

NETWORK

VARNA RACK SERIES

On-line UPS double conversion high frequency from 1 to 10 kVA

Description

The Varna Rack series, available in either Rack or Tower, include active input PFC rectifier (Power Factor Corrector) and make use of the advantages of PWM technology with IGBTs to obtain equipment with high technical features. They resolve mains electricity problems without resorting to the use of the battery in most cases, thereby increasing its service life. They are ideal for supplying critical systems of up to 10kVA that require a high reliability and quality supply with low operating and maintenance costs.

Data is provided locally through mimic panel with LEDs and LCD display. The communications interface, together with its powerful software, allow users to monitor the status of the unit and provides information on its environment.



Varna Rack Series 1-3kVA



Varna Rack Series 6kVA



Varna Rack Series 10kVA

Features

- > On-line UPS double conversion
- > Output power factor 0.8 (0.9 optional)
- > 19" rack-mounting / tower design
- > Microprocessor digital control technology
- > Power: 1, 2, 3, 6 and 10 kVA
- > Visual alarms (led and display) and audible in the case of mains failure
- > Easy-shift LCD display with information about status of UPS
- > Wide input voltage range
- > Battery mode start up without mains line
- > Protections against overloads, shortcircuit and low battery voltage
- > Battery test function
- > Re-start function
- > RS232 / USB + software included for software monitoring
- > Cables also included: 2 (1kVA) or 3 (2-3kVA) IEC for peripheral systems
- > Extended battery options available (long backup time models)
- > Programmable shutdown
- > High input power factor ≥ 0.99
- > SNMP and Dry contact cards optional
- > 1 year warranty batteries included: 1, 2 and 3 kVA models

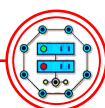
Applications



Domestic Use



Data Center



Network & Server



Industrial controls & Process Automation



Medical Equipment



Building Automation



Elevator & Escalator

GENERAL SPECIFICATIONS

Model	Varna Rack 1	Varna Rack 2	Varna Rack 3	Varna Rack 6	Varna Rack 10
Power kVA	1	2	3	6	10

GENERAL

Technology	Online, double conversion, high frequency				
Overload	105~110% up to 10 min, 110~130% up to 1 min			100~110% up to 30 min, 110~130% up to 5 min	

INPUT

Voltage	155~300 Vac			176~300 Vac	
Frequency	40~70 Hz			46~64 Hz	
Power factor	≥0.8 (0.9 optional)				

OUTPUT

Power (kVA/kW)	1/0.8	2/1.6	3/2.4	6/4.8	10/8
Voltage	230Vac ±1%				
Output frequency	50 Hz ±0.25			50 Hz±0.1	
Outputs	6 IEC		6 IEC and terminals		Terminals
Type of wave	Pure sinewave				
Harmonic distortion	THD < 3% (linear load)				
Crest factor	3:1				

EFFICIENCY

AC Mode	88%	89%	90%	92%	93%
DC Mode	83%	87%	88%	90%	91%

BATTERY

Standard Model	Battery Type	12V / 9Ah		12V / 9Ah		12V / 9Ah		12V / 7Ah/9Ah			
	Numbers	2		4		6		16	20	16	20
	Typical Recharge Time	4 hours recover to 90% capacity						9 hours recover to 90% capacity			
	Charging Current (max.)	1.A						1A/2A (adjustable)			
Long-run Model	Battery Type	Sealed lead acid						VRLA Type			
	Numbers	2	3	4	6	8	6	8	16 ~ 20 (Adjustable)		
	Charging Current (max.)	1A/2A/4A/6A (Adjustable)						1A/2A/4A/6A (Adjustable, 6A is only available for 16pcs batteries)			

INDICATORS

Lcd	Load level, Battery level, AC mode, Battery mode, Bypass mode and Fault indicators
Acoustics	Battery mode, low battery, overload, fault, bypass mode

COMMUNICATIONS

Control software	View power
Communications	RS232 and USB
Indicators	Automatic shutdown of applications, input/output voltage and frequency, load status, battery capacity, temperature, historic events, system analysis
SNMP card	Optional

PROTECTION

Protection	Low battery, current limitation, overload, short-circuit, temperature and output over/low voltage
Automatic bypass	Yes
RFI filter	Yes
PFC : Power factor corrector	Yes

STANDARDS

Marks	CE
Directives	EN 62040-1, EN 62040-2 (EMC)

OTHERS

Operation temperature	0-40°C				
Relative humidity	20-90% non-condensing			0-95% non-condensing	
Altitude without decreasing power	1000 meters over sea level				
Acoustic level	<50dBA			<55dBA	<58dBA
Dimension ** WxDxH (mm)	438x310x88	438x410x88	438x630x88	438x530x88	438x580x133
Dimensions U	2U			2U+3U	3U+3U
Weight ** (Kgs)	12	19	29.3	15	18

** Indicated dimension and weigh for UPS models with internal batteries (10 minutes of autonomy).

Rest of models and backup times with external battery module, consult weights and dimensions.

** Specifications may be changed without notice.