

UMTWR Series 3:1 ▶▶

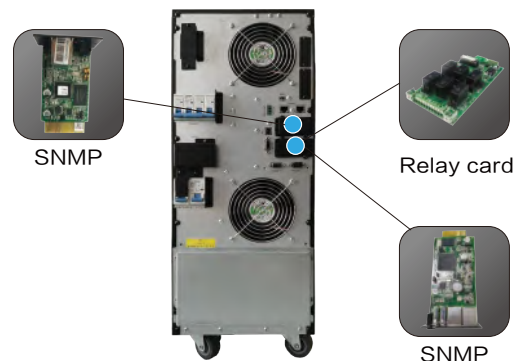
3:1 phase PF 0.9, support 3/1 and 1/1 operation

Power range: 10kVA ~ 20kVA



Features

- N+X parallel redundancy, support maximum 4 units in parallel
- Online double conversion with DSP control
- Optimization battery group, the quantity of battery: 16/18/20pcs (32~40pcs supportable)
- Wide input voltage range: 208~478Vac
- Wide input frequency range: 40Hz~70Hz
- Input current harmonic: < 3%
- Dual input source (Optional)
- Maximum charging current up to 18A (Settable)
- Support 3/1 and 1/1 operation
- Generator compatible
- ECO mode operation for energy saving
- Design with maintenance switch
- Cold start
- Intelligent fan speed regulation
- Self-testing when UPS startup
- 50/60Hz frequency converter mode
- Colorful 2.4 inch TFT LCD display and 7 inch LCD display LCD are optional
- Multiple protection function: short-circuit, overload, overheat, battery overcharge and overdischarge, output low voltage and fan fault alarm
- Multiple communication interface: RS232/RS485/USB/EPO /Dry contact port (Relay card/SNMP card/Parallel cable/Battery temperature sensor optional)



Technical Specifications:

MODEL	UM10000TWR31	UM15000TWR31	UM20000TWR31
Capacity	10kVA/10kW	15kVA/15kW	20kVA/20kW
INPUT			
Nominal voltage	380/400/415Vac (3PH+N+PE) 220/230/240Vac (L+N+PE)		
Operating voltage range	208 ~ 478Vac; 120 ~ 276Vac		
Operating frequency range	40 ~ 70Hz (50/60Hz Auto-Sensing)		
Power factor	≥0.99		
Harmonic distortion (THDi)	≤3% 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%, -20%, -30%)		
FREQUENCY			
Frequency protection range	50/60Hz ± 10%		
OUTPUT			
Output voltage	220/230/240Vac (L+N+PE)		
Voltage regulation	± 1%		
Power factor	1.0		
Output frequency	± 1%/ ± 2%/ ± 4%/ ± 5%/ ± 10% of the rated frequency (Optional) (50/60 ± 0.1%)Hz		
Transfer time	Line mode	0ms	
	Bat. mode	0ms	
Transfer time	AC mode to Bat.mode	0ms	
	Inverter to Bypass	0ms	
Output waveform	Pure Sinewave		
Crest factor	3:1		
Harmonic distortion (THDv)	≤2% Linear load ≤5% Non linear load		
Overload	AC mode	Load ≤ 110%: last 60min turn to bypass; ≤ 125%: last 10min turn to bypass; ≤ 150%: last 1min turn to bypass; ≥ 150%: shut down UPS immediately	
	Bat.mode	Load ≤ 110%: last 10min; ≤ 125%: last 1min; ≤ 150%: last 5s; ≥ 150%: shut down UPS immediately	
	Bypass mode	Breaker 2 × 32A	Breaker 2 × 50A
EFFICIENCY			
Efficiency	Up to 93.5%	Up to 94.5%	
BATTERY			
Battery voltage	Long run unit	± 96Vdc ~ ± 120Vdc (16 ~ 20pcs, 16pcs default, Standard unit and 20pcs no power derating; 18pcs output power factor 0.9; 16pcs output power factor 0.8)	
		± 192/204/216/228/240Vdc (32/34/36/38/40pcs supportable)	
Charging current	Long run unit	14A (Max.)	16A (Max.)
		Charging current can be set according to battery capacity	
PHYSICAL			
Dimension (W × D × H)	Long run unit	250 × 580 × 655mm	
Net weight	Long run unit	33kg	37kg
		38kg	
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	< 55dB at 1 Meter		< 58dB at 1 Meter
STANDARDS			
Safety	IEC/EN 62040-1, IEC/EN 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)		

1. Specifications are subject to change without prior notice

2. Data above are typical values for reference only, not as a basis for engineering design