



TM66E Modular Series

Modular design

- All units adopt modular design, including power module, bypass module, monitoring module, can be easily integrated in MDC or customized cabinet
- Power module, Bypass module, Monitoring module, ECU control module, all these modules are hot-swappable

High reliability

- Wide input voltage range, line voltage range is 138-485V, UPS will derate to 40% when input voltage is below 305V
- UPS adopts multiple digital bus and redundancy parallel control system, making sure the whole system keep online if any single circuit fail
- The UPS will keep on single or parallel working, if any module fail
- Thickened conformal coating, applicable for harsh environment such as high heat, high humidity, dust, salt spray

Green and power saving

- High input power factor, it is up to 0.99
- 3-level topology design, efficiency is up to 95.8%
- THDi < 3% (100% linear load)
- The UPS will work in sleeping mode when the load is very small

LBS function

- LBS function can realize 2 independent UPS system work in synchronization, and it enhances the reliability of the system

Parallel redundancy function

- Support parallel expanded operation: maximum is 8 units
- Support sharing batteries for the UPS in parallel

Build-in battery design

- Integrated solution, no additional battery cabinet is required, saving construction costs
- Maximum 6 groups of internal batteries, selectable according to autonomy time requirement

Strong load capability

- Output power factor is 1.0, UPS can supply power to 100% unbalanced load
- High adaptability for load, it can connect full inductive load or capacitive load

Intelligent management

- With 7 inches (Standard) and 10 inches (Optional) colorful touch LCD screen
- Support recording and exporting history logs and fault logs
- Support SNMP, RS232, RS485, Dry contact interface
- Support upgrading FW&SW on line
- EPO & REPO function

Compatible with generator

- Power Walk In function, it can reduce the start current impact to system, and it can reduce the capacity of generator

TM66E Modular Series

Technical Specifications

		TM66E				
Cabinet Model		TM66E-30	TM66E-45	TM66E-50	TM66E-60	TM66E-75
Cabinet capacity		30kVA	45kVA	50kVA	60kVA	75kVA
Module Model		TM66E-RM-10/15	TM66E-RM-15	TM66E-RM-10/25	TM66E-RM-20/30	TM66E-RM-15/25
Module capacity		10kVA/15kVA	15kVA	10kVA/25kVA	20kVA/30kVA	15kVA/25kVA
Max. number*		3+2/2+3	3+2	5/2+3	3+2/2+3	5/3+2
INPUT						
Nominal voltage		380/400/415Vac, (3Ph+N+PE)				
Operating voltage range		138~305Vac for 40% load; 305~485Vac for 100% load				
Operating frequency range		40Hz~70Hz				
Power factor		≥0.99				
Harmonic distortion (THDi)		≤3% (100% linear load)				
Bypass voltage range		Max. voltage: 220V: +25% (Optional+10%, +15%, +20%) 230V: +20% (Optional+10%, +15%) 240V: +15% (Optional+10%) Min. voltage: -45% (Optional-10%, -15% -20%, -30%)				
Bypass frequency range		Frequency protection range: ±10%				
Power walk in		Support				
Generator input		Support				
OUTPUT						
Rated voltage		380/400/415Vac, (3Ph+N+PE)				
Power factor		1.0				
Voltage regulation		±1%				
Output frequency	Line mode Bat. mode	Synchronize with input, when the input frequency > ±10% (±1%/±2%/±4%/±5% optional), output 50/60 (±0.1Hz) (50/60±0.1%)Hz				
Crest factor		3:1				
Harmonic distortion (THDv)		≤2% with linear load; ≤4% with nonlinear load				
Efficiency		up to 95.8%				
BATTERY						
Battery voltage		±240Vdc (6×40pcs 9Ah/12V)				
Power module charge current		18A (Max.)				
SYSTEM FEATURES						
Transfer time		Utility to Battery: 0ms; Utility to Bypass: 0ms				
Overload	Inverter mode Bypass mode	≤110% 60min, ≤125% 10min, ≤150% 1min, >150% 1.2s shut down inverter 30°C: 135% for long term; 40°C: 125% for long term; >1000%, 100ms Line Mode: Switch to Bypass; Backup Mode: Shut down UPS immediately Alarm and Switch off				
Overheat		Upon Power On and Software Control				
Low battery voltage		Support				
Self-diagnostics		Shut down UPS immediately (Turn to bypass optional)				
Backfeed protection		Advanced Battery Management				
EPO (Optional)		Complies with EN62040-3				
Battery		Line Failure, Battery Low, Overload, System Fault				
Noise suppression		Line Mode, Bypass Mode, Battery Low, Battery Fault, Overload & UPS Fault				
Audible & visual alarms		Input, Output, Battery, Command, Setting, Maintenance				
Status LED & LCD display		Reading on the LCD display				
Communication interface		RS232, RS485, Parallel, LBS, Dry contact port, Relay card (Optional), SNMP card (Optional), Battery temperature sensor (Optional)				
ENVIRONMENTAL						
Operating temperature		0°C~40°C				
Storage temperature		-25°C~55°C				
Humidity range		0~95% (Non condensing)				
Altitude		<1500m, derating required when >1500m				
Noise level		<58dB		<61dB		
PHYSICAL						
Dimension	UPS cabinet	600×1000×2000mm				
W×D×H	Power module	440×620×86mm (2U)				
Net weight	UPS cabinet (Without battery)	310kg (MAX.)				
	Power module	10kVA: 19kg; 15~30kVA: 21kg				
STANDARDS						
Safety		IEC/EN 62040-1, IEC/EN 62477-1				
EMC		IEC/EN 62040-2 (IEC 61000-2-2, 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)				

* 3+2 means 2 power modules are used as redundancy module

- Specifications are subject to change without prior notice
- Data above are typical values for reference only, not as a basis for engineering design



ATENCO POWER TECH CO. LTD

2F.-7 No.14, Xiwei St., Sanchong Dist., New Taipei City 24155, Taiwan

TEL +886-2-2280-6939 FAX +886-2-2280-2939 info@atenco.com.tw www.atenco.com.tw