

Solutions behind the power

1:1



95.5%*

Online efficiency

THDv≤1.5%

(linear)

3-Level

IGBT inverter

PF=1.0

kW=kVA

110/125/150%

Overload (60/10/1 min)

4× (N+X)

Parallel Redundancy
6/10kVA

Unity Power. Three-Level Inverter Efficiency.

6-10kVA · Efficiency up to 95.5% · 0 ms transfer · Input PF > 0.99 · THDi < 3% · 110-300Vac · 40-70Hz · ±1% regulation · Crest 3:1

Max 10A charger · 192/216/240 VDC · RS-232/USB/RS-485/EPO · Maintenance bypass switch · Low noise (≤45 dB @ 6kVA)

Applications



ON LINE



Tower



Datacenter



Finance



E-Medical



Industry



Transport



Emergency



Education

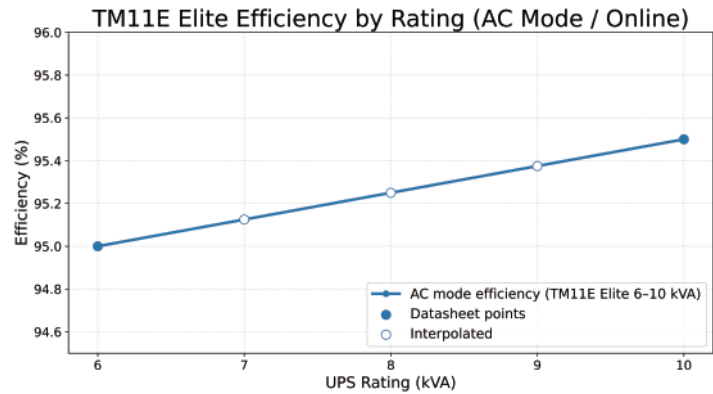
Tower TM11E Elite is a transformer-less, **true online (VFI)** tower UPS delivering **unity power** with low distortion for edge racks, labs, and control rooms. A **three-level IGBT** inverter and **±1% voltage regulation** keep outputs clean even on weak mains. **Wide input (110-300 Vac)** with **40-70Hz** sensing and **0 ms transfer** ride through sags and frequency drift. Runtime scales from internal strings to external cabinets, with **high-current charging** to accelerate recovery, and **N+X to 4 units** for growth or parallel redundancy.

**Performance may vary by configuration and environment.*

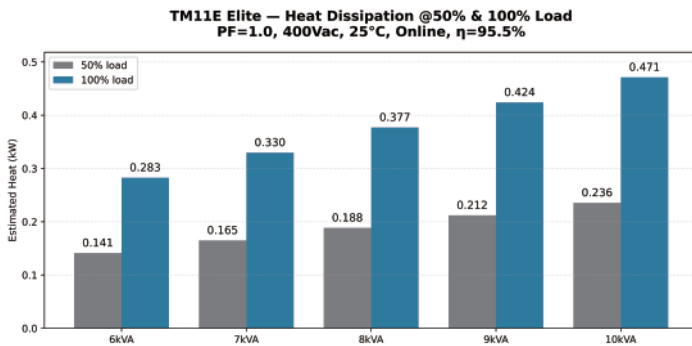
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TO LEARN MORE



- N+X parallel redundancy (up to 4 units)
- True online, full digital control
- Wide input 110-300Vac
- Generator compatible
- Built-in maintenance switch
- Multiple I/O: RS-232/USB/RS-485/EPO
- Max charging current up to 10A
- Cold-start
- Intelligent fan speed regulation
- Low noise (≤ 45 dB @ 6kVA)
- Multi-protection (short-circuit, overload, overheat, battery over-/over-discharge, output low voltage, fan fault)



Performance



- VFI (online double conversion) with PF = 1.0
- Efficiency up to 95% (online)
- Input PF > 0.99
- Input THDi < 3%; 40-70Hz
- Selectable output 208/220/230/240 Vac (default L+L+G; L+N+G variants)
- Voltage regulation $\pm 1\%$; crest factor 3:1
- Transfer time (AC→BAT, INV→BYP): 0 ms
- Overload behavior (typ.): **online** 110%/60 min, 125%/10 min, 150%/1 min; bypass 105-130% alarm then timed limits; **battery** 110%/10 min, 125%/1 min, 150%/10 s, >150% 0.5 s shutdown
- Acoustics: ≤ 48 dB @ 6 kVA, ≤ 52 dB @ 10 kVA (1 m)

Scalability, Battery & Charging

- N+X to 4 units (6-10kVA) for redundancy or capacity growth
- Charging current: 8A (6kVA) / 10A (10kVA)
- Battery DC Voltage (model-dependent): 216V default; 36pcs internal 9Ah
- Internal options: packs listed as 9Ah external cabinets for extended runtime (per SKUs)

Optional Accessories

- Communication cards: SNMP / dry-contact (standard and mini versions)
- Dual intelligent slots support touch LCD

Note: Specifications are model-specific. Optionals (e.g., parallel kit, bigger charger, communications cards, accessories) are not supplied by default and vary by SKU/order.

Final deliverables and configurations are defined only by ATENCO's formal quotation and the customer's confirmed model/options.

TM11E Elite 6-10kVA Technical Specifications



	TM11E Elite	
Model	TM11E 6K EL S/TM11E 6K S	TM11E 10K EL S/TM11E 10K S
Capacity	6000VA/6000W	10000VA/10000W
Topology	Double Conversion On-Line	
Cooling	Fan cooled	
Installation Type	Tower	
INPUT		
Nominal voltage	208/220/230(Default)/240Vac	
Input voltage range	110-300Vac(110-176Vac @ 50% load / 176-300Vac @ 100% load)	
Frequency range	40-70Hz	
Harmonic distortion(THDi)	<3%	
Power factor	>0.99	
Input Connection	Terminal(L+N+G)	
OUTPUT		
Output Power	6kW	10kW
Power factor	1	
Output Waveform	Pure Sinewave	
Online Efficiency (up to)	95%	95.5%
Economy mode efficiency	98.8%	99%
Output voltage	208/220/230(Default)/240Vac	
Voltage Regulation	±1%	
Output Voltage Regulation (Dynamic)	±5%	
Harmonic distortion(THDv)	< 1% (Full Linear load)	
	< 3% (Full nonlinear load)	
Output Frequency	50/60Hz ± 10%(Line mode); 50/60Hz(default) ±0.1%(Battery mode)	
Over Load Capability (Online mode)	105%~110%: UPS transfer to bypass after 60 minutes when the utility is normal	
	110%~125%: UPS transfer to bypass after 10 minutes when the utility is normal	
	125%~150%: UPS transfer to bypass after 1 minute when the utility is normal	
	>150%: UPS transfer to bypass after 0.5 second when the utility is normal	
Over Load Capability (Battery mode)	105%~110%: UPS after 10 minute shut down	
	110%~125%: UPS after 1 minute shut down	
	125%~150%: UPS after 10 second shut down	
	>150%: UPS after 0.5 second shut down	
Over Load Capability (Bypass mode)	105%~130%: Only Overload alarm	
	130%~150%: UPS after 10 minute shut down	
	150%~200%: UPS after 1 minute shut down	
	>200%: after 0.5 second shut down	
Current Crest Ratio	Breaker 40A	Breaker 63A
	03:01	
Output Connection	Terminal (L+N+G)	
BYPASS		
Voltage range	208/220Vac Max.voltage: +25% (optional +10%,+15%,+20%)	
	230Vac Max.voltage: +20% (optional +10%,+15%)	
	240Vac Max.voltage: +15% (optional +10%)	
	Min. voltage: -45% (optional -10%,-20%,-30%)	
Frequency range	Frequency Protection Range: ±10%	
ECO Range	Rated Voltage ± 10%	
BATTERY		
Capacity (Standard unit)	7Ah/12V (9Ah/12V optional)	9Ah/12V (7Ah/12V optional)
Nominal DC Voltage	216Vdc	
Number (PCS)	36	
Charge Current (max.)	±96/±108/±120Vdc (Settable)	±96/±108/±120Vdc (Settable)
COMMUNICATION		
Control panel LCD+LED	Segment code screen	
Communication Interface	USB,RS232,RS485 port, Intelligent slot, Parallel port (optional), SNMP card (optional), Relay card (optional)	
Emergency Power Off (EPO)	Yes	
ENVIRONMENT		
Operating temperature	0°C~40°C	
Storage temperature	-25°C~55°C	
Humidity range	0~95%RH (Non -condensing)	
Operating altitude	0~1000 meters Normally operate; 1000~3000 meters Derating	
Protection Class	IP20	
Noise level	≤45dB	≤50dB
STANDARDS		
Safety	EN IEC 62040-1:2019 + A11:2021	
EMC	IEC 62040-2:2016, EN IEC 62040-2:2018	
PHYSICAL		
Dimension W×D×H	250*643*715mm (With wheel)	
Net weight	TDB	TDB

Disclaimer: Products are continuously improved and updated. As a result, actual product specifications may differ from promotional or technical materials due to asynchronous revisions. This document is provided for reference only and does not constitute an offer, warranty, or commitment.

TC 6-10kVA battery pack specification

	TC40120N/TC40120N-B
BATTERY SYSTEM	
Battery type	VRLA (Lead acid maintenance free battery)
Typical battery recharging time	6~8 hours (To 90% of full capacity)
Typical battery life	3~5 years, depend on discharging cycle and ambient temperature
System voltage	±120Vdc
Battery quantity	2×20 PCS
Capacity	9Ah (12V)
PHYSICAL	
Dimension W×D×H	250×619×616mm (With wheel)
Net weight	134kg
ENVIRONMENT	
Safety	CE
Operating environment	0°C~40°C
Relative humidity	0~95% (Non condensing)
Noise level	< 40dB at 1 Meter

Model remark: TC40120N; "TC" means Tower cabinet; "40" means battery number inside the cabinet;
 "120" means the battery system voltage; "N" means battery with neutral connection

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