

ONLINE UPS

3:3 5-1000 KVA

3:1 5-30 KVA

1:1 1-20 KVA



Highlights

- Rectifier and Inverter Technology
- Ultra High Energy Efficiency
- Full Rated Power Factor $kW=kVA$
- Marine Filter System

New Generation IGBT Technology

- The new generation IGBT technology has high efficiency in the fully controlled uninterruptible power supply class.

Maximum Availability

- Parallel configuration up to 8 units per redundancy (N+1) and power increase.
- Loop connection helps the UPS system to continue the operation when the connection cable is interrupted.

High Efficiency & Low Total Cost of Ownership

- Less energy consumption to supply the loads thanks to high efficiency up to 95%.
- Reduced energy loss.
- Reduced electricity usage and air conditioning requirements.
- Reduction in operating cost of UPS.
- IGBT based power factor correction technology provides input power factor close to 1 ($\geq 0,99$). The high input power leads to reduced electricity pay-out, minimizes cable, switchboard, fuse and generator requirements, thus reducing investment cost.
- Low input current total harmonic distortion (THDi) less than 3% helps to avoid the disturbance and expensive harmonic filters.
- Small footprint and easy maintenance.



TECHNICAL SPECIFICATIONS 5-1000 kVA

INPUT

Nominal Voltage	380/400/415 VAC 3P+PE -20% +15%
Voltage with External Transformer	208-690 VAC 3P+PE -20% +15% (Optional)
Frequency Tolerance	50 / 60 Hz $\pm 10\%$ (Selectable)
Power Factor	>0.99
Total Harmonic Distortion (THD)	$<3\%$

OUTPUT

Power Factor	0.9 (1 Optional)
Nominal Voltage	3:3 380/400/415 VAC 3P+PE 3:1 115/230 VAC 2P+PE
Voltage with External Transformer	208-690 VAC 3P+PE (Optional)
Frequency Tolerance	50 / 60 Hz $\pm 0.01\%$ (Battery Mode)
Output THD	$<1\%$ (Linear Load) / $<3\%$ (Non-Linear Load)
Crest Factor	3:1
Overload Capacity*	At 125% Load 10min, At 150% Load 1min
Efficiency	95% Online Mode 99% Eco Mode

BYPASS

Nominal Voltage	380/400/415 VAC 3P+PE
Voltage Tolerance	$\pm 15\%$ (Configurable from 10% to 30%)
Frequency Tolerance	$\pm 5\%$ (Selectable)

BATTERY

Type	VRLA / GEL
Quantity (12V DC VRLA)	32 / 34 / 36 / 38 / 40 / 42 / 44
Charge Rate	10% UPS Capacity (Selectable from: 1 ~ 20% * UPS Capacity)
Recharge Time	6-8 hour

ENVIRONMENTAL

Operating Temperature	For UPS $0^{\circ}\text{C}/+40^{\circ}\text{C}$ For Battery $+15^{\circ}\text{C}/+25^{\circ}\text{C}$
Storage Temperature	For UPS $-15^{\circ}\text{C}/+45^{\circ}\text{C}$ For Battery $0^{\circ}\text{C}/+30^{\circ}\text{C}$
Protection Class	IP23 (IP Optional)
Humidity	0-95% (Without Condensation)
Altitude	$<1000\text{m}$: Correction Factor 1, $<2000\text{m}$: Correction Factor >0.92 , $<3000\text{m}$: Correction Factor >0.84

COMMUNICATION

Communication Port	RS232 Standart, RS485, Mod-BUS, J-Bus, Web, Tel-Net, GPRS, CAN-Bus, SNMP (Optional), Dry Contact
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STANDARDS

Quality	ISO 9001, ISO 14001, ISO 45001, CE, TSE, TSE-HYB
Performance	EN62040-3 (VFI-SS-III, Bureau Veritas Certified)
EMC/LVD	EN62040-2, EN62040-1, EN60950 (TÜV SÜD Certified)
Marine Certificate	Optional

DIMENSION & WEIGHT

Cabinet Dimensions (mm)	Contact us for Dimensions.
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TECHNICAL SPECIFICATIONS 1-20 kVA

INPUT

Related Voltage	1:1 115V / 208V / 220V / 230V / 240 VAC 2P+PE
Voltage Range	-20% / +15%
Frequency	40 ~ 70 Hz (Auto Sensing)
Power Factor	>0.99
Bypass Voltage Range	-25% ~ +15% (Seectable)
Generator	Compatible

OUTPUT

Voltage Range	115V / 208V / 220V / 230V / 240 VAC 2P+PE
Voltage Regulation	±1%
Frequency	45 ~ 55 Hz or 55~ 65 Hz (Synchronized Range); 50 / 60 Hz ±0.1 Hz (Battery Mode)
Waveform	Sinusoidal
Crest Factor	3:1
Harmonic Distortion	<2% (Linear Load) / <5% (Non-Linear Load)
Transfer Time	Mains Mode - Battery Mode: 0ms Inverter Mode - Bypass Mode: 4ms (Tipik)
Overload Capacity	105%~125%: Transfer to Bypass in 1min 125% ~150%: Transfer to Bypass in 30s >150%: Transfer to Bypass in 300ms

EFFICIENCY

Online Mode	≥90%	≥91%	≥92%	≥92%	≥91%
ECO Mode	≥95%	≥96%	≥97%	≥98%	≥98%

BATTERY

DC Voltage	24V	36V	36V	48V	72V	72V	72V	96V	96V	192V - 240V	192V-240V
Inbuilt Battery	2x7Ah	3x7Ah	Harici	4x7Ah	6x7Ah	Harici	6x7Ah	8x7Ah	Harici	16/20 x 7/9Ah	16/20 x 7/9Ah
Charging Current (Max.)	1A	6A		1A	6A		1A	6A		3,5A	3,5A
Recharge Time	8h										

ENVIRONMENTAL

Protection Class	IP23 (IP Optional)				
Operating Temperature	0~40°C				
Relative Humidity	0~90% (Non-Condensing)				
Noise Level	≤ 45 dB (1m)		≤50 dB (1m)		≤55-60 dB (1m)

COMMUNICATION

RS232 (Standard) / USB (Optional)	Supports Windows®98/2000/2003/XP/Vista/2008/Windows®7/8/10
SNMP (Optional)	Power Management from SNMP Manager and Web Browser
Dry Contact	9 Alarm Output

STANDARDS

Security	CE LVD
EMC	CE EMC

DIMENSION & WEIGHT

Cabinet Dimensions (mm)	Contact us for Dimensions.
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SEAPOWERS reserves the right to change or modify product design, construction, specifications or materials without prior notice.

Standard Electrical Features

- Parallel-Redundant (N+X) Systems
- Co-Aging
- Dual Input
- Common Battery
- Backfeed Protection
- Cold Start (Optional)
- Advanced Battery Management
- Short Circuit and Overload Protection
- Parallel Ready
- Redundant Power Supply
- Power Walk-in for Progressive Rectifier
- Start-up when the Mains is Restored
- Battery Temperature Sensor
- Static and Manual Bypass Operation
- Co-Aging
- Smart Paralleling

Advanced Communication Features

- 2000 Real Time Event Log with Detailed Parameters (Three Phase Devices)
- User Friendly Multilingual Graphic Display Provides Operation Information
- Monitoring and Shutdown Software
- RS232 Serial and RS485 Ports
- 2 Communication Slots
- ModBUS RTU / ModBUS TCP (Optional)
- Remote Emergency Power Off (Optional)
- Remote Display Panel (Optional)
- Dry Contact (Optional)
- SNMP (Optional)

Flexibility

- MT-UPS Series provides maximum flexibility advantage for all applications. It can be configured in a variety of features with available options and accessories.
- Custom input voltage range.
- It can be used in capacitive loads such as blade server etc. thanks to its flexible configuration with existing options and accessories.
- Temperature sensor for external battery cabinets.
- External battery cabinets for different sizes of batteries.
- 3/1 phase version in 10-30kVA models.
- Galvanic isolation.
- Compatible version with EN 50171 for supplying power to emergency lighting systems.
- Leak Detection (Optional)

High Output Power Factor 1

- Output power factor of 1 (kVA=kW) rate provides up to 25% more active power than a traditional UPS.
- Suitable for modern power supply application with unit or capacitive power factor (e.g. new servers generation).
- No reduction in active power from 0,9 leading to 0,9 lagging.

