

# NS4000 SERIES

Ethernet-based SHDSL DSLAM

Ethernet-based SHDSL DSLAM

## NS4012G:12ports

## NS4024G:24ports



NexComm System's NS4000 Series is a Ethernet-based SHDSL DSLAM that delivers symmetric data rate up to 4.6 Mbps using two copper pairs and 2.3 Mbps using a single copper pair. It is easy to install, and in a single Rack Unit (1U) compact form factor.

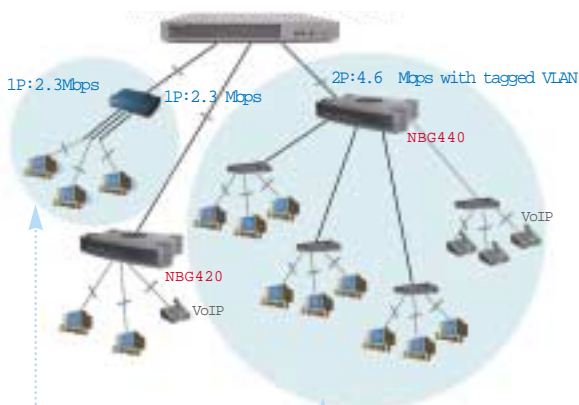
The NS4000 Series is designed to provide Symmetric DSL Access Solutions for Service Providers. Although the device takes up only a small space in a Central Office, it enables Service Providers to offer highly concentrative Business DSL service.

The NS4000 Series provides broadband access solutions to deliver VoIP, Video Conferences and Data Communications over a single or multiple copper pairs. The NS4000 Series offers Ethernet-based SHDSL leased line service with guaranteed bandwidth, QoS, security, manageability by and of Tag-based VLAN with guaranteed bandwidth is the absolute advantage of NS4000 Series.

### Product Line

- f NS4012G\_AC: 12 ports SHDSL DSLAM with AC Power supply
- f NS4012G\_DC: 12 ports SHDSL DSLAM with DC Power supply
- f NS4024G\_AC: 24 ports SHDSL DSLAM with AC Power supply
- f NS4024G\_DC: 24 ports SHDSL DSLAM with DC Power supply

### ☞ Prioritized Service with NS4000 Series



- f Limited expansion in LAN
- f Neither QoS nor VLAN

- f More flexible expansion in LAN
- f Full support of QoS & tagged VLAN
- f IP multicasting & IP filtering

### Ethernet Switch based Architecture

- f Performance benefit: Providing 20% greater IP throughput eliminating Packet conversion overhead between ATM and IP.
- f Maximizing full bandwidth with wire-speed and non-blocking performance

### QoS features

- f Fully complying with IEEE 802.1P/Q
- f Highly sophisticated Forward Scheduling based on 802.1P tag (4levels), Diff-Serv (Layer 3), Discarding (WRED), TCP/UDP logical port
- f Traffic controllability to meet QoS demand on advanced services such as Voice over IP (VoIP) and video conferencing

### Security Features by IEEE 802.1Q

- f Fully complying with IEEE 802.1P /Q
- f Supporting 255 concurrent VLANs
- f Suitable for Metro Ethernet Service provisioning

### Advanced Remote CPE Management Protocol(RCMP)

- f Remote Operation, Administration, Management, and Provisioning without IP address
- f Once NBG400 Series are connected to NS4000 Series, NBG400 Series can be managed and monitored remotely
- f Capability to download and restore the latest configuration of NBG400 Series from NS4000 Series by utilizing RCMP
- f Easy firmware upgrade by RCMP
- f Leading to save Operating Expenditure (OPEX) by eliminating truck roll

### Interoperable Nexpeed CPE family

- f Single copper-pair connectivity with 2.3Mbps
  - NBG420 2-Wire SHDSL Business Gateway
  - NM220G SHDSL Modem
- f Two copper-pair connectivity with 4.6Mbps
  - NBG440 4-Wire SHDSL Business Gateway

# NS4000 SERIES

Ethernet-based SHDSL DSLAM

## Specification

### POWER REQUIREMENT

100 ~ 240VAC, 50 ~ 60Hz (Default)  
-48VDC (Optional)

### MECHANICAL

Dimension 432mm(W) x 361mm(D) x 44mm(H)  
Weight 5.50 Kg  
Mount 19" Rack Mountable(1U) or desktop

### ENVIRONMENT

Operating Temperature 0°C to 50°C  
Storage Temperature -20°C to 70°C  
Humidity 5%~95%, non-condensing

### LINE INTERFACE

Uplink Dual 10/100M Ethernet  
RJ-45 connector (MDI/MDI-X)  
SHDSL Compliant to ITU-T G.991.2 Annex B  
12 ports (NS4012G)  
24 ports (NS4024G)  
RJ-21 connector (Telco 50 pin connector)  
200Kbps~2320Kbps at 64Kbps step  
384Kbps~4608Kbps at 128Kbps step  
(4 wire mode)

### CONSOLE

RS-232C  
DB-9 connector

### DIAGNOSTIC LED

Power On/Off  
Line SYNC: On/Off  
ACT: Light flashing (Tx / Rx)  
Uplink/Mgmt Right Light on: 100M Ethernet  
Right Light off: 10M Ethernet  
Left Light on: Link on  
Left Light flashing: Tx/ Rx

### BRIDGING

32K MAC addresses  
MAC address filtering  
MAC address limiting  
Flooding control  
Spanning Tree Protocol (802.1d)\*  
Rapid Spanning Tree Protocol (802.1w)\*  
Per VLAN Spanning Tree (PVST)\*

### VLAN

Port-based VLAN  
IEEE 802.1Q Tag-based VLAN  
No. of IEEE 802.1Q tag-based VLAN: 255  
GVRP\*

### QoS

Traffic Classification based on :  
-Port based priority  
-VLAN priority field in VLAN tagged frame  
-DS/TOS field in IP packet  
-TCP/UDP logical ports  
4 priority queues with delay bounded, strict priority and WFQ service disciplines  
2 dropping precedence with WRED mechanism

### IP MULTICAST

Support IGMP snooping\*

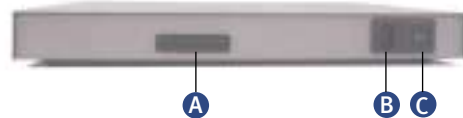
### MANAGEMENT

Local console  
SNMP v2  
Web-based manage  
Telnet  
Remote CPE Management Protocol (RCMP)  
-Remote Monitoring  
-Remote Configuration Download  
-Remote Firmware Upgrade

### MIB

RFC 1213 MIB II  
RFC 1493 Bridge MIB  
SHDSL line MIB

### BACK PANNEL



- A Telco 50 pin connector (RJ-21/Female)
- B AC power connector
- C Power Switch

### Quality Management

NexComm Systems, Inc has been certified ISO9001 from American Quality Assurance Ltd. Authorized agent of International Standard Organization (ISO) 9001 Quality Management Standard

All future options are marked as\*\*. Please contact NexComm's sales division or authorized dealer in your location for further details.

**NEXPEED** is registered trademark of NexComm Systems Inc. All other trademarks are property of their respective owners.



# NEXCOMM

S Y S T E M S

C-501, Bundang Techno-Park 45 Yatap-Dong, Bundang-Ku  
Sungbom-City, Kyunggi-Do, 463-760, Korea  
Phone: +82.31.781.1862/ Fax: +82.31.781.1863  
E-mail: sales@nexcomm.co.kr  
URL: www.nexcomm.co.kr

Authorized Dealer

Specifications are subject to change without notice