mt UPS

SERIES

10-300 kVA 3:3 FAZ

10-300 kVA 3:1 FAZ

1-10 kVA 1:1 FAZ

ONLINE UPS

MARINE · INDUSTRY · MEDICAL · DATA CENTER · TRANSPORT · EMERGENCY

VFI TYPE UPS ONLINE · RACK/UPS · Service SERVICE · IACS ICAS

_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.

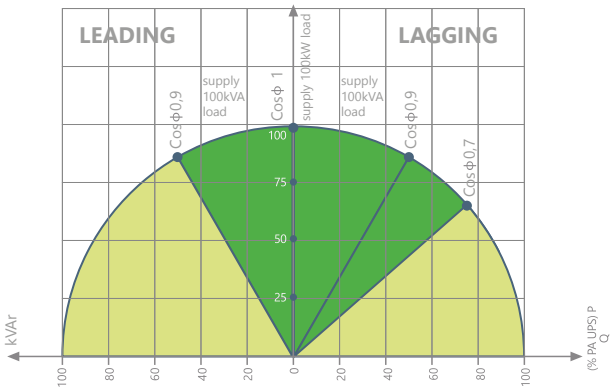
SEAPOWER

High Efficiency & Low Total Cost of Ownership

- Less energy consumption to supply the loads thanks to high efficiency up to 96%.
- 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 (≥ 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.

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.



MT UPS Output Power Factor Scheme

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 inturrupted.

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)

SEAPOWER
Electrical Systems

mt UPS SERIES

10-300 kVA 3:3 FAZ **10-300** kVA 3:3 FAZ

ONLINE UPS

	10 - 300 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 ±10% (Selectable)			
Power Factor	>0.99			
Total Harmonic Distortion (THDi)	<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 ±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 (Online Mode)	94%			
Efficiency (Eco Mode)	99%			
BYPASS				
Nominal Voltage	380/400/415 VAC 3P+PE			
Voltage Tolerance	%15 (Configurable from 10% to 30%)			
Frequency Tolerance	±5 (Selectable)			
BATTERY				
Type	VRLA / GEL			
Quantity (12V DC VRLA)	60 / 62			
Charge Rate	25% of Active Power			
Recharge Time	6-8 saat			
ENVIRONMENTAL				
Operating Temperature	For UPS 0°C/+40°C For Battery +15°C/+25°C			
Storage Temperature	For UPS -15°C/+45°C For Battery 0°C/+30°C			
Protection Class	IP20 (IP Optional)			
Humidity	0-95% (Without Condensation)			
Altitude	<1000m: Correction Factor 1, <2000m: Correction Factor >0.92, <3000m: Correction Factor >0.84			
Noise Level	<53dBA	<55dBA	<60dBA	<65dBA
COMMUNICATION				
Communication Port	RS232 Standart, RS485, Mod-BUS, J-Bus, Web, Tel-Net, GPRS, CAN-Bus, SNMP (Optional), Dry Contact			
STANDARDS				
Quality	ISO 9001, ISO 14001, ISO 45001, CE, TSE, TSE-HYB			
Performance	EN62040-3 (VFI-SS-111, Bureau Veritas Certified)			
EMC/LVD	EN62040-2, EN62040-1, EN60950 (TÜV SÜD Certified)			
Marine Certificate	Optional			
DIMENSIONS & WEIGHT				
Cabinet Dimensions (mm)	Width			
	Depth			
	Height			
Net Weight (kg)				
Packaging Dimensions (mm)	Width			
	Depth			
	Height			
Gross Weight (kg)				

For Dimensions
You can communicate.

* under certain conditions.
3 Phase in / 1 Phase Out Version is Available. (10 to 30kVA)

SEAPOWER
Electrical Systems

mt UPS SERIES
1-10 kVA 3:3 FAZ
ONLINE UPS

	1 - 10 kVA										
INPUT											
Related Voltage	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%
BATTERIES											
DC Voltage	24V	36V	36V	48V	72V	72V	72V	96V	96V	192V - 240V	192V-240V
Inbuilt Battery	2 x 7Ah	3 x 7Ah	Harici	4 x 7Ah	6 x 7Ah	Harici	6 x 7Ah	8 x 7Ah	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										
SYSTEM FEATURES											
Charge Current	Intelligent Charging System										
Intelligent Alarm System	Compatible										
LED&LCD Screen	Compatible										
ALARM											
Utility Failure	Beep / 4sec										
Low Battery	Beep / 1sec										
Overload	Beep Twice / 1sec										
UPS Fault	Long Beep										
ENVIRONMENTAL											
Protection Class	IP20 (IP Optional)										
Operating Temperature	0 ~ 40ºC										
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										