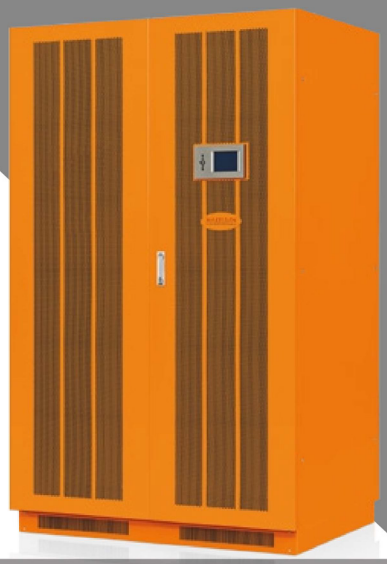
Aytemiz MAKELSAN
Uninterruptible Power Supplies/Generator

POWER FORLIFE

HOME/OFFICE | EMERGENCY | MEDICAL | INDUSTRY | DATA CENTER | TRANSPORT

PM
SERIES ON-LINE UPS
25-200 kVA



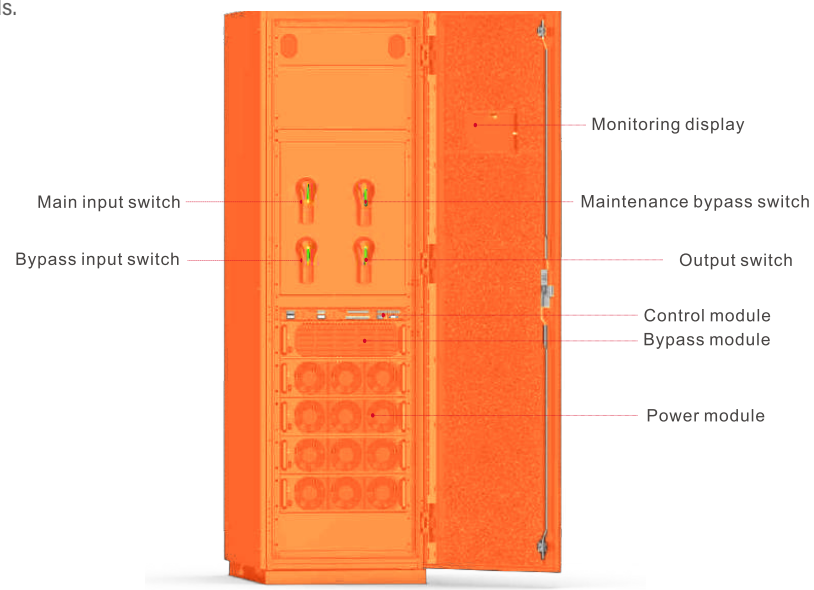
- High power factor 1.0
- High efficiency 96%
- High power density
- 3-level technology
- 2 U power module
- Power flexibility from 25 – 200 kW
- Scalability & Modular hot-swappable
- Low total cost of ownership

VFI TYPE ON-LINE UPS | TOWER | 1.0 POWER FACTOR | 24H SERVİCE

CE TSE TSE-HYB

PM0 Series modular UPS is ideal for reliable, saving, intelligent and easy solutions. It ensures that a scalable, secure, high quality power supply is available for any critical high-density computer and IT environment applications, such as data centers and other critical loads.

PM EA660 Series (25 kVA ~ 200 kVA) UPS is a high-end modular UPS with latest dual-core DSP control technology. It adopts a highly intelligent modular design which mainly contains power modules, bypass module and control module, all modules support "plug & play" to simplify UPS servicing and maintenance. The available UPS power and redundancy level can expand vertically from 25 kVA / 25 kW to 200 kVA / 200 kW in one single power cabinet with flexible configuration for meeting different needs. Based on superior electrical performance, perfect hardware and software protection function, PM Series UPS can adapt to different grid environment and provides maximum protection and high quality power for critical loads in data centers or other important applications.



PM SERIES ON-LINE UPS
25-200 kVA

POWER FORLIFE

- Advanced dual-core DSP control technology
- True On-line, double conversion power protection, and with strong load capacity
- Compact footprint, modular Hot-swappable design simplifying maintenance and scalability
- High efficiency up to 96% in on-line mode, 99% efficiency in ECO mode
- Dual input design, independent bypass available, improving bypass availability
- Output power factor 1.0, input power factor ≥ 0.99, input THDi ≤ 3%, output THDv ≤ 1%
- 138 ~ 485 Vac wide input voltage range, 50 Hz / 60 Hz grid self-adaptive
- Frequency conversion available: 50 Hz input / 60 Hz output or 60 Hz input / 50 Hz output
- Advanced digital parallel technology, improving redundancy and reliability in system
- Flexible charger parameter and battery configuration settings, battery number 30 ~ 46 pcs selectable
- Compatible with lead-acid battery and lithium battery, suitable for different types of battery configuration requirements
- Support cold start with battery and auto restart with mains power
- Settable delay time for startup when the mains power is restored, reducing the impact on the grid or generators
- Fan speed varies intelligently with temperature, reducing noise and extending the service life of the fan
- Fault-tolerant design for fan system, taking 35% loads when any one of fans fails
- Superior hardware and software protection function, robust self-diagnostic function, and abundant event log
- Hibernation function to improve the system efficiency at light loads and extend the service life of UPS
- Powerful background software for parameters configuration and online updating
- 7 inches LCD touch screen, friendly human-machine interface
- Multi-platform communications: RS485, CAN, NET, dry contacts, SNMP, Wi-Fi and GPRS communication interfaces; Real-time monitoring UPS available through the mobile App after installing Wi-Fi card and GPRS card
- Intelligent battery management, automatic floating/equalizing charge control, battery self-diagnosis control, SOC detection, SOH detection and charger hibernation control, extending battery lifespan

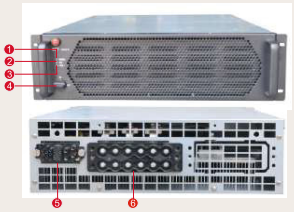
Power Module



① Run indicator
② Alarm indicator
③ Fault indicator
④ Ready switch
⑤ Output port
⑥ Input port

Dimensions (W x D x H) (mm)	442×620×86
Weight (kg)	20.26 kg
Charging current	10 A
Capacity	25 kVA / 25 kW
Power density	17.2 W / inch³

Bypass Module



① Run indicator
② Alarm indicator
③ Fault indicator
④ Ready switch
⑤ Signal terminal
⑥ Power terminal

Dimensions (W×D×H) (mm)	442×500×130
Weight (kg)	18 kg
Capacity	200 kVA / 200 kW

Control Module



① LBS connection port/rack parallel port ② LED indicator ③ Input dry contacts ④ Output dry contacts ⑤ Battery ground fault (BTG) interface/ generator (GEN) interface
⑥ Generator (GEN) port ⑦ Battery circuit breaker (BCB) port ⑧ EPO port ⑨ Switch state port of distribution cabinet ⑩ SPD port
⑪ Ambient temp port ⑫ Battery temperature compensation port ⑬ CAN port ⑭ RS485 port 1 ⑮ RS485 port 2 ⑯ Ethernet port
⑰ USB port ⑱ LCD port ⑲ Plug-in switch of system control board ⑳ Plug-in switch of dry contacts board ㉑ Plug-in switch of monitoring board

PM
SERIES ON-LINE UPS
25-200 kVA



MODEL	Rated Capacity	100 kVA / 100 kW	200 kVA / 200 kW
	Number of Power Module	4	8
	Rated Capacity of Power Module	25 kVA / 25 kW	
INPUT	Input Wiring	Three-phase five-wire (3Φ + N + PE)	
	Rated Voltage	380 Vac / 400 Vac / 415 Vac	
	Voltage Range	138 ~ 305 Vac (linear derating at 40% ~ 100% load), 305 ~ 485 Vac (no derating)	
	Frequency Range	40 ~ 70 Hz	
	Input Power Factor	⩾ 0.99	
	THDi	≤ 3%	
	Bypass İnput Voltage Range	-60% ~ +25% (settable)	
	Battery Voltage	± 240 Vdc (±180 ~ ± 276 Vdc settable)	
	Number of Battery	40 PCS 12 V battery (30, 32, 34 ,36, 38, 40, 42, 44, 46 pcs settable)	
OUTPUT	Output Wiring	Three-phase five-wire (3Φ + N + PE)	
	Rated Voltage	380 Vac / 400 Vac / 415 Vac	
	Output Voltage Regulation Accuracy	± 1%	
	Output Frequency Accuracy	Synchronized with utility in mains power mode; 50 Hz / 60 Hz ± 0.1% in battery mode	
	Output Power Factor	1	
	Output Waveform Distortion (THDv)	≤ 1% (linear load); ≤ 3% (non-linear load)	
	Crest Factor	3:1	
	Overload Capacity	105% < load ≤ 110% for 60 min, 110% < load ≤ 125% for 10 min, 125% < load ≤ 150% for 1 min, load > 150% for 0.2 s	
SYSTEM	Max. efficiency	96% in on-line mode, 99% in ECO mode	
	Transfer time	0 ms	
	Max. number of parallel connections	2	
	Protections	Short-circuit, overload, over-temperature, battery low voltage, undervoltage, overvoltage, fan failure protection	
	Communications	Standard configurations: RS485, CAN, NET, SNMP, dry contacts port, and EPO Optional configurations: Wi-Fi card, parallel port, LBS port, GPRS card, Battery temperature sensor, EMD and SMS alarms	
	Display	7 inches LCD touch screen	
ENVIRONMENTAL	Operating temperature	0 ~ 40°C	
	Storage temperature	-25°C ~ +55°C (without battery)	
	Relative humidity	0% ~ 95% (non-condensing)	
	Altitude	≤ 1000 m, above 1000 m, derating 1% for each additional 100 m	
	Protection level	IP 20	
	Noise	≤ 65 dB (at 1 m)	
OTHERS	Cabinet dimensions (W x D x H)(mm)	600 x 850 x 1200	1600 x 850 x 2000
	Net weight (kg)	180	280
	Module dimensions (WxDxH) (mm)	442 x 620 x 86	
	Power module weight (kg)	21	
	Color	Black	

All specifications are subject to change without notice.

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