



# MR33 Series UPS

## Design Idea

KEHUA<sup>®</sup>MR series 3-in 3-out UPS, adopts advanced 3-level inverter technology and reliable redundancy design from components to the whole machine. It has the advantages of high efficiency, high power density, easy expansion, capacity expansion as required and small occupied area, and provides reliable, stable and pure green power for loads.



Power Modular 30kW, 50kW

# **Product Description**

- Modular capacity: 30kW, 50kW
- Cabinet capacity: 120/200/300/400/500/600kVA
- Rated voltage: 380/400/415Vac (L-L)
- Rated frequency: 50/60Hz
- Topology: online double conversion UPS

# **Application Fields**

- Large data center, communications
- Government, education
- Finance, transportation, energy



#### **High Reliability**

- Wide input voltage range -60%~ +25% with high grid adaptability
- Hot-swappable function ensures uninterrupted operations during maintenance
- Dual system control card prevents single failure point
- Intelligent fan control and redundant design for energy saving: Parallel expansion up to four systems without requiring additional hardware

#### **High Performance**

- High efficiency in online mode (>96%) reduces heat dissipation and limits power consumption costs
- THDi≤3% and input power factor 0.99 reduce the pollution to grid and reduce upstream investment costs
- Full rated power (kVA=kW) to maximize power availability
- Efficiency>99% in ECO mode gives significant cost reduction
- Advanced power module sleep mode, prolong the service life of power module
- Allow 100% three phase unbalance load
- Frequency converter function (60Hz to 50Hz or 50Hz to 60Hz)
- Self-load test function without load enables on-site commission
- Small footprint, 300kW only covers 0.5m<sup>2</sup>

### **Intelligent Management**

- Fault Trace Management (FTM) for convenient failure analysis(80ms waveform record)
- 7-inch HMI enables more parameters setting and status showing
- Intelligent battery charging system, prolong the service life of batteries
- Intelligent battery management, 28-46 pcs batteries per group allow customers to get the faulty battery out instead of replacing it
- Common battery bank sharing in parallel system

#### **More Options**

#### **Power Distribution Cabinet**

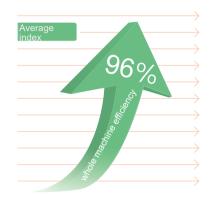
- Design the power distribution cabinet according to your integrated solution
- Backfeed protection

#### Flexible Network Management

- Optional internal SNMP adapter
- Intelligent management software

#### Intelligent Battery Monitoring System BMS2000:

- · Smart status diagnosis
- Abnormal status real time alarming
- Event logs recording
- · Parameters real time monitoring







# **Technical Specifications**

MODEL		MR33120	MR33200	MR33300	MR33400	MR33500	MR33600
Power Module		MR3330-J	MR3350-J				
Capacity (kW)		30	50				
INPUT		ı	ı				
Rated Voltage (Vac)		380/400/415					
Voltage Range (Vac)		L:L 138~485					
Input Frequency (Hz)		40~70					
Bypass Voltage Range (Vac)		-15% (-20%/-30% optional) ~+15%(+10% /+20% optional)					
Power Factor		≥0.99					
THDi		3% (linear load)					
Phase		3Ф4W+PE					
Battery Voltage (Vdc)		±192 (±168~±276 settable)	±192 (±180~±276 settable) ±240 (±168~±276 settable)				
Charging Current (A)		N×10 Maximum (N: the number of power modules)					
OUTPUT							
Capacity (kVA)		120	200	300	400	500	600
Power Factor		1					
Phase		3Ф4W+PE					
Waveform		sine wave					
Voltage (Vac)		L-L:380, 400, 415±1%					
Frequency (Hz)		50/60± 0.2% (battery mode)					
Three Phase Difference		≤1 degrees					
THDv		≤1% (linear load, full load), ≤4% (nolinear load, full load)					
Static Bypass Transfer Time		0					
Max. System Efficiency		97%					
Parallel Mode		Advanced no-master-slave parallel technology, N+1 redundancy					
Overload Capacity		106-110% load for 60mins, 111%-130% load for 10mins, 131%-150% load for 1 min, 151%-200% load for 200ms					
GENERAL							
Working Temperature (°C)		-5~40					
Storage Temperature (°C)		-40~70					
Relative Humidity		0%~95%, no condensing					
Battery Type		Lead-acid batteries and lithium iron phosphate batteries					
Communication Interface		RS485, RS232, dry contact (SNMP optional)					
Noise (dB)		< 65 < 70					
Dimension (W×D×H) (mm)		600×860×2000 1200×860×2000					
Weight (kg)	Cabinet	180	224	236		427	
	Bypass Module	17	19	25	25	31	31
	Power Module	27			33		

Specifications are subject to change without notice;

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