

NS SERIES

uninterruptible power supply

1kVA to 6kVA

NS SERIES

single phase on-line ups - 1kVA to 6kVA



The evergreen NS Series UPS just gets better, its even outstripped sales of our previous world-beating S Series UPS. And with tens of thousands of NS units sold we're still surprised at the varied applications and environments it's used in, from Oil Rigs and Hospital Theatres to Epos Systems and Railways.

But we're not surprised why the NS Series is constantly being chosen. The robust and ultra reliable NS Series brings high-end features and manageability to a new level, at a price that's hard to beat.

Although the NS Series is built to perform the critical task of protecting your vital equipment, the design avoids unnecessary complications.



A simple, clear visual display gives an immediate indication of system status. The manual interface simply consists of two buttons: one to initiate a self-test routine, the other to toggle between on-line and bypass modes. Just connect your devices requiring protection, plug in the power lead and get on with your work!

ENVIRONMENTALLY FRIENDLY

When configured to run in 'green' mode, the NS Series switches to bypass when no load is present, but immediately switches back to double conversion when the load returns. This feature offers more economical operation where supply is more reliable without compromising protection to the load.

INTEGRATED SMARTCARD SLOT

Of course, because this is an AEC product, the NS Series is also highly configurable, with a full range of control and management functions easily accessible. A key feature is the inclusion of a

smartcard slot in every model. This allows the user to take advantage of a growing range of add-on cards providing facilities such as SNMP, remote web browser-based management, along with optocoupler and relay cards.



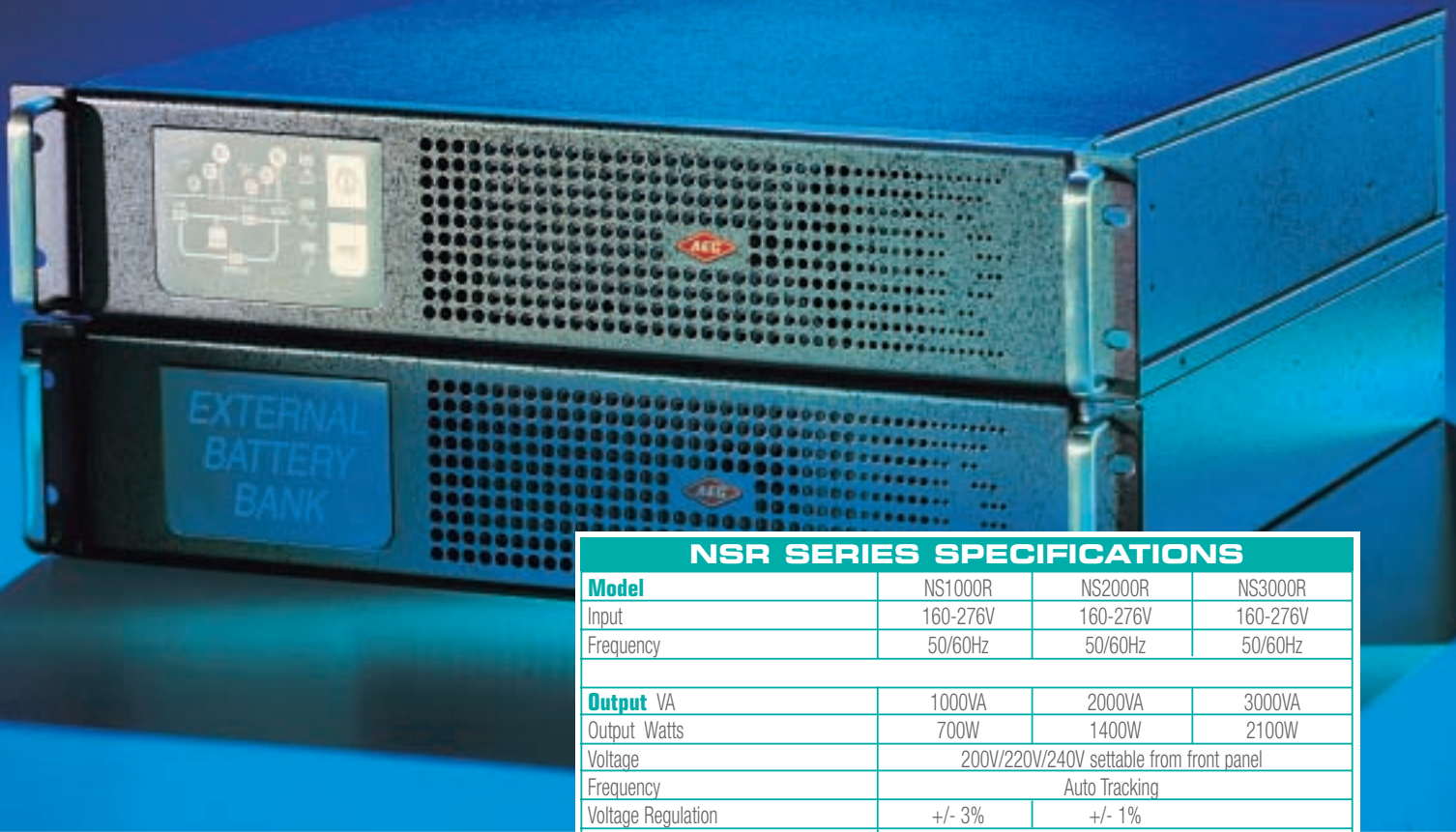
NS SERIES key features

- TRUE ON-LINE DOUBLE CONVERSION TECHNOLOGY FOR HIGH LEVEL OF PROTECTION.
- INTEGRATED SMARTCARD SLOT PROVIDING A CHOICE OF COMMUNICATIONS INTERFACES.
- RS232 AS STANDARD.
- OPTIONAL SPECIALISED UPS MANAGEMENT SOFTWARE.
- 'GREEN' MODE FUNCTION.
- FAILSAFE INTERNAL BYPASS SWITCH WITH MANUAL CONTROL.
- ADVANCED MICROPROCESSOR CONTROL.
- EASY TO READ VISUAL DISPLAY.
- FAST RECHARGE.
- SMALL FOOTPRINT.

Our
knowledge
is your
Power

NSR SERIES

rack mount on-line ups - 1kVA to 6kVA



With high demands on floor space in comms rooms and many other applications, Managers are turning to rack space to mount their UPS'. Available in low profile 19-inch rack mount format, the NSR Series Rack Mount UPS is designed to fulfil these needs.

With exactly the same key features as the free-standing NS Series the NSR Series also has matching 2U battery modules to give extended autonomy enhancing its flexibility even further.

Available in 1, 2 or 3kVA, and all still only 2U high. The NSR 1kVA can also be configured with internal batteries saving even more space.

"We're not surprised why the NS Series is constantly being chosen, its build quality and features are unsurpassed at this price level"

NSR SERIES SPECIFICATIONS

Model	NS1000R	NS2000R	NS3000R
Input	160-276V	160-276V	160-276V
Frequency	50/60Hz	50/60Hz	50/60Hz
Output VA	1000VA	2000VA	3000VA
Output Watts	700W	1400W	2100W
Voltage	200V/220V/240V settable from front panel		
Frequency	Auto Tracking		
Voltage Regulation	+/- 3%	+/- 1%	
Frequency Stability	+/- 0.3%		
Transient Response	+/- 5% 100% step-load		
Distortion (THD)	+/-3%	2.5% @ linear load	
Overload Capacity	50Sec @105% immediate @ 150%	Sustaining at least 120 Secs at 100-110% load,111-150% max 2 mins derating on load immediate response at 150% load. Auto transfer to UPS when overloaded.	
Crest Ratio	> 3:1		
AC.AC Efficiency	>91%		
Audible Noise	<42 dBA Typical		
Battery			
DC Operating	36V	72V	96V
Average autonomy mixed load.	1 to 2hrs	1 to 2hrs	1 to 2hrs
Typical Recharge time	8 Hrs to 90%		
Indications			
Fault	Indicates fault condition		
Green	Green Mode On		
Boost	Booster working and checked on start up.		
Inverter	Inverter OK		
By Pass	Load being fed directly by mains.		
Load 25/50/75/100	Load Indicator		
Battery Full	LED		
Low Battery	LED		
Cut Battery	DC Voltage is approaching shut down voltage		
Audible Alarm	DC Mode, Low Battery, Voltage Error, Frequency Error, High Temperature, Over Load, Fault, PFC Overload.		
Green Mode			
Activated at:	20W	60W	90W
Interface	RS232 (Standard), SNMP (Optional) DB9 connector optional USB (Optional)		

Dimensions and weights vary depending on autonomy, please ask for further information.

UPS MANAGEMENT

power at your fingertips

Our specialised UPS management software gives you the power to monitor and control your UPS from remote locations.

UPS MANAGEMENT SOFTWARE

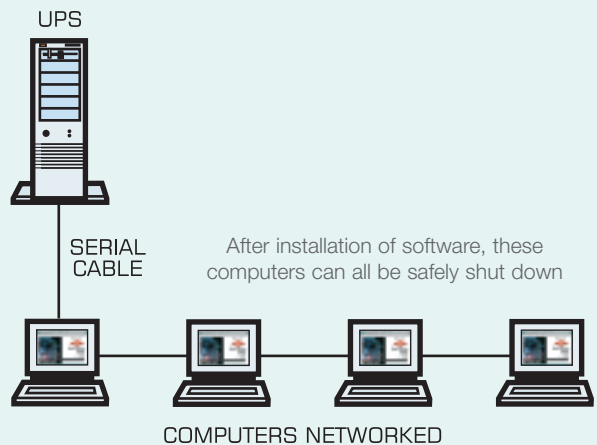
The UPS management software is installed on a server or workstation connected to each UPS via the serial port. Power failure, power restored, battery failure or eight events will be detected and the user informed. A shutdown will be initiated when the batteries are exhausted or a technical problem occurs with the UPS. The UPS management software disconnects network connections, logs out users and closes open applications (subject to app/os support) before shutting down the operating system itself.

Features:

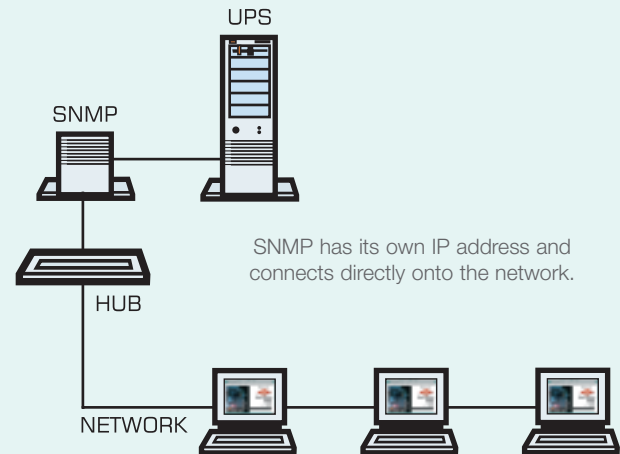
- Extensive log files
- Scheduled battery and inverter testing
- Scheduled system shutdown/restart
- User-customisable commands and messages
- Multiple UPS control from a single computer
- Remote Console Command module for remote multiple server shutdown
- Internal SNMP sub-agent for integration into existing NMS (e.g. HP OpenView, CA Unicenter)

UPS CONFIGURATIONS - AT A GLANCE

LOCAL MONITORING



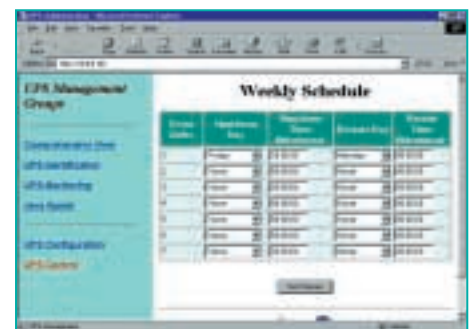
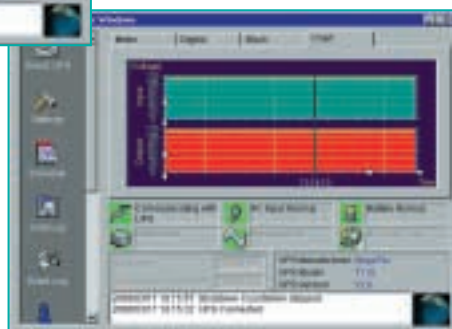
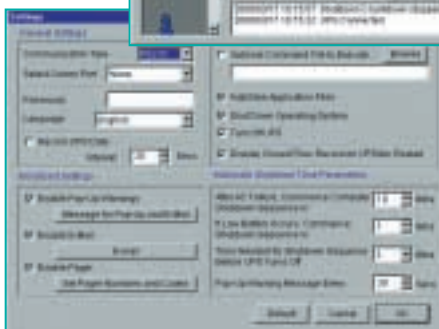
SIMPLE NETWORK MANAGEMENT PROTOCOL (SNMP)



SIMPLE NETWORK MANAGEMENT PROTOCOL (SNMP)

The NS SNMP external agent can be located up to 5 metres away from the UPS. Initial configuration is carried out by serial comms using any suitable terminal application (e.g. Hyperterminal for Windows).

The embedded HTTP server presents an HTML interface to the network, which can be accessed from any web browser. All system parameters can be configured from here, including scheduled shutdown. A sophisticated Java applet provides full monitoring in real time, along with comprehensive event and history logs.



NS SERIES SPECIFICATIONS

Model	S1000	NS1600	NS2400	NS3200	NS5000	NS6000
Input						
	160-276V	160-276V	160-276V	160-276V	170-272V	160-272V
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Output VA	1000VA	1600VA	2400VA	3200VA	5000VA	6000VA
Output Watts	700W	1120W	1680W	2240W	3500W	4200W
Voltage	200V/220V/240V settable from front panel (dip switch on 1kVA)				Dip Switch	Dip Switch
Frequency	Auto Tracking					
Voltage Regulation	+/- 3%	+/- 1%			+/- 3%	+/- 3%
Frequency Stability	+/- 0.3%					
Transient Response		+/- 5% 100% step-load			+/- 5% 100% step-load	
Distortion (THD)	+/-3%	2.5% @ linear load			+/13%	+/13%
Overload Capacity	50Sec @105% immediate @ 150%	Sustaining at least 120 Secs at 100-110% load,111-150% max 2 mins derating on load immediate response at 150% load. Auto transfer to UPS when overloaded.			50Sec @105% immediate @ 150%	
Crest Ratio	> 3:1					
AC.AC Efficiency	>91%					
Audible Noise	<42 dBA				<50dBA	<55dBA
Battery						
DC Operating	36V	48V	72V	96V	240V	240V
Typical Recharge time	8 Hrs to 90%					
Indications						
Fault	Indicates fault condition					
Charge	Indicates battery charger is OK (not available on 1,5 & 6kVA)					
PFC-OL	Indicates that input current too high due to low AV voltage.(not available on 1,5 & 6kVA)					
Green	Green Mode On					
Boost	Booster working and checked on start up.					
Inverter	Inverter OK					
By Pass	Load being fed directly by mains.					
Load 25/50/75/100	Load Indicator					
Battery Full	LED					
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Cut Battery	DC Voltage is approaching shut down voltage					
Audible Alarm	DC Mode, Low Battery,Voltage Error, Frequency Error, "High Temperature,Over Load, Fault, PFC Overload."					
Green Mode						
Activated at:	20W	30W	60W	90W	320W	360W
Interface	RS232 (Standard), SNMP (Optional) DB9 connector (Optional) USB (Optional)					

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