

3-Ph, 120KVA/120KW, 380/400/415, 50/60Hz Smart online UPS with Unity power factor

Product Description

Magnizon MU120KX Series is a smart online double-conversion UPS with full DSP control technology with 3x40KW modular design to ease the service and maintenance. With high input and output power factor, self-adjusting output frequency, smart battery management system and network management, MU120KX is Specially design for IDC data exchange centers, medical, telecommunication, data center, banks, negotiable securities, traffic, arms, industry, large enterprises and so on.



Key Features

- ❖ Advanced dual-core DSP control technology, rectification and inversion are controlled by dual DSP
- ❖ Output power factor 1.0, load capacity improved 11% more than traditional products
- ❖ Active Power Factor Correction Technology, input power factor up to 0.99
- ❖ 3x40KW Smart power modular construction
- ❖ System efficiency improved to 96% and Working efficiency up to 99% in ECO mode
- ❖ Dual input design, supporting independent bypass
- ❖ Advanced digital and parallel technology, providing higher reliability than single system
- ❖ Wide input voltage range, 50 / 60 Hz auto-sensing frequency
- ❖ Built-in 50 Hz / 60 Hz frequency conversion mode

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- ❖ Compact internal layout, small footprint
- ❖ Fan speed varies intelligently with temperature, reducing noise and extending its service life
- ❖ Features strong fault tolerance, one fan damaged takes 50% of the load, two fans damaged take 30% of the load
- ❖ Conformal coating technology to make UPS operate in harsh environment for a long time
- ❖ Effective hardware and software protection, robust self-diagnosis function, abundant event log for future check
- ❖ Linear downgrading in low voltage input reducing battery discharging times
- ❖ Flexible battery configuration setting, selectable battery numbers: 30 ~ 46 pcs
- ❖ Ability to switch on the UPS by battery in the absence of mains power (Cold start)
- ❖ Zero switching time for UPS power supply mode when the mains power is unstable, ensuring the output is uninterrupted
- ❖ Settable delayed start time when mains power is restored
- ❖ 5 inches LCD colorful touch screen, friendly human & machine interface
- ❖ Powerful background software for parameters configuration and online upgrade
- ❖ Advanced multi-platform communication for UPS monitoring: RS232, USB, RS485, NET, dry contacts, SNMP card, Wi-Fi card and GPRS card
- ❖ Intelligent battery management, automatic equalized and float charging control, charger dormancy control, improving the reliability of charger and extending the battery life
- ❖ Options and accessories: supplied RS232, USB, RS485, NET, parallel, LBS, dry contacts, EPO and battery temperature compensation interface; optional SNMP card, Wi-Fi card, GPRS card, battery temperature sensor, EMD detector and SMS alarms

Applications

- Critical applications where ever higher reliability is needed
- Medical & lifesaving equipment's
- Data centers & Larger computer rooms
- Industrial & Petrochemical application
- Banking & Telecommunication
- Power Generation & distribution stations
- Banking, security and IDC applications
- Desktops, servers & storage applications

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Specifications

MODEL	MU120KX
Capacity	120KVA /120 KW
INPUT	
Rated voltage	380 / 400 / 415 Vac (L-L)
Voltage range	304~478Vac (L-L),full load 228 V ~ 304 Vac (L-L), load decrease linearly according to the min phase voltage
Rated frequency	50 / 60 Hz (auto-sensing)
Frequency range	40 ~ 70 Hz
Power factor	> 0.99
Bypass voltage range	Selectable , default -20%~+15% Up limited: +10%, +15%, +20%, +25%; Down limited: -10%, -15%, -20%, -30%, -40%
Bypass frequency range	Selectable, $\pm 1\text{Hz}$, $\pm 3\text{Hz}$, $\pm 5\text{Hz}$
Total harmonic distortion (THDi)	<3% (full Linear Load)
Bypass overload	125%: Long term operation; 125%~130% : 10min; 130%~150% : 1min; 150%~400%:1s; >400%, less than 200ms
OUTPUT	
Rated Voltage	380 / 400 / 415 Vac (L-L)
Voltage regulation	$\pm 1\%$ (full Linear Load)
Frequency	Synchronized with utility in mains mode, 50 / 60 Hz $\pm 0.1\%$ in battery mode
No of Power modules	3x40KW
Waveform	Pure Sinusoidal
Power Factor	1
Total harmonic distortion (THDv)	<1% (full Linear Load); <3% (full non-linear load according to IEC/EN62040-3)
Crest factor	3:1
Overload	<110%, 60min; 110%~125%,10min; 125%~150%,1min; >150%, 200ms
BATTERIES	
DC voltage	$\pm 240\text{VDC}$ (Selectable, 32 - 40pcs of 12V blocks)
Inbuilt battery	External Batteries only
Charging current	36Amp
Charger Voltage precision	1%
Recharge time	Standard model: 90% capacity restored in 8 hours; Long time model: depend on the capacity of battery
SYSTEM	
Efficiency	Max. 96% in online mode, 99% in ECO mode
Transfer time	0 ms
Max. number of parallel connections	4
Protections	Short-circuit, overload, over temperature, battery low voltage, overvoltage, under voltage and fan failure

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Communications	Standard configuration: RS232, USB, RS485, NET, dry contacts; Optional configuration: SNMP card, Wi-Fi card, GPRS card
Display	LED + 5 inches LCD touch screen
OTHERS	
Operating temperature	0°C ~ 40°C
Storage temperature	-40°C~70 °C
Relative humidity	0 ~ 95% (Non condensing)
Altitude	<1000m, Load de-rated 1% per 100m From 1000 ~ 2000m
IP rating	IP 20
Noise level at 1m	63dB @ 100% load, 55dB @ 50% load
Dimensions (W × D × H) (mm)	440 × 850 × 1200
Packaged dimensions (W × D × H) (mm)	530 × 940 × 1370
Net weight (kg)	198Kgs
Gross weight (kg)	218Kgs
EMI	EN62040-2
EMS	IEC61000-4-2(ESD)
	IEC61000-4-3(RS)
	IEC61000-4-4(EFT)
	IEC61000-4-5(surge)
Quality Standards	ISO9001:2015, ISO14001:2015, RoHs, CE