



# NS Series

## Single-Phase UPS 1-6 kVA

Premium power protection for "mission-critical" application.

The NS Series UPS is a family of high-density, performance for advanced backup power and power quality management for PCs, workstations, and servers. Featuring double conversion on-line technology, the NS series UPS protects your data by supplying reliable, network-grade power. With capacity up to 6kVA in a convenient tower form, small footprint, designed to be installed in an office or computer room. Customers looking for extremely tight voltage and frequency regulation, internal bypass, and input power factor correction will find them in the NS series UPS.



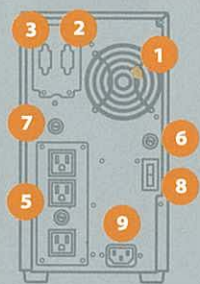
# NS Series

## Single-Phase UPS 1-6kVA

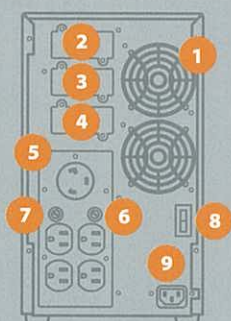
"Easy-to-install" for quality power management.



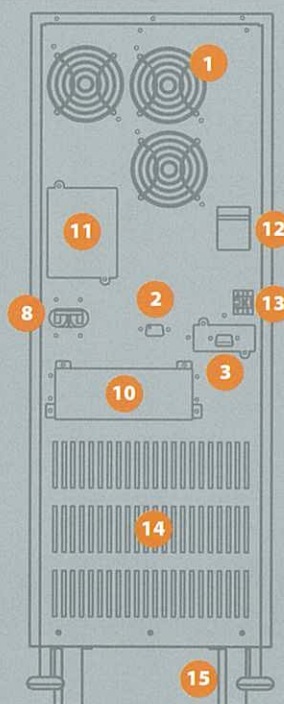
### Rear Panel



NS1500, NS1600



NS2200, NS2400,  
NS3000, NS3200



NS5000, NS6000

- |  |                         |           |
|--|-------------------------|-----------|
| 1 Fans   | 6 Input Fuse            | 13 EPO    |
| 2 Standard RS232 port  | 7 Output Fuse           | 14 Vent   |
| 3 Communication ports:<br>DB9, USB, AS400,<br>SNMP/HTTP (Option) | 8 Input Breaker         | 15 Wheels |
| 4 External Battery<br>Connectors                                 | 9 Inlet                 |           |
| 5 Outlets  | 10 Terminal Blocks      |           |
|  | 11 Manual Bypass Switch |           |
|  | 12 Battery Fuse Holder  |           |

## Features & Benefits

- **True On-Line Double Conversion**  
To ensure clean, no-break power for a wide range of mission-critical applications.
- **Advanced Microprocessor Control.**  
Power failure, power restored, battery failure or other events will be detected and the user informed. A shutdown will be initiated when the batteries are exhausted or a critical technical problem occurs with the UPS.
- **Manual Bypass Switch**  
Failsafe internal bypass switch with manual control to ease of maintenance.
- **Green Mode Function**  
The NS Series switches to bypass when no load is present, but immediately switches back to inverter when the load returns. This feature offers more economical operation when power supply is more reliable without compromising protection to the load.
- **Easy To Read Visual Display**  
A simple, clear visual display at the front of the unit gives an immediate indication of system status.
- **RS232 As Standard**  
The UPS management software is installed on a server or workstation connected to each UPS via the serial port.
- **Integrated Smartcard Slot Providing a Choice**  
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 USB, AS400, and DB9 cards.
- **Optional Specialized UPS Management Software**  
Highly manageable power protection for sensitive equipment. Retaining the legendary reliability of its predecessor, the NS series brings high-end features and manageability to even the smallest unit in the NS range.
- **Small Footprint**  
Compact tower, designed to be installed in an office or computer room, taking up very little valuable space in often cramped high resource areas.

## Applications

- Computers
- Network Servers
- Workstations
- Wireless Communications
- Other Electronic Peripherals

Other major UPS monitoring Software and SNMP/ HTTP Cards compatible with all NS Series UPS

- Internal or External Networking Card: Net Agent II or USHA PRO (SNMP, HTTP, PPP, TCP/IP, etc.)

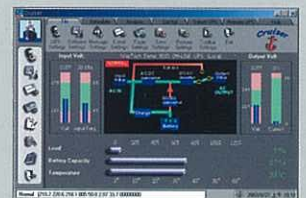


NetAgent II UPS Management		View	Remote Control	Config	Log
View	UPS Information				
UPS Model/ID	1000000000	1000000000	1000000000	1000000000	1000000000
Current Name	1000000000	1000000000	1000000000	1000000000	1000000000
Manufacturer	1000000000	1000000000	1000000000	1000000000	1000000000
Configuration	1000000000	1000000000	1000000000	1000000000	1000000000
Model	1000000000	1000000000	1000000000	1000000000	1000000000

- UPSilon via RS232



- Cruiser via RS232



- Rups via Contact Closure (DB9)



# NS Series

## Single-Phase UPS 1-6kVA

### Specifications

Model No.	S1000	NS1500	NS1600	NS2200	NS2400	NS3000	NS3200	NS5000	NS6000
Topology	True On - Line , Double Conversion								
On- battery Output Waveform	True Sine Wave								
Number of Phase	Single ( 1 $\phi$ 2W + G )								
<b>Input</b>									
Maximum Capacity ( VA/ W )	1000VA/ 700W	1500VA/ 1050W	1600VA/ 1120W	2200VA/ 1540W	2400VA/ 1680W	3000VA/ 2100W	3200VA/ 2240W	5000VA/ 3500W	6000VA/ 4200W
Input Voltage Range	80 138VAC 160 to 276 VAC	80 to 138 VAC	160 to 276 VAC	80 to 138 VAC	160 to 276 VAC	80 to 138 VAC	160 to 276 VAC	160 to 275 VAC	160 to 275 VAC
Nominal Input Frequency	50 / 60 Hz + / - 5 Hz								
Input PFC	> 0.98 @ full load								
Input Short Protection	Circuit Breaker								
<b>Output</b>									
Nominal Output Voltage	100/ 110/ 115/ 120 VAC or 200/ 208/ 220/ 230/ 240VAC	100/ 110/ 115/ 120 VAC	200/ 208/ 220/ 230/ 240VAC	100/ 110/ 115/ 120 VAC	200/ 208/ 220/ 230/ 240VAC	100/ 110/ 115/ 120 VAC	200/ 208/ 220/ 230/ 240VAC	100/ 110/ 115/ 120 VAC (With ISO.TX) or 200/ 208/ 220/ 230/ 240VAC	100/ 110/ 115/ 120 VAC (With ISO.TX) or 200/ 208/ 220/ 230/ 240VAC
Output Voltage Regulation	+ / - 3 %	+ / - 2 %						+ / - 2 %	
Output T.H.D	< 3 % @ Linear Load								
High Efficiency Mode (AC to AC)	> 83 %	> 87 %			> 90 %			> 89 %	
Crest Factor	3 : 1								
Start on Battery	Yes								
Output Frequency	50 / 60 Hz ( Autotracking )								
<b>Battery</b>									
Battery Type	Sealed Lead-Acid 12VDC 7Ah ; Maintenance Free								
Number of Battery Cells	3 x 12 VDC/ 7Ah	4 x 12 VDC/ 7Ah		6 x 12 VDC/ 7Ah		8 x 12 VDC/ 7Ah		16 x 12 VDC/ 7Ah	
Typical Backup Time ( Full/ Half load )	7/ 20 minutes	6/ 15 minutes						10/ 30 minutes	7/ 25 minutes
Recharge Time to 90%	8 hours								
<b>Advance Warning Diagnostics</b>									
Visual Indication	Fault, Line, Inverter, Load, Bypass, Green Mode, Battery Discharge/ Recharge Level, Boost/ DC Mode (All for S & NS series); Charger, PFC Overload (NS series only).								
Audible Alarms	DC Mode, Low Battery, Voltage Error, Frequency Error, High Temperature, Over Load, Fault (All for S & NS series); Charger, PFC Overload (NS series only).								
<b>Communication Interface</b>									
Communication Port	RS232 (Standard); DB9 or AS400 or USB or SNMP/ HTTP (Optional)								
SNMP Manageable	Yes								
<b>Environmental</b>									
Operating Temperature	0°C - 40°C ( 32°F - 104°F)								
Storage Temperature	- 15°C - 50°C ( 5°F - 122°F)								
Relative Humidity	0 % to 95 % non-condensing								
Audible Noise ( at 1 meter from surface of unit )	<= 45dBA								
<b>Mechanical</b>									
Dimensions ( W x D x H )	152 x 400 x 220mm (6.0" x 15.7" x 8.7")	150 x 450 x 265 mm ( 5.9" x 17.7" x 10.4" )		193 x 455 x 323 mm ( 7.6" x 17.9" x 12.7" )		193 x 485 x 323 mm ( 7.6 x 19.1 x 12.7 in )		263 x 630 x 520 mm ( 10.4" x 24.8" x 20.5" ) (w/o ISO.TX.) / 263 x 630 x 755 mm ( 10.4" x 24.8" x 29.7" ) (with ISO.TX.)	
Weight-with Battery ISO. TX.	N/A								
Weight-with Battery w/o ISO. TX.	15 kg ( 33.0 lb )	19 kg ( 41.9 lb )		30.5 kg ( 67.2 lb )		38 kg ( 83.7 lb )		117 kg ( 257.7 lb )	
Weight w/o Battery w/o ISO. TX..	7.5 kg ( 16.5 lb )	9.5 kg ( 20.9 lb )		15.5 kg ( 34.1 lb )		18 kg ( 39.6 lb )		74 kg ( 163.0 lb )	

\* Specifications subject to change without notice.

