

Model		VNVH 10	VNVH 20	VNVH 30
CAPACITY*		10 KVA/10 KW	20 KVA/20 KW	30 KVA/30 KW
Input				
Voltage Range	Low Line Loss	110 VAC(Ph-N) \pm 3 % at 50% Load 176 VAC(Ph-N) \pm 3 % at 100% Load		
	High Line Loss	300 VAC(L-N) \pm 3 % at 50% Load 276 VAC(L-N) \pm 3 % at 100% Load		
Frequency Range		46Hz ~ 54 Hz nel sistema 50Hz 56Hz ~ 64 Hz nel sistema 60Hz		
Phase		3 Phase with Neutral		
Power Factor		\geq 0.99 at 100% Load		
Output				
Phase		3 Phase with Neutral		
Output voltage		360/380/400/415VAC (Ph-Ph) - 208*/220/230/240VAC (Ph-N)		
AC Voltage Regulation		\pm 1%		
Frequency Range (Synchronized Range)		46Hz ~ 54 Hz @ 50Hz system - 56Hz ~ 64 Hz @ 60Hz system		
Frequency Range (Batt. Mode)		50 Hz \pm 0.1 Hz or 60Hz \pm 0.1 Hz		
Overload	AC mode	100%~110%: 60min; 110%~125%: 10min; 125%~150%:1min;>150% : immediately		
	Battery mode	100%~110%: 60min; 110%~125%: 10min; 125%~150%:1min;>150% : immediately		
Current Crest Ratio		3:1 max		
Harmonic Distortion		\leq 2% al 100% di carico lineare \leq 5% al 100% del carico non lineare		
Transfer Time	Line \leftrightarrow Battery	0 ms		
	Inverter \leftrightarrow Bypass	0 ms (When phase lock fails, <4ms interruption occurs from inverter to bypass)		
	Inverter \leftrightarrow Eco	<10 ms		
Topology		multilevel		
Efficiency				
AC mode		96,5%		
Battery Mode		95,5%		
Battery				
Standard Model	Type	12 V/7 Ah	12 V/9 Ah	12 V/7 Ah
	Numbers	(10+10) pcs	(16+16) pcs x 2 strings	
	Recharge Time	9 hours recover to 90% capacity		
	Charging current(max.)	2.0 A \pm 10% (Recommended) 1.0~12.0A (Adjustable)		
	Charging voltage	+/-136,5 V CC \pm 1%	+/-218 V CC \pm 1%	
Long-run Model	Type	Depending on applications		
	Numbers	20	32 ~ 40 (adjustable)	
	Charging current(max.)	1,0~12,0A \pm 10% (adjustable)		
	Charging voltage	+/- 13,65 V CC * N \pm 1% (N = 16~20)		
Physical				
Standard Model	Dimension, D x W x H (mm)	175	185	245
	Net Weight (kgs)	124/126	139/141	225/230
Long-run Model	Dimension, D x W x H (mm)	175	185	245
	Net Weight (kgs)	28/30	43/45	60/65
Environment				
Operation Temperature		0 ~ 40°C (the battery life will down when > 25°C)		
Operation Humidity		<95 % and non-condensing		
Operation Altitude**		<1000 m**		
Acoustic Noise Level		Less than 55dB @ 1 Meter	Less than 58dB @ 1 Meter	Less than 65dB @ 1 Meter
Management				
Smart RS-232 or USB		Supports Windows@ 2000/2003/XP/Vista/2008/7/8/10, Linux, Unix, and MAC		
Optional SNMP		Power management from SNMP manager and web browser		

* Derate capacity to 90% when the output voltage is adjusted to 208VAC.

** If the UPS is installed or used in a place where the altitude is above than 1000m, the output power must be derated 1% per 100m.

***Product specifications are subject to change without further notice.