

LPS

MEXGA

UKO Series

60KVA - 200KVA 3:3 phase

Online Transformer-Less UPS



TIS.1291 Part 1-2553
TIS.1291 Part 2-2553
TIS.1291 Part 3-2555



Highlights

- 3 level IGBT rectifier and inverter
- High Efficiency up to 96.5%
- Output PF 1.0
- Operation temperature up to 50°C
- Fault Trace Management
- Colorful LED bar
- Customized power distribution cabinet
- Flexible Network Management: SNMP
- Expanded dry contact
- Intelligent Battery Monitoring System
- Bypass voltage regulator
- Dual system control card
- N+X in parallel
- Input and output isolation transformer
- SPD: C Grade
- Output Synchronization Common Bus
- Battery Charge Temperature Compensation

MODEL
60 - 120 kVA



MODEL
160 - 200 kVA



HIGH RELIABILITY

- Wide input voltage range -60%~+25% with high grid adaptability
- High overload capacity
- Dual DSP control prevents single failure point
- Intelligent fan control and redundant design for energy saving: 25% load can be driven when 2 fans fail and 50% load when 1 fan fails
- Integrated with input,output,bypass breaker and manual bypass switch for better protection of system.
- Anti-corrosion resistant coating in all PCB boards.
- Short circuit time up to 200ms which provide high protection for system.
- Bus synchronization control function provides reliable high power for the dual bus application
- High ambient temperature up to 50 °C with auto-derating above 40 °C

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Automatic fans control



FLEXIBLE

Frequency Converter



Easy to support different mains frequency load

Common battery bank



Save the space and lower TCO
Battery range: 28~46 pcs

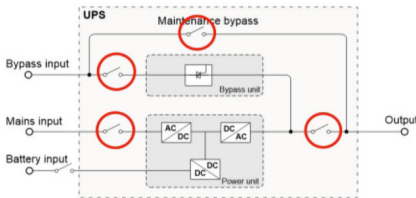
Compatible with transformer



Transformer rating Ratio : <1:1.5
UPS : 100kW
Transformer : <150kW

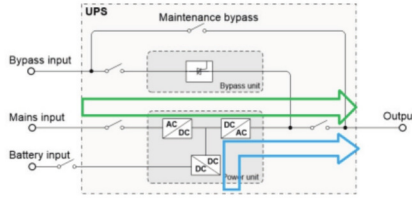
SAFE

4 breaker design



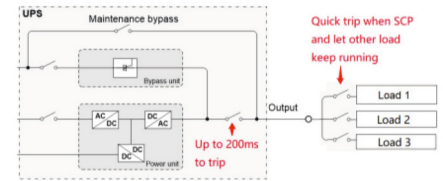
4 breaker integrated design No need to consider upstream and downstream distribution set

Battery rectifier soft start



Smooth transfer the power from Battery mode to double conversion Prevent any impact for input grid

Safe short circuit protection



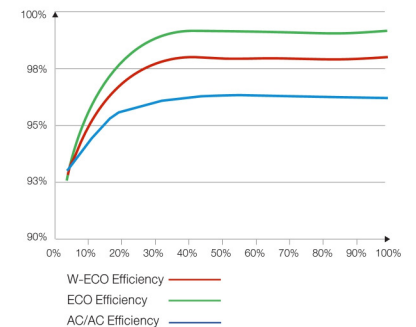
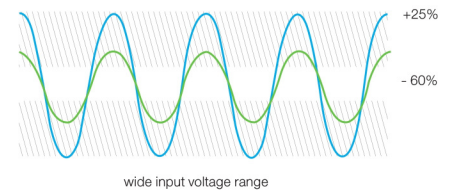
Output SCP time set from 20ms to 200ms. Guarantee the effective disconnection of the failure load

GREEN POWER

- AC/AC efficiency up to 96.5% and 20% load up to 95% efficiency reduces heat dissipation and limits power consumption costs
- ECO mode efficiency up to 99.2% ingives significant cost reduction
- W-ECO mode could reach 98.5% efficiency, THDi below 5% and transfer time below 5ms to reduce TCO.
- High input power factor up to 0.99 and low Input THDi: < 3.0% at full load, much less grid pollution and costs
- Self-load test function, easy debugging and easy onsite test during commissioning, before it is connected the real load, without using costly temporary loads, cabling and breakers for energy saving.

ADVANCED TECHNOLOGY

- Three level technology, Low harmonic, high efficiency, effectively energy-saving.
- Power walk in function decrease the inrush to mains or generator.
- 8 units of intelligent paralleling helps to achieve maximum capacity up to 1.6MW.
- Self-dedusting function which save the preventive service time.
- Parallel ECO mode maximum whole system efficiency.
- Common battery bank on parallel mode.
- Frequency converter function(60Hz to 50Hz or 50Hz to 60Hz)
- Lithium Battery compatible.



AC/AC double conversion efficiency up to 96.5% ECO mode efficiency up to 99%

USER-FRIENDLY INTERFACE

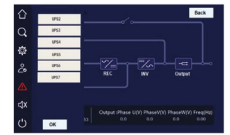
- User-friendly ON/OFF - Double physical button design to avoid false operation.
- Multicolor LED bar allowing quick and easy detection of the system status and simplified troubleshooting.
- Colorful touch screen with LED Indicators, ensure comprehensive and visualized information display.
- Large data storage capacity, 10000pcs events logs.
- Friendly human-machine interface with data and graphical forms.
- Support software update at site, one time update for all power module and control module.
- Smart programmable dry contact communication function.
- Main unit display allow to check the information of each parallel unit

INTELLIGENT MANAGEMENT

- Fault Trace Management (FTM) for convenient failure analysis (waveform record before & after of the fault point for 200ms) which easily figure out faulty point.
- 3 stage battery charging system, prolong the service life of batteries
- Intelligent battery management, 28-46 pcs batteries per string allow customers to get the faulty battery out instead of replacing it
- Key components pre-alarm function which precaution the system fault.
- Full asset management record the spare parts replacement, timeline and service people.
- Easy monitoring of lithium battery, battery tripping, generator, etc.

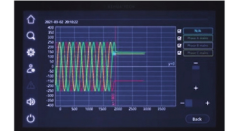


Integrate Status Monitoring



Monitor the status of other parallel UPS. Easy check on the master UPS to know whole system status

Fault Trace Management



Easy and quick locate the problem
Reduce time for maintenance

ACCESSORIES (Option)



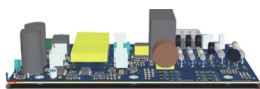
SNMP Card



Dry contact expansion card



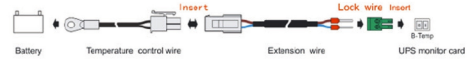
BMS expansion card



Battery Release Control Accessory



Class - C SPD



Battery Temperature Sensor

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POWER MODULE	MODEL 60 - 120 kVA	MODEL 160 - 200 kVA
<ol style="list-style-type: none"> LED indicator Lock indicator 	<ol style="list-style-type: none"> Power Module Bypass Module Input Breaker Output Breaker Bypass Breaker Maintenance breaker 	<ol style="list-style-type: none"> Power Module Bypass Module Input Breaker Output Breaker Bypass Breaker Maintenance breaker
BYPASS MODULE <ol style="list-style-type: none"> Dry contact Cold start Expansion card slot SNMP RS485 RS232 Parallel port 	<p>1 Power module 1 Bypass module</p>	<p>2 Power module 1 Bypass module</p>

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LOCAL AREA NETWORKS (LAN)



SERVERS



DATA CENTRES



TELECOMMUNICATIONS DEVICES



E-BUSINESS (Servers Farms, ISP/ASP/POP)



INDUSTRIAL PROCESSES



INDUSTRIAL PLCS



ELECTRO-MEDICAL DEVICES



EMERGENCY DEVICES (Lights/Alarms)

MODEL	UKO 60	UKO 80	UKO 100	UKO 120	UKO 160	UKO 200
INPUT						
Voltage (Vac)	380/400/415 (138~485 L-L); 3 phase 4 wires					
Frequency (Hz)	40~70					
Power Factor	≥0.99					
Phase	3φ4W+PE					
THDi at full linear load	<3%					
BYPASS						
Bypass Voltage (Vac)	380/400/415: -20%~+15%; 3 phase 4 wires					
Frequency Range (Hz)	50/60(±5%/±10%)					
Overload	≤130%: long run; 130%< load ≤150%: 5min; 150%< load ≤200%: 1s; 200%< load≤300%: 100ms; >300%: immediately.					
OUTPUT						
Capacity (kVA)	60	80	100	120	160	200
Power Factor	1 or 0.9 (option)					
Voltage (Vac)	380/400/415±1%; 3 phase 4 wires					
Frequency (Hz)	50/60±0.1% (Battery mode)					
Phase	3φ4W+PE					
Three Phase Difference	≤2%					
Waveform	Pure sine wave, THDv<1% at linear load, THDv<4% at non-linear load					
Transfer Time (ms)	0					
AC-AC Efficiency Max	96.5%					
Overload*	101-105% Long run, 106-110% load for 60 minutes, 111%-125% load for 10 minutes, 126%-150% load for 1 minute, over 150% load transfer to bypass					
BATTERY						
Battery Voltage (Vdc)	±192(±168 ~±288 adjustable)		±240(±168 ~±288 adjustable)			
BATT Type	External					
Charging Current (A) MAX	30			60		
OTHER						
Communication Interface	RS485, MODBUS, dry contact (RS232, SNMP, expend dry contact card are optional in slot)					
Display	4.3-inch Touch screen+LED or 7-inch touch screen+LED; Option					
Alarm	AC input abnormal, low battery, overload, failure					
Protection	Output short-circuit, overload, over-temperature, battery low voltage, output over/low voltage					
Noise (dB)	<65					
IP	20					
Working Temperature (°C)	0 ~ 40 no derate, 40~50 auto derate.					
Relative Humidity	0 ~ 95%, no condensation					
Dimension (WxDxH)(mm)	400×960×1200				600×1000×1600	
Weight (kg)	145	161	161	161	260	260

• Specification is subject to change without prior notice.

* 120kva overload capacity based on PF0.9.



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- All specifications subject to change without notice.
- Custom-made specifications are acceptable.
- Manufactured by factory with ISO 9001, ISO 14001, OHSAS 18001, CE, STANDARD