

## NBK

### True On-line Double Conversion UPS

#### High Reliability Design

- Wide input range, 176 - 264 Vac
- Wide input frequency range, available for all types of generator
- Built-in output isolation transformer
- Pure sine wave output

#### Comprehensive and Reliable Protection

- Built-in static electronic bypass switch
- EMI/RFI and power line noise protection
- Surge, spike, blackout, brownout, overload, short circuit and over temperature protection
- Battery under voltage, over voltage protection
- Zero time transfer full static switch
- Built-in sealed lead acid (maintenance free) battery
- Self-testing function before start-up
- DC start function and AC start without battery function
- Extended backup time with battery extension pack

#### Communication Interface

- RS-232 serial interface port for UPS monitoring and management software
- RS-485 port (option)
- Dry contact port (option)
- SNMP/HTTP capability (option)



NBK-2K  
NBK-4000

NBK-6K

NBK-10K



True On-line Double Conversion Sine Wave UPS



## NBK-series True On-line Double Conversion Sine Wave UPS

### SPECIFICATIONS

MODEL		NBK-2K		NBK-4000	NBK-6K	NBK-10K
CAPACITY	Pf = 0.8	2 kVA/1.6 kW		4 kVA/2.4 kW	6 kVA/4.8 kW	10 kVA/8.0 kW
INPUT	Voltage	220, 230 Vac single phase				
	Voltage range	176 - 264 Vac				
	Frequency	50 / 60 Hz ± 5%				
	Power factor	> 0.97*				
OUTPUT	Voltage	220 Vac ± 1%				
	Frequency	50 / 60 Hz ± 0.5%				
	Wave form	Pure sine wave (sinusoidal)				
	Total Harmonic distortion	Less than 3% at full linear load				
	Overload capability	> 125% for 1 min, ≤ 150% for 200 ms to bypass				
	Crest factor ratio	3 : 1				
	Protection	Low battery voltage shutdown, Overload, Over temperature, short circuit, Noise				
	EFFICIENCY	AC to AC (at full load)	85%			
BATTERY	Type	Sealed lead acid (maintenance free) rechargeable				
	Voltage	48 Vdc			192 Vdc	
	Amount x Capacity	(4 x 2 string) x 9Ah	(4 x 2 string) x 9Ah	16 x 9 Ah		-
	Backup time	Depending on connected loads				
	Continuous recharging time	8 - 10 hours to 90% after full load discharge				
	Management	End of life indicator and alarm				
TRANSFER TIME	Mains fail or recover	Zero time (True on-line UPS)				
	UPS to bypass or vice versa	Zero time				
	Auto reverse	After overload return to normal				
MANUAL CONTROLS	Maintenance bypass switch	optional				
INDICATOR	LED	Input, Battery, Output, Bypass, Fault				
	LCD display	Input (voltage / frequency), Output (voltage / frequency), Load power (%), Battery voltage, Temperature				
AUDIBLE ALARM	Buzzer	Mains failure, low battery, replace battery, overload, UPS abnormal				
FEATURES	Low battery shutdown	yes				
	Over temperature	automatic transfer to bypass mode				
	Output short circuit	Limit current and automatic shutdown				
	UPS abnormal	automatic transfer to bypass mode				
	Manual self-test	yes				
	DC start	yes			yes	
	AC start without battery	yes			yes	
CONNECTION	Main input	Terminal block with circuit breaker and TIS-166 power cord			Terminal block with circuit breaker	
	Output	4 Outlets	Terminal block		Terminal block	
COMMUNICATION INTERFACE	RS-232 port	Serial interface port can be connected to PC, workstations or servers for automatic unattended shutdown. using with the UPS monitoring and management software <sup>(1)</sup>				
	RS-485 port	optional				
	Dry contact	optional				
	SNMP/HTTP capability	optional				
ACOUSTIC NOISE	At 1 metre	< 58 dBA				
ENVIRONMENT	Temperature	0 - 40°C				
	Relative humidity	0 - 95% (non-condensing)				
DIMENSIONS (W x H x D)	UPS	23 x 70.5 x 62 cm				30.5 x 86.7 x 65 cm
	Battery extension pack (option)	Separate				
WEIGHT (Approximate in kg)	UPS (no battery)	60 kg	65 kg		62 kg	115 kg
	UPS include standard battery	82 kg	87 kg		106 kg	-
	Battery extension pack (option)	Depending on battery capacity				
CONFORMANCE	Safety	IEC/EN62040-1, 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, TIS-1291 Part 1-2553, TIS-1291 Part 2-2553, TIS-1291 Part 3-2555				

\* With optional Filter. Continuous product development is our commitment. In that manner, the above specifications may be changed without prior notice.

<sup>(1)</sup> IUPS monitoring and management software capable to work with these OS below.

- Windows 98 / Me / 2000 / 2003 / XP / Vista
- Windows 7 / 10
- MS DOS
- Novell Netware v3.1x / 4.x / 5.x
- Free BSD 4.x
- Linux

Authorized Distributor

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