Designed and built to protect your electronic equipment from power fluctuations, this UPS is your insurance for a reliable, clean and stable supply.

The multi-functional LCD/LED panel displays various readings including voltage, load status and inner cabinet temperature. Fully programmable from the display, the UPS has ECO and Normal modes, making it suitable for a wide variety of applications.

The Green Triera utilises new 3rd generation Inverter IGBT Technology. This provides increased AC-AC efficiency, leading to less power loss and therefore increased energy saving. This also results in a high output power factor of 0.9, allowing increased loading capability, low output voltage harmonic distortion and therefore a better quality energy supply. This technology results in a lighter, highly efficient system with both lower installation costs and lower running costs.



## Rear Panel

1. RS232 and EPO connectors on processor board
2. Internal SNMP slot Installation point
3. Cooling fans
4. Dry contact board
5. MODBUS board
6. Battery fuses
7. Manual bypass, input and output breakers
8. Input and output cable terminals. If the UPS is configured for external batteries, then there will also be battery terminals on this terminal rail.

## Communication

The RS232 port, standard on the UPS, allow remote monitoring of the UPS using the bundled software. Further optional interface cards are available to allow application specific UPS monitoring.

## Optional Cards

- USB Converter (Optional)
- Dry Contacts (Optional)
- Internal or External SNMP Card (Optional)
- MODBUS (Optional)

Specification						
MODEL	GTR1103	GTR1105	GTR1106	GTR1108	GTR1110	GTR3110
Power (kVA)	3	5	6	8	10	10
Power (kW)	2.7	4.5	5.4	7.2	9	9
<b>INPUT</b>						
Nominal Voltage	220V/230V/240V					380V/400V/415V
Minimum Voltage (at half load)	90V					155V
Minimum Voltage (at full load)	180V					320
Maximum Voltage	270V					467
Frequency	45-65 Hz					
Power Factor	>0,99					>0,95
Input Current Harmonics	< 6 %					<25%
<b>OUTPUT</b>						
Power factor	0.9					
Nominal Voltage	208V to 242V adjustable					
Voltage Tolerance	±1%					
Nominal current @220V	13.6A	23A	27A	36.4A	45.5A	45.5A
Wave Form	Pure Sine Wave					
Total Harmonic Distortion						
at 100% linear load	<1.5%					<2%
at 100% non-linear load	<3.5%					<4%
Frequency	50Hz or 60Hz (adjustable from LCD Panel)					
Frequency Tolerance(battery operation)	0.005%					
Static Voltage Regulation (0%-100% load)	1%					
Dynamic Voltage Regulation (0%-100% load)	5%					
Crest Factor	3:1					
Overload						
100% to 125% overload	10 min					
125% to 150% overload	1 min					
Overall Efficiency (AC-AC)	94%					
Greenmode ( Ecomode ) Efficiency	>98%					
<b>BATTERY</b>						
Type	Maintenance-free lead acid batteries					
Recharge Time	6h - 8h					
Quantity per String	14pcs 12V Batt	20pcs 12V Batteries				
Voltage	168VDC	240VDC				
Internal Batteries (Optional)	7Ah, 9Ah or 12Ah					
Cold Start	Yes					
<b>DISPLAY PANEL</b>						
LCD Display	Load %, Input/Output/Bypass Voltages, Output Power (W & VA), Output Current Output p.f., Battery +/- Voltage Values, Input/Output Frequency, DC Bus +/- Voltages, Remaining Back Up Time, Internal Temperature, Heatsink Temperature					
Audible and Visual Alarm Warning	41 different Alarm Messages					
<b>BY-PASS</b>						
Voltage Tolerance	±10%					
Frequency Tolerance	3Hz (adjustable from LCD panel between 0.5Hz to 5Hz)					
Transfer Time	0 ms					
Overload Capability	up to 175%					
<b>PROTECTION</b>						
Overload Protection	Transfers to bypass on overload					
Short Circuit Protection	Current limits and internal fuses					
<b>COMMUNICATION</b>						
Interface (Communication Ports)	RS232 (standard), SNMP, Modbus and USB (optional)					
Relay Contact Port Option	Alarm relays programmable from display panel					
<b>ENVIRONMENT</b>						
Operating Temperature	0°C - 40°C					
Storage Temperature	-15°C to +55°C					
Proposed Temp. to extend battery life	20 - 25°C					
Humidity	< 95%					
Maximum Altitude	1000m					
Audible Noise ( from 1m distance )	<50 dB					<55 dB
Protection Class	IP 20					
<b>PHYSICAL SPECIFICATIONS</b>						
Dimensions (mm) (WxDxH)	272 x 740 x 758					
Net Weight - without battery (kg)	32	33	34	43.5	44	47
<b>STANDARDS</b>						
Standards	EN 62040-1-1 (safety), EN 62040-2 (EMC), EN 62040-3 (Performance)					
<b>ACCESSORIES</b>						
Optional	Internal&External SNMP, Relay Contact Board, Monitoring and Management Software, Internal Battery Holder Apparatus, Additional External Charging Set					

