

# MASTER Series

6~40kVA

3:1 phase PF: 0.8



## High Reliability Design

- ◆ Double Conversion on-line design, which makes the output a pure sine wave source with tracking frequency, phase-lock and voltage regulation, low distortion and without power fluctuation interference, providing the load with more comprehensive protection

## Battery Cold Start Function

- ◆ The UPS can be start directly by battery group when no utility access in, which meets the emergent needs of user.
- ◆ Strong cold start ability, which can do the cold start operation when full load

## Wide Input Range

- ◆ Wide input voltage range up to: 304~456Vac, avoid frequently switching to battery mode, which adapt to the areas with harsh environment
- ◆ Wide input frequency range, ensure all types of fuel generators connected work stable

## Optimization of High-performance Battery

- ◆ Adapt intelligent battery management (ABM ) technology, thus extending battery life and reducing battery maintenance times
- ◆ Advanced floating switching and charging technology maximums the activation of the battery, thus saves the charging time and extends the battery life

## Strong Protection for Load

- ◆ Built-in isolation transformer, strong anti-interference ability, provides more comprehensive protection

## Comprehensive and Reliable Protection

- ◆ Self-diagnosis function before start-up, avoid the risks that maybe lead to the failure
- ◆ The multi-protections such as overload, short-circuit, over-temperature, battery under voltage, battery over-charge and so on greatly ensure the system stability and reliability
- ◆ Advanced phase-locked synchronization technology and dual electronic static output switches, ensure the switching operation between bypass and inverter without any disturbance. When UPS fails, it can transfer to bypass without interruption to provide AC power to load and provide the alarm information as well
- ◆ DC start function. The UPS can be started directly without AC, which meet the emergent needs of the user



## User-friendly Network Management

- ◆ Chinese and English language selectable via LCD panel
- ◆ RS232 communication interface
- ◆ RS485 communication interface (Support ModBus protocol)
- ◆ SNMP card (Optional)
- ◆ Events log can be record in the LCD panel
- ◆ Dry contact signal port are available

## Technical Specifications

MODEL	M6K	M8K	M10K	M15K	M20K	M30K	M40K
Capacity (kVA/kW)	6/4.8	8/6.4	10/8	15/12	20/16	30/24	40/32
INPUT							
Operating Voltage Range (Vac)	380/400 (±20%), (3Ph + N + PE)						
Operating Frequency Range (Hz)	50/60 (±5%)						
Power Factor	≥0.97 *						
OUTPUT							
Output Voltage (Vac)	220 (±0.5%)/230 (±0.5%)						
Output Frequency (Hz)	50/60 (±0.5%)						
Efficiency	Up to 86%					Up to 88%	
Harmonic Distortion (THDv)	≤2% (Linear load)						
Crest Factor	3:1 (Max)						
BATTERY							
Battery Voltage (Vdc)	192					240	
SYSTEM FEATURES							
Transfer Time (ms)	0 (Line mode → Battery mode)						
Overload	110%≤Load≤150%/1min; >150%/200ms, to Bypass						
LED Display	Battery low, Mains status, Inverter, Bypass, UPS failure, Overload						
LCD Display	I/O voltage, Frequency, Battery voltage, Load percentage, Internal temperature						
Communication Interface	RS232, RS485, EPO, Dry contact, SNMP (Optional)						
ENVIRONMENTAL							
Operating Temperature (°C)	0~40						
Storage Temperature (°C)	-25~55						
Humidity Range	0~95% (Non-condensing)						
Altitude (m)	<1500						
Noise Level (dB)	<60					<65	
PHYSICAL							
Dimension W×D×H (mm)	305×585×864					350×650×1050	
Net Weight (kg)	100	110	115	130	145	205	255
Shipping Weight (kg)	110	120	125	140	155	220	270
STANDARDS							
Safety	IEC/EN 62040-1; IEC 62477-1						
EMC	IEC/EN 62040-2 (IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11, IEC 61000-2-2)						
Performance	IEC/EN 62040-3						

\* With optional filter

1. Specifications are subject to change without prior notice

2. Data above are typical values for reference only, not as a basis for engineering design