

Uninterrupted Power Partner Solutions



Part 3



BLAZER



MARS ONLINE



COMBO



INVERTRON



BATTERIES



SOLAR INVERTER



Current Automation
POWER SOLUTION PROVIDERS

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BLAZER PRO LINE INTERACTIVE SERIES 500 & 700VA

FEATURES

- Microprocessor control guarantee high reliability
- Boost and buck AVR for stabilising input power voltages
- Built-in DC start function enables the UPS to be started up without AC power supplied
- Smart RS-232 communication port with free downloadable software from the internet
- Green power function for energy saving
- 3-LED display for easy understanding
- Auto self-restart when AC power is recovered
- Auto self-charge even when the UPS is in off status
- Modem / Phone line surge protection for highest standard of protection
- Discharge, Overcharge and Overload Protection for highest standard of power protection



Model	Power		Backup minutes (full load)	BATTERY PACK	BATTERY NUMBER	WEIGHT	DIMENSION
	VA	Watt					
BL600	600	360	33 minutes (1x PC)	12V/7Ah	1 pcs	6kg	330x100x140mm
BL1000	1000	600	23 minutes (2 x PC)	12V/7Ah	1 pcs	9.6kg	405x205x145mm
BL1400	1400	840	25 minutes (2x PC)	12V/9Ah	2 pcs	9.7kg	405x205x145mm
BL2000	2000	1080	26 minutes (2x PC)	12V/9Ah	2 pcs	9.8kg	405x205x145mm

TITAN ONLINE SERIES UPS 1000 , 2000, 3000, 6K,10K & 20KVA

FEATURES

- PWM Technology with IGBTs
- Microprocessor control guarantees high reliability
- Wide input voltage range
- External battery socket available for extended backup time
- Tower and 19" rackmount available
- Modular design available for Titan 1K/ 2K or 3K
- Transfer time: AC/DC = Zero: Inverter to bypass = 2.5ms



Model-Tower Model-Rack	CAPACITY	EFFICIENCY	EXT. BATTERY CHARGER	BATTERY VOLTAGE	BATTERY NUMBER	WEIGHT	DIMENSION-TOWER DIMENSION-RACK
Titan-1K TITAN-1KS	1000VA/700W	85%	None	36VDC	3 pcs	7kg	400x145x220mm
TITAN-RM-1KS			7A		No Batteries		482.6x450x87mm
Titan-2K TITAN-2KS	2000VA/1400W	85%	None	96VDC	8 pcs	9.6kg	460x192x340mm
TITAN-RM-2KS			9.6A		No Batteries		482.6x450x87mm
Titan-3K TITAN-3KS	3000VA/2100W	88%	None	96VDC	8 pcs	9.6kg	460x192x340mm
TITAN-RM-3KS			9.6A		No Batteries		482.6x450x87mm
Titan-6K TITAN-6KS	6000VA/4200W	88%	None	240VDC	20 pcs	35kg	570x260x717
TITAN-RM-6KS			4.2A		No Batteries		600x482.6x132
Titan-10K TITAN-10KS	10000VA/7000W	88%	None	240VDC	20 pcs	38kg	570x260x717
N/A			4.2A		No Batteries		570x260x717
TITAN-20KS	20000VA/14000W	88%	4.2A	240VDC	No Batteries	55kg	570x260x717



MEANWELL-Pure Sine Wave Solar Inverter + Battery Charger (1500W)

FEATURES

- True Sine wave output (THD 3%)
- Advanced digital control with a microprocessor
- Input voltage / frequency adjustable
- High efficiency up to 91%
- Power saving mode to conserve energy
- Optional monitoring software
- Solar input current up to 30A maximum (TN-1500)
- Fast transfer time under 10ms (TN-1500)
- With UPS function (TN-1500)
- AC by pass / built-in AC and solar charger
- LED indicating panel for load / battery / operation status
- Protections: Input- Bat. low alarm / Bat. low shutdown / Bat. polarity
- Protections: Bat. over voltage / Output-Short circuit / Overload / Over temperature
- Applications: Home appliances, Power Tools, , office and portable equipment



Model	Rated power	Surge power	AC regulation	Charger current	Efficiency (typical)	Circuit breaker	Voltage range	Solar Charge	Dimensions Weight
TN-1500-212	1500W	3000W	± 3%	5.5A	88%	8A	10.5~15VDC	30A	420x220x88mm
TS-1500-212	1500W	3000W		N/A	88%	N/A	10.5~15VDC	N/A	
TN-1500-224	1500W	3000W		2.7A	90%	8A	21.0~30VDC	30A	
TS-1500-224	1500W	3000W		N/A	90%	N/A	21.0~30VDC	N/A	6.85kgs
TN-1500-248	1500W	3000W		1.35A	91%	8A	42.0~60VDC	30A	
TS-1500-248	1500W	3000W		N/A	91%	N/A	42.0~60VDC	N/A	

Combo Models	Rated power	Surge power	Additional Battery charger	Batteries	Weight with batteries	Dimensions
TN2-1500	1500W	3000W	25A	2x 105 A/h	70kg	LR: 370mm x BT:690mm x BF:570mm
TN4-1500	1500W	3000W		4x 105 A/h	130kg	LR 370mm x BT: 420mm x BF: 570mm



MARS INTELLIGENT ON-LINE SERIES UPS

1000 , 2000, 3000VA

In today's world we are heavy reliant on technology and the power that drives it. If you do not have the correct protection you are putting your business at risk of downtime, lost data and even component damage. The intelligent Mars series is a cost effective way of meeting your critical power needs and integrate seamlessly into the modern network environment.

FEATURES

- Double conversion online technology
- Unity input power factor
- Single-Chip Microprocessor Control
- Pure sine wave output
- User friendly display
- Smart RS232 communication interface
- User-friendly plug and play design
- Customer options slot



Model	MS1000	MS2000	MS3000
INPUT			
Voltage (Vac)	160–280 Vac		
Frequency (Hz)	50 / 60 Hz ± 5% (Auto sensing)		
Phase	Single		
Input power factor	> 0.98 (Full load)		
OUTPUT			
Voltage (Vac)	200/220 / 230 / 240		
Capacity (VA / W)	1000VA / 700W	2000VA / 1400W	3000VA / 2100W
Rated Power Factor	0.7		
Load power factor range	0.5 Lagging to unity within KW rating of unit		
Wave Form	Sine wave, THD < 3% (no load to full load)		
Voltage Regulation	± 2%		
Transient Time Response	± 4% under full load, change and correct within 60 ms		
Frequency Stability	± 0.5Hz (Free running)		
Synchronisation	Slew rate: 1Hz/Sec Max. Synchronising Window ± 5%		
Transfer Time	0 ms		
Crest Factor	3:1		
Efficiency (AC / DC)	up to 88%		
Autonomy	> 7 minutes		
DC Start	Yes		
BATTERY			
Type	Sealed lead acid Maintenance Free		
Quantity (pcs)	3	6	8
Voltage (Vdc)	36	72	96
Recharge Time	8 Hours to 90% (Built-in battery models)		
Supplementary Charger	Optional 200W / 500W Charger for extended backup		
DISPLAY			
LED	Utility, Battery Low, Inverter, Bypass, Self Test, Over load, Load/Battery level and fault conditions		
Self Diagnostics	Push Button (On demand)		
PROTECTION			
Overload	AC Mode: < 105% Continuously; 105%~120% delay 50 seconds before switching to bypass; 120%~150% delay 10 seconds before switching to bypass; > 150% immediately switching to bypass		
Short circuit	Hold whole system		
Overheat	Switch to bypass		
High voltage trip	Switch to backup mode		
Battery low	Alarm and switch-off		
Noise suppression	Complies with EN62040-2		
Spikes suppression	Complies with EN61000-4-5		
ALARMS			
Audible and Visual	Line failure, Battery Low, Transfer to bypass, Over load, System fault conditions		
PHYSICAL			
Dimensions (WxHxD)	147x223x401mm	130x365x479mm	190x365x453mm
Net Weight	15kg	27kg	32kg
COMPUTER INTERFACE			
Interface Type	Standard RS232		
Communication Slots	Relay contact board, SNMP/Web interface card		
Compatible Platforms	Windows 95/98/NT/2000/XP/ Vista, Novell Netware, Linux, etc.		



INVERTRON Low frequency modified sine wave inverter & charger

1KW, 1.5KW, 2.4KW

The new Invertron series inverter charger adopts superior features and is designed with the highest standards in the industry. Adopting low frequency design, Invertron series provides extra high power factor up to 1.0 that allows multi-applications and various types of loads from home to heavy duty industrial environment. Up to 50 Amp charging capacity and 3-steps intelligent charging control design. Invertron series adopts built-in charger which maximizes the charging efficiency and also the battery lifetime. Multiple protection mechanism including overload, battery low, high voltage, surge protection maximize the power safety for all your connected equipments. Invertron series promises to provide the most reliable power source to fulfill all your power demands without interruption,

FEATURES

- High output power factor up to 1.0 to support various types of loads
- Up to 50A charging current on 12Vdc models and 25Amp for 24Vdc models
- 3 Step Intelligent charging control
- Selectable battery capacity with appropriate charging current to extend the battery lifetime
- Fan speed control control to reduce the operating noise and extend the fan lifetime.
- Fast and automatic transfer from AC mode
- Overload, battery low and high voltage protection
- High surge capacity up to three times of the self power rating
- Audible & LED indications for various unit operation and fault conditions



Model	Rated power	Surge power	Charger current	Transfer Time	Input Voltage	Dimensions
1012	1000W	3000W	40A	20ms	12vdc	381x217x179
1512	1500W	4500W	40A	20ms	12vdc	
1524	1500W	4500W	20A	20ms	24vdc	
2412	2400W	7200W	50A	20ms	24vdc	
2424	2400W	7200W	25A	20ms	24vdc	

MARS II PARALLEL REDUNDANCY ON-LINE SERIES UPS

6K, 10KVA - Parallel up to 40KVA

The MARS II series on-line double conversion UPS with full time digital signal processor control technology is the perfect solution for mission critical users who demand high reliability, availability and performance from a UPS. Input power factor correction, high efficiency and parallel redundant capability provide a superior level of power quality for sensitive electronic equipment and computer loads.

Model	MSII6000	MSII10000	MSII10000P
INPUT			
Voltage (Vac)	160~280 Vac (1 Phase)		277~485 (3 Phase)
Frequency (Hz)	45~65 Hz		
Phase	Single, Line + Neutral + Ground		Three R S T + Neutral + Ground
Input power factor	> 0.99 (Full load)		
OUTPUT			
Voltage (Vac)	200/ 220 / 230 / 240		
Capacity (VA / W)	6000VA / 4200W	10000VA / 7000W	
Rated Power Factor	0.7 Lagging		
Wave Form	Sine wave, THD < 3% (no load to full load)		
Frequency Stability	± 0.2% (Free running)		
Frequency Regulation	± 1Hz	± 3Hz	
Frequency Stability	± 0.5Hz (Free running)		
Transfer Time	0 ms		
Crest Factor	3:1		
Efficiency (AC / DC)	up to 90%		
Efficiency (AC to AC, ECO)	up to 95%		
Autonomy	> 8 minutes	> 5 minutes	
DC Start	Yes		
BATTERY			
Type	Sealed lead acid Maintenance Free		
Capacity if fitted with internal batteries	12V / 7A/h	12V / 9A/h	
Quantity (pcs)	20		
Voltage (Vdc)	240 Vdc		
Recharge Time if fitted with internal batteries	4 Hours to 90%		
Supplementary Charger - Part Number CHG1000	Optional 1000W Charger for extended backup. (Up to 4 chargers)		
DISPLAY			
Status on LED + LCD	Line Mode, Backup Mode, ECO Mode, Bypass Supply, Battery Low, Bad/Disconnect, Overload, Transferring with interruption & UPS fault		
Self Diagnostics	Push Button, Front panel setting & Software Control, 24 Hour routine checking		
PROTECTION			
Overload	Inverter supply: 105%~150% delay 160 seconds- 2 cycles before switching bypass		
Short circuit	Bypass supply: 105% ~200% for 500 seconds - 8 cycles before stopping supply load		
Overheat	Switch off Immediately		
Battery low	AC Mode: Switch to bypass Backup Mode: Switch off the UPS Alarm and switch-off		
ALARMS			
Audible and Visual	Line failure, Battery Low, Transfer to bypass, System fault conditions		
PHYSICAL			
Dimensions (WxHxD)	290x748x645mm	290x881x645mm	
Net Weight without optional isolation transformer	120kg	149kg	154kg
and with internal batteries			
COMPUTER INTERFACE			
Interface Type	Standard RS232		
Communication Slots	Relay contact board, SNMP/Web interface card		
Compatible Platforms	Windows 95/98/NT/2000/XP/ Vista, Novell Netware, Linux, etc.		

FEATURES

- Simple parallel installation
- Full-time digital signal processor control
- Programmable frequency converter
- LCD/LED mimic panel
- Smart ECO Mode
- Simple and Easy to use
- Optional Galvanic isolation transformer
- Optional hot swappable battery



INVEREX Modified sine wave inverter / Charger system

1000VA (12vdc) , 2000VA (24vdc)

The INVEREX series inverter/charger system converts DC power to AC power with amazing transfer efficiency. With the continuous output and compact design, the Inverex is excellent for home and office environment. Appliances such as TV's, stereos, desktop or laptop computers and others can be connected to INVEREX for uninterruptable power. The INVEREX series inverter/charger can transfer between modes "utility mode" and "inverter" mode. When encountering utility power failure, INVEREX will transfer from "utility mode" to "inverter mode" for acquiring the power from battery supply. INVEREX provides the maximized reliability and stability for power demands.

FEATURES

- User selectable for accepting wider input voltage
- Full automatic and silent operation
- High Frequency Design
- Off Mode Charging
- Compact size for convenient use and storage
- Built-in 8Amp super charger for up to 100A/h battery
- Two-steps intelligent charging control to reduce the charging time
- Optional dual input loops



Model	Rated VA	Rated Power	Charger current	Transfer Time	Input Voltage	Dimensions
INVEREX 1000	1000VA	600W	10A	15ms	12vdc	224x225x80mm
INVEREX 2000	2000VA	1200W	10A	15ms	24vdc	224x225x80mm

Model	Batteries	Weight	Dimensions
INV1-1000	1x 105A/h	35kg	370x380x430mm
INV2-2000	2x 105A/h	60kg	475x380x430mm

