

NETWORK

VARNA+ SERIES

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

Description

The Varna+ UPS series 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+ Series

Features

- > On-line UPS double conversion
- > Output power factor 1
- > 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
- > LCD display with information about status of UPS
- > Wide input voltage range
- > Battery mode start up without mains line
- > Protections against overloads, short-circuit and low battery voltage
- > Battery test function
- > Re-start function
- > RS232/USB + software included for software monitoring
- > Extended battery options available 2-10kVA (1kVA long time model)
- > Programmable shut-down
- > High input power factor ≥ 0.99
- > SNMP and Dry contact cards optional

Applications



Domestic Use



Small Data Center



Network & Server



Industrial controls & Process Automation



Medical Equipment



Building Automation



Elevator & Escalator

GENERAL SPECIFICATIONS

Model	Varna+ 1000	Varna+ 2000	Varna+ 3000	Varna+ 6000	Varna+ 10000
Power kVA	1	2	3	6	10

GENERAL

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

INPUT

Voltage	110~300 Vac				
Frequency	40~70 Hz				
Power factor	≥0.99				

OUTPUT

Power (kVA/kW)	1/1	2/2	3/3	6/6	10/10
Voltage	208/220/230/240Vac ±1%				
Output frequency	50 Hz±0.1				
Power factor	≥1				
Outputs	IEC / 3 pin universal type			IEC / 3 pin universal and terminals	Terminals
Type of wave	Pure sinewave				
Harmonic distortion	THD < 1% (linear load)			THD < 2% (linear load)	
Crest factor	3:1				

EFFICIENCY

AC Mode	94.5%	95.5%	95.5%	95.5%	95.5%
DC Mode	89.5%	91.5%	91.5%	95.3%	95.3%

BATTERY

Standard Model	Battery Type	12V 9Ah	12V 7Ah	12V 9Ah	12V 7Ah	12V 7Ah	12V 7Ah	12V 7Ah	
	Numbers	2	3	4	6	8	16	20	20
	Typical Recharge Time	4 hours recover to 90% capacity					9 hours recover to 90% capacity		
	Charging Current (max.)	1A (Default) 1-4A (Adjustable)				1A (Default) 1-12A (Adjustable)		1A/2A (Default) 1-12A (Adjustable)	
Long-run Model	Battery Type	Sealed lead acid VRLA battery							
	Numbers	2	3	4	6	8	6	8	16-18-20 (Adjustable)
	Charging Current (max.)	1-12A (Adjustable)							

INDICATORS

LCD display	Load level, battery level, input/output voltage and frequency, operating mode and fault or warning indicator
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	EN61000, EN 62040-1, EN 62040-2 (EMC)

OTHERS

Operation temperature	0-40°C				
Relative humidity	0-95% (non-condensing)				
Altitude without decreasing power	1000 meters over sea level				
Acoustic level	<50dBA			<55dBA	<58dBA
Dimension WxDxH (mm)	S:285x145x225 L:285x145x225	S:397x190x325 L:397x145x225	S:397x190x325 L:397x145x225	S:460x190x620 L:397x190x325	S:460x190x620 L:397x190x325
Weight (Kg)	8.5/4.5	18/6	21.5/6.5	58/8.8	60.5/9.6

** 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.