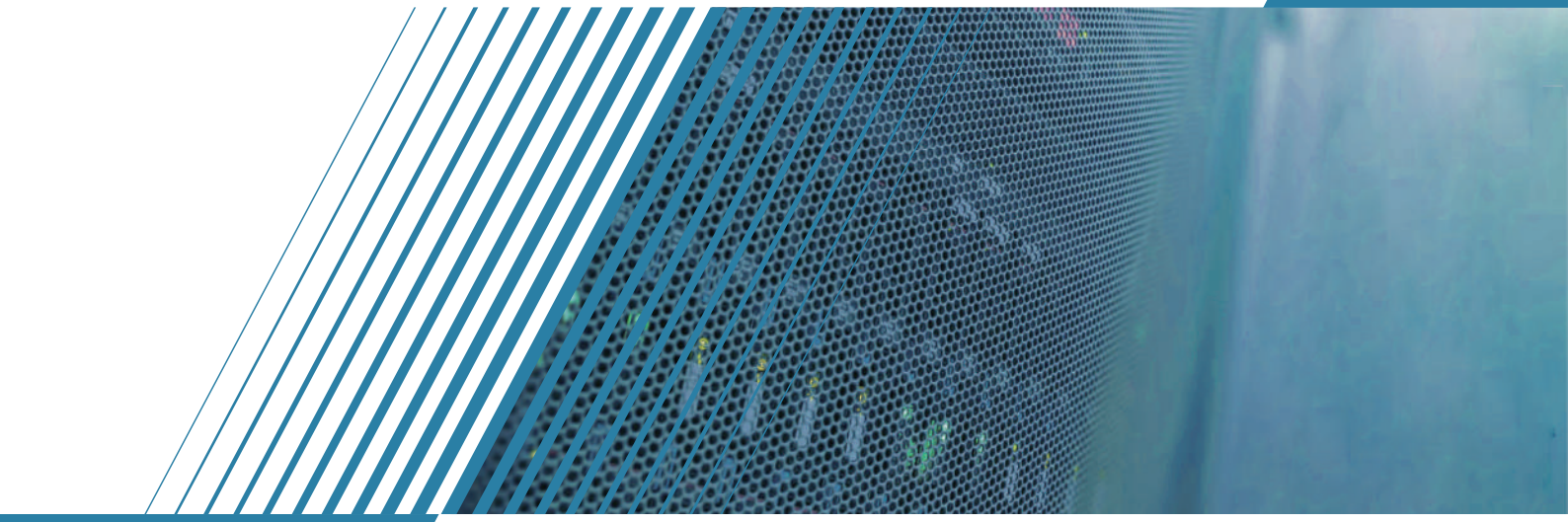
ATENCO POWER TECH CO. LTD



Solutions behind the power

3:3

Up to 94%
VFI efficiency*

≤1%
THDv*
(linear load)

110/125/150%
Overload (60/10/1 min)

0 ms transfer
Line → Battery

≥0.97*
Input PF

6× (N+X)
Parallel Redundancy*

Transformer-Based. Built to Scale.

Industrial-Grade Reliability · VFI online double-conversion · THDv ≤1% (linear load) · 110/125/150% overload (60/10/1 min) · Parallel up to 6 units (N+X)

Isolation transformer architecture · Wide input: −25% / +20% (380/400/415Vac); 45–65Hz generator-friendly · Complete protection & alarms

Applications

Government | Finance | Data Center | Education | Transportation | Healthcare | Energy

TM33-ET is a transformer-based, **three-phase VFI** (online double-conversion) UPS platform covering **10-800kVA**, designed for industrial and critical facilities where isolation, robustness, and predictable performance matter. The series delivers **3/3-phase output PF 0.9** (kW = 0.9×kVA) and specifies **efficiency up to 94%** (by model range), supporting large loads with practical energy performance. On the input side it targets improved upstream behavior with **input PF ≥ 0.97*** and **output quality with THDv ≤ 1% (linear load)**, helping protect sensitive equipment and reduce disturbance on weak mains. Continuity is reinforced by **0 ms transfer** (Line → Battery) and a clear overload profile (110%/60 min, 125%/10 min, 150%/1 min to bypass) for short-duration overload events. For capacity growth and redundancy planning, the platform supports N+X parallel operation **up to 6 units**.

With optional filter. Efficiency varies by model/rating (see model table).

SCAN THE CODE
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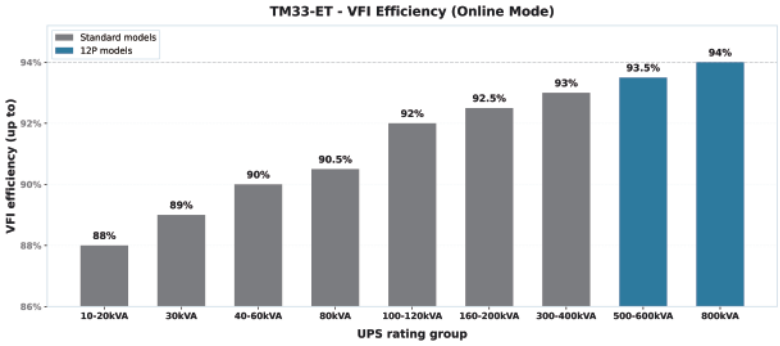
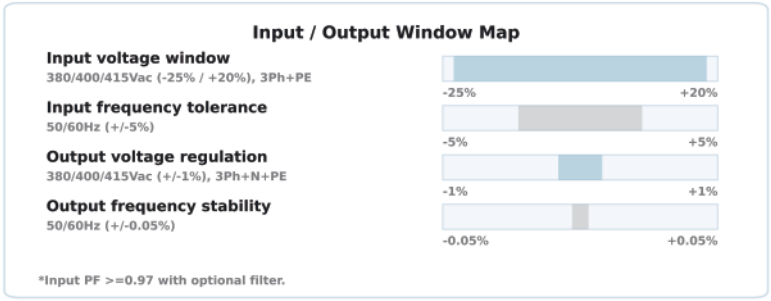
TM33-ET Key Features

- **Transformer-based VFI online UPS** for robust industrial operation and isolation architecture
- **10-800kVA** three-phase VFI platform **(3/3)**
- **PF 0.9 output** (kW = 0.9 × kVA)
- **0 ms transfer** (Line → Battery mode)
- **Parallel up to 6 units (N+X)** for scalable capacity and redundancy
- **Monitoring: RS232 / RS485 / EPO / Dry contact; SNMP card (optional)**
- **Utility rating**: 380/400/415Vac systems; frequency 50/60Hz
- **Configurable battery system by model group** to support different runtime requirements



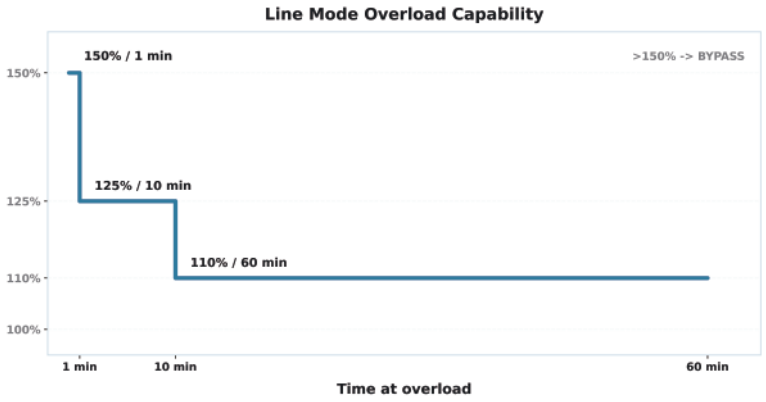
Performance & Power Quality



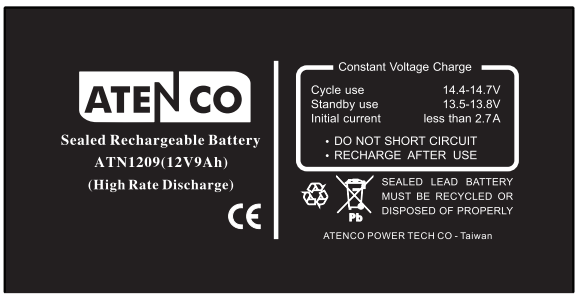
- **Input voltage**: 380/400/415Vac (−25% / +20%), 3Ph+PE
- **Input frequency**: 50/60Hz (±5%)
- **Input PF**: ≥0.97* (*with optional filter)
- **Output voltage**: 380/400/415Vac (±1%), 3Ph+N+PE
- **Output frequency**: 50/60Hz (±0.05%)
- **Output THDv(linear load)**: ≤2% / ≤1% (model-dependent)
- **Crest factor**: 3:1 (max)
- **Efficiency (VFI / online)**: model-dependent (up to 94%)
- **Operating temperature**: 0–40°C
- **Humidity**: 0–95% (non-condensing)
- **Standards**: IEC/EN 62040-1 / -2 / -3; IEC 62477-1

Bypass & Overload Capability

- **Line mode overload**: ≤110% / 60 min • ≤125% / 10 min • ≤150% / 1 min → **bypass**
- **Transfer time: 0 ms** (Line mode → Battery mode)
- **Bypass rated**: 380/400/415Vac • 50/60Hz
- **Bypass voltage window (adjustable)**:
- • Upper limit: **+10 / +15 / +20%** (max +20%)
- • Lower limit: **−10 / −20 / −30 / −40%** (max −40%)
- **Bypass frequency window (adjustable)**:
  - **±2.5 / ±5 / ±10 / ±20%** (base ±10%)



Battery & Charging



- **Battery bus options (by model group)**: 384Vdc (360–408) / 480Vdc / 600Vdc
- **Charging management**: auto **float / boost** charging
- **Battery functions**: backup time prediction (by current & voltage)
- **Battery self-test**: automatic battery test at intervals
- **Battery monitoring**: temperature sensor (optional)
- **Battery configuration**: flexible DC battery voltage (by model group)
- **Optional accessories**: harmonic filter, SNMP adapter, LBS cables, bypass current-sharing inductor

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.

Technical Specifications

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	TM33-ET Series								
Model	**ET10**	**ET20**	**ET30**	**ET40**	**ET60**	**ET80**	**ET100**	**ET120**	**ET160**
Capacity	10kVA/9kW	20kVA/18kW	30kVA/27kW	40kVA/36kW	60kVA/54kW	80kVA/72kW	100kVA/90kW	120kVA/108kW	160kVA/144kW
INPUT									
Operating voltage range	380/400/415Vac (−25%/+20%), (3Ph+PE)								
Operating frequency range	50/60Hz (±5%)								
Power factor	≥0.97 *								
OUTPUT									
Output voltage	380/400/415Vac (±1%), (3Ph+N+PE)								
Output frequency	50/60Hz (±0.05%)								
Harmonic distortion (THDv)	≤2% (Linear load)						≤1% (Linear load)		
Crest factor	3:1 (Max)								
Efficiency (up to)	88%	89%		90%		90.5%	92%		92.5%
BYPASS									
Rated voltage	380/400/415Vac, (3Ph+N+PE)								
Rated frequency	50/60Hz								
Voltage protection range	Upper limit: +20% (+10%, +15%, +20% adjustable) Lower limit: −40% (−10%, −20%, −30%, −40% adjustable)								
Frequency protection range	±10% (±2.5%, ±5%,±10%, ±20% adjustable)								
BATTERY									
Battery voltage	384Vdc (360~384Vdc)								
SYSTEM FEATURES									
Transfer time	0 ms (Line mode→ Battery mode)								
Overload	Load≤110%: 60min; ≤125%: 10mins; ≤150%: 1min, to Bypass								
LED display	Input, Inverter, Bypass, Battery, Output, Status								
LCD display	Real-time status, load/battery, alarms, history								
Communication interface	RS232, RS485, EPO, Dry contact (Optional), SNMP card (Optional)								
Optional	Harmonic filter, SNMP adapter, LBS cables, battery temperature sensor, Bypass current-sharing inductor								
ENVIRONMENTAL									
Operating temperature	0~40°C								
Storage temperature	-25~55°C								
Humidity range	0～95% (Non-condensing)								
Altitude	<1500m								
Noise level	<58dB					<68dB			
PHYSICAL									
Dimension W×D×H (mm)	350×650×1050			430×830×1100		720×690×1400	720×690×1400 (6P) 1515×830×1600 (12P)	890×790×1600 (6P) 1515×830×1600 (12P)	890×790×1600 (6P) 1400×1000×1900 (12P)
Net weight (kg)	145	165	204	255	320	450	556 (6P)/ 1300 (12P)	693 (6P)/ 1450 (12P)	780 (6P)/ 1645 (12P)
Shipping weight (kg)	160	180	225	280	345	485	591 (6P)/ 1370 (12P)	738 (6P)/ 1520 (12P)	825 (6P)/ 1775 (12P)
STANDARDS									
Safety	IEC/EN 62040-1; IEC 62477-1								
EMC	IEC/EN 62040-2 (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, IEC 61000-2-2)								
Performance	IEC/EN 62040-3								

* With optional filter

Technical Specifications

	TM33-ET Series					
Model	**ET200**	**ET300**	**ET400**	**ET500-12P**	**ET600-12P**	**ET800-12P**
Capacity	200kVA/180kW	300kVA/270kW	400kVA/360kW	500kVA/450kW	600kVA/540kW	800kVA/720kW
INPUT						
Operating voltage range	380/400/415Vac (-25%/+20%), (3Ph+PE)					
Operating frequency range	50/60Hz (±5%)					
Power factor	≥0.97 *					
OUTPUT						
Output voltage	380 / 400 / 415Vac (±1%), (3Ph+N+PE)					
Output frequency	50 / 60Hz (±0.05%)					
Harmonic distortion (THDv)	≤1% (Linear load)					
Crest factor	3:1 (Max)					
Efficiency (up to)	92.5%	93%		93.5%		94%
BYPASS						
Rated voltage	380/400/415Vac, (3Ph+N+PE)					
Rated frequency	50/60Hz					
Voltage protection range	Upper limit: +20% (+10%, +15%, +20% adjustable) Lower limit: -40% (-10%, -20%, -30%, -40% adjustable)					
Frequency protection range	±10% (±2.5%, ±5%, ±10%, ±20% adjustable)					
BATTERY						
Battery voltage	384Vdc (360～408Vdc)			480Vdc		600Vdc
SYSTEM FEATURES						
Transfer time	0 ms (Line mode → Battery mode)					
Overload	Load≤110%/60min; ≤125%/10mins; ≤150%/1 min, to Bypass					
LED display	Input, Inverter, Bypass, Battery, Output, Status					
LCD display	Real-time status, load/battery, alarms, history					
Communication interface	RS232, RS485, EPO, Dry contact, SNMP card (Optional)					
Optional	Harmonic filter, SNMP adapter, LBS cables, battery temperature sensor, Bypass current-sharing inductor					
ENVIRONMENTAL						
Operating temperature	0~40°C					
Storage temperature	-25~55°C					
Humidity range	0～95% (Non-condensing)					
Altitude	<1500m					
Noise level	<72dB			<75dB		
PHYSICAL						
Dimension W×D×H (mm)	1200×800×1600 (6P) 1400×1000×1900 (12P)	1400×1000×1900 (6P) 1640×1000×1900 (12P)		2580×1000×1900	2800×1040×1900	3280×1040×1900
Net weight (kg)	1030 (6P)/1715 (12P)	1560 (6P)/2395 (12P)	1640 (6P)/2510 (12P)	3510	3950	4950
Shipping weight (kg)	1130 (6P)/1845 (12P)	1690 (6P)/2545 (12P)	1770 (6P)/2665 (12P)	3730	4250	5245
STANDARDS						
Safety	IEC/EN 62040-1; IEC 62477-1					
EMC	IEC/EN 62040-2 (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, IEC 61000-2-2)					
Performance	IEC/EN 62040-3					

* With optional filter

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.

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