



Working in Power

TEC 9000-MKH Online UPS

1Ph-1Ph / 3Ph-1Ph / 3Ph-3Ph 6~200 KVA

MODULAR UPS 1Ph-1Ph: 6~50 kVA
MODULAR UPS 3Ph-1Ph: 6~100 kVA
MODULAR UPS 3Ph-3Ph: 10~200 kVA



- CENTRALIZED SERVERS
- LAN GATEWAYS
- DATA CENTERS
- GENERATORS
- ENTERPRISE TELECOMMUNICATIONS
- MISSION-CRITICAL APPLICATIONS

Model		TEC 9000-MKH				
		1-1		3-1		
UPS cabinet code		U9030AEMHBHK	U9050AEMHBHK	U9030AFMHBHK	U9050AFMHBHK	U9100AFMHBHK
UPS module code		U906MAERHBHK	U906MAERHBHK	U906MAFRHBHK	U906MAFRHBHK, U910MAFRHBHK	
Capacity (VA/Watts)	UPS cabinet	6~30k / 4.8~24k	6~50k / 4.8~40k	6~30k / 4.8~24k	6~50k / 4.8~40k	6~100k / 4.8~80k
	Module	6k/4.8k	6k/4.8k, 10k/8k	6k/4.8k	6k/4.8k, 10k/8k	
INPUT						
Phase		Single Phase+N+PE		Three-phase+N+PE		
Nominal Voltage		220/230Vac		380/400Vac or 220/230Vac		
Operating Voltage Range		120~276Vac		208~478Vac or 120Vac~276Vac		
Operating Frequency Range		40~70HZ				
Power Factor		≥0.99				
Bypass Voltage Range		Max.voltage: 220V: +25%(optional +10%, +15%, +20%) 230V: +20%(optional +10, +15%) 240V: +15%(optional +10) Min.voltage: -45%(optional -20%, -30%)				
Bypass frequency range		Frequency protection range: ±10%				
Harmonic Current		≤5% (100%non-linear load)				
Generator input		Support				
OUTPUT						
Phase		Single phase+N+PE				
Output Voltage		220/230VAC				
Power Factor		0.8				
Voltage Regulation		±1%				
Output Frequency	Line Mode	±1%, ±2%, ±4%, ±5%, ±10% of the rated frequency (optional)				
	Battery Mode	(50/60 ±0.2)Hz				
Crest Factor		3:1				
Harmonic distortion (THD)		≤2% with linear load ≤5% with non-linear load				
Efficiency						
Efficiency		≥93.5%				
BATTERY						
Battery voltage	(Battery quantity: Optional) 192, 216, 240 Vdc					
	Connections	3 wires (positive / neutral / negative)				
Charge Current(A)	UPS cabinet	30A (Max)			60A (Max)	
	Module	6A (Max) (charge current can be set according to battery capacity installed)				
Backup time		Depends on the capacity of external batteries				
SYSTEM FEATURES						
Transfer Time		Mains to Battery: 0ms ; Mains to Bypass: 0ms				
Overload Short circuit	Line mode	Load ≤110%: last 60min ; <125%: last 10min ; ≤150%: last 1min ; >150% turn to bypass mode immediately				
	Bat. mode	Load ≤110%: last 10min ; <125%: last 1min ; ≤150%: last 10second ; >150%: last 1second				
	Bypass mode	Breaker(6kVA:40A /10kVA:60A)				
Short Circuit		Hold Whole System				
Communication interface		USB cabinet: Rs232, Rs485, Dry Contact, Intelligent slot x 2, (SNMP card, Relay card(optional))				
ENVIRONMENT						
Operating temperature		0°~40° C				
Storage Temperature		-25 °C~55 °C				
Humidity range		0~95% (non condensing)				
Altitude		<1500m				
Noise level		<55dB			<65dB	
PHYSICAL						
Dimension (D x W x H)(mm)	UPS cabinet	600x840x1400		600x840x1400		600x840x2000
	Module	580x443x131(3U)				
Net weight (kg)	UPS cabinet	138 kg	150 kg	138 kg	150 kg	213 kg
	Module	6kVA:23kg ; 10kVA:25kg				
STANDARDS						
Safety		IEC/EN62040-1, IEC/EN60950-1				
EMC		IEC/EN62040-2, IEC61000-4-2, IEC61000-4-3, IEC61000-4-4 IEC61000-4-5, IEC61000-4-6, IEC61000-4-8				

Model		TEC 9000-MKH	
UPS cabinet code		3-3	
UPS module code		U9100AGMHBHN	U9200AGMHBHN
Capacity (VA/Watts)		U910MAGRHBHN, U915MAGRHBHN, U920MAGRHBHN	
Capacity (VA/Watts)	UPS cabinet	10~100k / 9~90k	10~200k / 9~180k
	Module	10k/9k, 15k/13.5k, 20k/18k	
INPUT			
Phase		Three-phase+N+PE	
Nominal Voltage		380/400/415Vac	
Operating Voltage Range		208~478Vac	
Operating Frequency Range		40~70HZ	
Power Factor		≥0.99	
Bypass Voltage Range		Max.voltage: 220V: +25%(optional +10%, +15%, +20%) 230V: +20%(optional +10, +15%) 240V: +15%(optional +10) Min.voltage: -45%(optional -20%, -30%)	
Bypass frequency range		Frequency protection range: ±10%	
Harmonic Current		≤5% (100%non-linear load)	
Generator input		Support	
OUTPUT			
Phase		Three-phase+N+PE	
Output Voltage		380/400/415Vac	
Power Factor		0.9 / 1(Customized)	
Voltage Regulation		±1%	
Output Frequency	Line Mode	±1%, ±2%, ±4%, ±5%, ±10% of the rated frequency (optional)	
	Battery Mode	(50/60 ±0.2)Hz	
Crest Factor		3:1	
Harmonic distortion (THD)		<2% with linear load <5% with non-linear load	
Efficiency			
Efficiency		≥95.5%	
BATTERY			
Battery voltage	Connections	(Battery quantity: Optional) 384, 408, 432, 456, 480 Vdc 3 wires (positive / neutral / negative)	
	Charge Current(A)	UPS cabinet	30A (Max) / 60A (Max)
	Module	6A (Max) (charge current can be set according to battery capacity installed)	
Backup time		Depends on the capacity of external batteries	
SYSTEM FEATURES			
Transfer Time		Mains to Battery: 0ms ; Mains to Bypass: 0ms	
Overload Short circuit	Line mode	Load ≤110%: last 60min ; <125%: last 10min ; ≤150%: last 1min ; >150% turn to bypass mode immediately	
	Bat. mode	Load ≤110%: last 10min ; <125%: last 1min ; ≤150%: last 10second ; >150%: last 1second	
	Bypass mode	Breaker(10kVA:20A /15kVA:32A /20kVA:40A)	
Short Circuit		Hold Whole System	
Communication interface		USB cabinet: Rs232, Rs485, Dry Contact, Intelligent slot x 2 ,(SNMP card, Relay card(optional))	
ENVIRONMENT			
Operating temperature		0°~40° C	
Storage Temperature		-25 °C~55 °C	
Humidity range		0~95% (non condensing)	
Altitude		<1500m	
Noise level		<55dB	
PHYSICAL			
Dimension (D x W x H)(mm)	UPS cabinet	600x840x1400	600x840x2000
	Module	580x443x131(3U)	
Net weight (kg)	UPS cabinet	170 kg	270 kg
	Module	10kVA:25kg ; 15kVA:30kg ; 20kVA:31kg	
STANDARDS			
Safety		IEC/EN62040-1, IEC/EN60950-1	
EMC		IEC/EN62040-2, IEC61000-4-2, IEC61000-4-3, IEC61000-4-4 IEC61000-4-5, IEC61000-4-6, IEC61000-4-8	

* Product specifications are subject to change without further notice

TEC 9000-MKH



Features

- High frequency and double conversion on-line technology
- Advanced PFC technology
- 3U frame ,rack-mounted and tower convertible
- EPO function
- Wide input voltage range
- Fully digitized microprocessor control
- Parallel redundancy
- Advanced battery management
- Lightning and surge protection ,shortcircuit and overload protection
- Multilingual LCD display and LED display
- EMI/RFI noise filter
- Smart RS232 communication with monitoring software
- Optional SNMP card slot



3U battery box (optional)



(Optional)
The series has matching Battery Cabinets



Modude Control Panel



UPS Cabinet Control Panel

