

**GENERAL**

Rated power: 4kVA, 5kVA, 6kVA, 8kVA, 10kVA, 12kVA with a power factor of 0.7  
Technology: True on-line, double conversion topology with integral automatic bypass

**INPUT**

Phase: Single phase plus ground  
Input Bypass Voltage: 184 - 265 VAC (+15% to -20% of 230V nominal - user selectable)  
Input Voltage range: 120 / 140 / 160 / 180VAC - 276 VAC  
(120V - 276V @ 25% load, 140V - 276V @ 50% load, 160V - 276V @ 75% load, 180V - 276V @ 100% load)  
Frequency: 50 / 60 Hz Auto-sensing  
AC Frequency range: 45 - 65 Hz  
Synchronization range:  $\pm 3\text{H}$   
Input Current: 4kVA - 15A, 5kVA - 19A, 6kVA - 23A, 8kVA - 30A, 10kVA - 38A, 12kVA - 46A  
Input Power factor: 0.97

**OUTPUT**

Output Voltage: 208 / 220 / 230 / 240 VAC (user selectable)  
Voltage regulation:  $\pm 2\%$   
Voltage distortion: < 5% THD with non-linear loads, < 3% THD with linear loads  
Frequency regulation:  $\pm 0.25$  Hz (while on battery or in free run mode)  
Dynamic response:  $\pm 9\%$  max from 100% to 20% or from 20% to 100% linear load  
Overload capacity: 100 - 125% for 1 min, 126 - 150% for 10 sec  
Efficiency (HE Mode): Greater than  
95% Efficiency (On-line Mode): Greater than 88%  
Crest Factor: 3 : 1

**ENVIRONMENTAL**

Ambient temperature range: +32 °F to +104°F (+0 °C to +40 °C)  
Optimum temperature range: +59 °F to +77°F (+15 °C to +25 °C)  
Storage temperature: +5 °F to +122°F (-15 °C to +50 °C)  
Cooling: Forced air cooling  
Humidity: 0-95%, non-condensing  
Elevation: 10,000 feet max (operation), 45,000 feet (storage)  
Audible noise: < 55 db normal and battery mode (4000-8000 VA models)  
< 55 db normal and battery mode (10000-12000 VA models)

**STANDARDS**

Safety: EN50091-1-1  
Emissions: EN50091-2 class B  
Immunity: EN50091-2  
Conformity: UL 1778, CSA 107.1, 107.2, CE (Model Dependent)  
Transient Immunity: Per IEEE C 61000 4-5 level 3

**Tower Models without Output Isolation (ISO) Transformer**

Model Number	VTWE-4000-02	VTWE-5000-02	VTWE-6000-02	VTWE-8000-02	VTWE-10000-02	VTWE-12000-02
<b>Capacity</b>	4kVA / 2.8kW	5kVA / 3.5kW	6kVA / 4.2kW	8kVA / 5.6kW	10kVA / 7kW	12kVA / 8.4kW
<b>Input Connection</b>	Hardwire Terminal Block or Fixed Input Power Cord		Hardwire Terminal Block			
<b>Output Connection Options</b>	IEC 320 10A and 16A IEC and NEMA L6-30R IEC and Shuko (European)		Hardwire Terminal Block and/or various IEC Receptacles (optional) Hardwire Terminal Block and/or various NEMA Receptacles (optional)			
<b>Battery Type &amp; Rating</b>	Sealed, lead-acid 7.2Ah/12V	Sealed, lead-acid 9Ah/12V	Sealed, lead-acid 7.2Ah/12V	Sealed, lead-acid 7.2Ah/12V	Sealed, lead-acid 9Ah/12V	Sealed, lead-acid 7.2Ah/12V
<b>Battery Quantity</b>	10	10	20	20	20	40
<b>Backup Time (full load)</b>	6 min	6 min	7 min	5 min	6 min	5 min
<b>Recharge Time</b>	<4 hours to 90 %					
<b>Dimensions in / mm W x D x H</b>	10.1 x 21.1 x 17.3 257 x 537 x 440		10.2 x 23.2 x 22.4 257 x 590x 570	10.1x 27.2 x 28.2 257 x 690 x 715		13.5 x 27 x 35.6 342 x 687 x 905
<b>Weight lbs. / kg</b>	95 / 43		190/ 86	247 / 112		419 / 190

**Tower Models with Output Isolation (ISO) Transformer**

Model Number	VTWE-6000-21	VTWE-8000-21	VTWE-10000-21	VTWE-12000-21
<b>Capacity</b>	6kVA   4.2kW	8kVA   5.6kW	10kVA   7kW	12kVA   8.4kW
<b>Input Connection</b>	Hardwire Terminal Block or Fixed Input Power Cord		Hardwire Terminal Block	
<b>Output Connection Options</b>	Hardwire Terminal Block (standard) and/or various IEC Receptacles (optional) Hardwire Terminal Block (standard) and/or various NEMA Receptacles (optional)			
<b>Battery Type &amp; Rating</b>	Sealed, lead-acid 7.2Ah/12V	Sealed, lead-acid 7.2Ah/12V	Sealed, lead-acid 9Ah/12V	Sealed, lead-acid 7.2Ah/12V
<b>Battery Quantity</b>	20	20	20	20 x 2SET
<b>Backup Time (full load)</b>	6 min	6 min	7 min	5 min
<b>Recharge Time</b>	<4 hours to 90 %			
<b>Dimensions in / mm W x D x H</b>	10.1 x 23.2 x 27.6 257 x 590 x 700	13.4 x 27.2 x 28.1 342 x 690 x 715	13.4 x 27.2 x 28.1 342 x 690 x 715	13.5 x 34.0 x 35.6 342 x 863 x 905
<b>Weight lbs. / kg</b>	270.6 / 123	286 / 130	286 / 130	396 / 180

**19" Rack Mount Models**

Model Number	VRTE-4000-02	VRTE-5000-02	VRTE-6000-02	VRTE-8000-02	VRTE-10000-02
Capacity	4kVA / 2.8kW	5kVA / 3.5kW	6kVA / 4.2kW	8kVA / 5.6kW	10kVA / 7kW
Input Connection	Hardwire Terminal Block				
Output Connection Options	Hardwire Terminal Block (standard) and/or various IEC Receptacles (optional) Hardwire Terminal Block (standard) and/or various NEMA Receptacles (optional)				
Battery Type & Rating	Sealed, lead-acid 5Ah/12V	Sealed, lead-acid 5Ah/12V	No Internal Batteries  External Battery Pack (EBP) Required		
Battery Quantity	10*	10*			
Backup Time (full load)	4 min	3 min			
Recharge Time	<4 hours to 90 %				
Dimensions in / mm W x D x H	16.9 x 25.9 x 5.1 428 x 657 x 130		UPS ONLY 16.9 x 23.6 x 5.1 428 x 597 x 130	UPS ONLY 16.9 x 25.9 x 5.1 428 x 657 x 130	
Weight lbs. / kg	88 / 40		UPS ONLY 44.1 / 20	UPS ONLY 53.6 / 24.3	

\*4kVA and 5kVA models have internal batteries.

\*\*6kVA, 8kVA, 10kVA and 12kVA models have external batteries.