

MAX+ SERIES

ONLINE UPS

1KVA / 2KVA / 3KVA

INTERNAL BATTERIES

1KVA / 2KVA / 3KVA

EXTERNAL BATTERIES

FULLY MICROPROCESSOR
HIGH FREQUENCY DOUBLE CONVERSION
IGBT TECHNOLOGY BASED ONLINE UPS.



SALIENT FEATURES

- Output Power Factor 0.9
- Inbuilt charger of 9.5 Amps.
- Inbuilt OVCD(Over Voltage Cut-Off Device) with Surge Protection.
- Efficient Micro Controller based.
- Robust Product-improves Power Quality with Reliability.
- 50Hz/60Hz Frequency Converter mode.
- Smart LCD Display for Real-Time information.
- EMI/RFI Noise Filter.
- External Charger Capacity expansion to 8 Amps.(Optional).
- Generator compatible.
- Programmable Power Management Outlets.
- Hot Stand-by feature available.
- Static Bypass-improves Reliability.
- Advanced PFC Technology/Battery Management.
- Alarm(Optional) for Mute Mode.
- SNMP Card(Optional) on demand.
- Isolation Transformer(Optional).
- Over Temperature Indication & Protection.
- Configurable Output Voltage Settings.
- Output Frequency fixed at 50Hz or can be synchronized with Input frequency.

MODEL	1KVA MAX+	2KVA MAX+	3KVA MAX+
CAPACITY	1KVA	2KVA	3KVA
INPUT			
VOLTAGE RANGE	110VAC±5% ~ 300VAC±5%		
FREQUENCY RANGE	40Hz~70Hz		
PHASE	Single Phase with Ground		
INPUT POWER FACTOR	≥0.99 @ Full Load		
OUTPUT			
VOLTAGE RANGE	200/208/220/230/240VAC		
AC VOLTAGE REGULATION	±1%(Battery Mode)		
FREQUENCY RANGE (Battery Mode)	50Hz±0.25Hz or 60Hz±0.3Hz		
CURRENT CREST RATIO	3:1		
HARMONIC DISTORTION	≤2% THD(Linear Load); 4% THD(Non-Linear Load)		
OVERLOAD CAPABILITY	105%~110% : UPS shuts down after 10 minutes at battery mode or transfer to bypas when the utility is normal. 110%~120% : UPS shuts down after 5 minute at battery mode or transfer to bypas when the utility is normal. >130% : UPS shuts down after 10 seconds at battery mode or transfer to bypas when the utility is normal.		
TRANSFER TIME			
AC MODE TO BATTERY MODE	Zero		
INVERTER TO BYPASS	<4ms(Typical 2.5ms)		
WAVEFORM(BATTERY MODE)	Pure Sine Wave		
EFFICIENCY	85%~92%		
BATTERY			
DC VOLTAGE	36VDC/IB(3Battery 7AH inside)	72VDC/IB(6Battery 7AH inside)	72VDC/IB(6Battery 7AH inside)
TYPE AND NUMBERS	SMF/Lead Acid/Tubular depending on the capacity of the External Batteries		
CHARGE CURRENT	1.5A~9.5A		
CHARGING CURRENT(Adjustable)	2.0A/4.0A/6.0A/8.0A(Maximum) Selectable via LCD setting		
PHYSICAL			
DIMENSIONS PRODUCT(LxWxH)	397x145x220(in mm)	421x190x318(in mm)	421x190x318(in mm)
NET WEIGHT PRODUCT(KGS.)	7.8 Kgs./(IB-12.5Kgs.)	12.10 Kgs./(IB-25.8Kgs.)	12.52 Kgs./(IB-27.0Kgs.)
ENVIRONMENT			
OPERATING HUMIDITY	20-95% RH@ 0-40°C(Non-Condensing)		
NOISE LEVEL	Less than 50dBA@1Meter(With Fan Speed Control)		
LED/LCD INDICATION	LCD Indications		
MANAGEMENT			
SMART RS-232 OR USB	Supports Windows® 2000/2003/XP/Vista/2008/7/8, Linux, Unix, MAC		
OPTIONAL SNMP	Power Management from SNMP Manager and Web Browser		

*Product specifications are subject to change without prior notice.



MAX+ SERIES

HIGH FREQUENCY HIGH PERFORMANCE ONLINE UPS

ONLINE UPS

6KVA

EXTERNAL BATTERIES

Max+ series operates with programmable power management outlet along with the availability of hot standby feature and it's static bypass improves its reliability. The SNMP card is also available on demand as an option. This series is based on High Frequency Double Conversion IGBT technology with static bypass which improves reliability and consists of advanced PFC technology or battery management. The fixed output frequency can be synchronized with the input frequency.



SALIENT FEATURES:

- Unity Power Factor Output with 20-Battery Option
- High Efficiency up to 94%
- True Double-Conversion
- DSP technology guarantees High Performance
- Wide Input Voltage Range (110-300 VAC)
- Light Weight UPS
- Active Input Power Factor correction 0.99
- 50Hz/60Hz Frequency Converter mode
- Emergency Power Off function (EPO)
- ECO mode for Energy Saving
- SNMP/USB/RS-232 Communications
- Adjustable Battery Numbers
- Maintenance Bypass & Static Bypass Available
- Optional N+X Parallel Redundancy
- Inbuilt Surge Protection with OVCD Available
- Generator Compatible
- External Charger: Capacity expansion to 4 Amps (Optional)





APPLICATIONS:



PROFESSIONAL WORKSTATIONS



SMALL DATA CENTERS



PROCESS AUTOMATION EQUIPMENTS

TECHNICAL SPECIFICATIONS

MODEL	MAX+ 6KVA
CAPACITY	6000VA
DC VOLTAGE	DEFAULT=192VDC, ADJUSTABLE=216VDC & 240VDC
PHASE	1 PHASE IN ~ 1 PHASE OUT
INPUT	
NOMINAL VOLTAGE	208/220/230/240 VAC
VOLTAGE RANGE	110~300VAC ± 3% at 50% Load / 176~300VAC ± 3% at 100% load
FREQUENCY RANGE	46~54 Hz
POWER FACTOR	≥ 0.99 @100% Load
TOTAL HARMONIC DISTORTION THD(i)	<4%@100% Load, <6%@50% Load
OUTPUT	
OUTPUT POWER FACTOR	DEFAULT = 0.8, Optional = 0.9 With 18-Battery, 1 With 20-Battery**
NOMINAL VOLTAGE	208*/220/230/240 VAC
AC VOLTAGE REGULATION	±1%(Battery Mode)
FREQUENCY RANGE	46~54Hz(Synchronized Range) / 50Hz ± 0.1 Hz (Battery Mode)
CURRENT CREST RATIO	3:1(Max)
HARMONIC DISTORTION	≤ 1% THD (Linear Load) ; ≤ 4% THD (Non-Linear Load)
OVERLOAD CAPABILITY	AC Mode: 100%~110%: 10min ; 110%~120%:5min ; >130% : 10sec
TRANSFER TIME	
AC MODE TO BATTERY MODE	Zero
INVERTER TO BYPASS	Zero
WAVEFORM (BATTERY MODE)	Pure Sine Wave
EFFICIENCY	AC Mode: 94% / BATTERY Mode: 91%
BATTERY	
BATTERY TYPE	VRLA / SMF
NUMBER OF BATTERIES	Default: 16 Nos. Adjustable: 18 & 20 Nos.
CHARGING CURRENT (Max.)	4.0A
CHARGING VOLTAGE	(13.65VDC x Battery Number) ± 1%
PHYSICAL	
DIMENSIONS PRODUCT(LxWxH)	555x250x830(in mm)
NET WEIGHT PRODUCT(KGs.)	32.5 Kgs.
ENVIRONMENT	
OPERATING HUMIDITY / TEMP.	20~90%RH and Non-Condensing / 0.40oC
NOISE LEVEL	Less than 55dB @ 1 Meter
LCD INDICATION	UPS Status, Load Level, Battery Level, Input/Output Voltage, Input/Output Freq. / Discharge Timer / Fault Status
MANAGEMENT	
SMART RS-232 OR USB	Supports Windows® 2000/2003/XP/Vista/2008/7/8, Linux and MAC
OPTIONAL SNMP	Power Management from SNMP Manager and Web Browser

* Derate capacity to 60% of capacity in CVCF mode and to 80% when the output voltage is adjusted to 208VAC or parallel system is operated.

**When Using 20 Pcs of Batteries. Output Power Factor will be Unity. With 18 Pcs of Battery Output Power Factor will be 0.9.

***If the UPS is installed or used in a place where the altitude is above than 1000m, the output power must be derated one percent per 100m.

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