

# 3Com® NBX® V3000 IP Telephony Solution

## DATA SHEET



- Cost-effective IP telephony solution for small and medium size organizations
- Converged communications eliminate the cost and administrative overhead required for separate voice and data networks
- Worktop choices meet varying performance and budget requirements
- Advanced built-in applications include automated attendant, voice mail, and graphical call detail recording; easily integrated optional software includes off-the-shelf call center, customer relationship management, and call reporting solutions

### Key Benefits

#### Increased Productivity

Advanced applications and intuitive, browser-based management can save time and increase efficiency. Collaboration among staff can be more effective. Customer services can be enhanced without requiring additional personnel. Built-in voice mail, computer telephony integration (CTI), voicemail/e-mail clients (IMAP4), and call detail reporting (CDR) applications give organizations practical, productivity-enabling tools.

#### Easy Deployment

Standards-based design, including support for IEEE 802.3af Power over Ethernet (PoE), helps ensure seamless integration with existing network infrastructure and the investment assurance of cost-effective system evolution. Open Applications Protocol Interface (API) architecture provides access to best-in-class third-party applications. Multisite message exchange options between 3Com and third-party Voice Profile for Internet Mail (VPIM)-compliant voicemail systems offer organizations the flexibility of interoperable systems.

#### Practical Scalability

Organizations can boost capacity and enhance applications via software upgrades, without the need for expensive hardware acquisitions. Cost-saving incremental licensing provides scalability up to 1,500 devices (lines/stations; max. 720 PSTN lines) and up to 48 NBX IP Virtual Tie Lines (VTLs).

#### Reduced Operation Costs

A single voice and data network gives organizations the advantages of a converged infrastructure. Streamlined deployment and management optimize existing IT resources. Simplified moves-adds-changes can significantly lower total cost of ownership. Voice over Internet Protocol (VoIP) telephony can dramatically reduce long distance calling expenses—unified multisite dialing plans and hop-on/hop-off toll-bypass across WANs make possible immediate cost savings.

#### Budget-Matching Phone Choices

Multiline IP phones with robust feature-sets let organizations optimize their investments in communications infrastructure. 3Com® phones include 10/100 Mbps Ethernet/IP phones, soft-phones, and receptionist consoles that support NBX H3 or SIP call control and PoE for deployment flexibility.

#### Extended Range of Advanced Applications

3Com NBX® IP telephony systems support numerous standards-based applications for improving business activities. The 3Com Voice Solution Providers Program enhances these options with third-party offerings tested for compatibility and integration with 3Com voice solutions.

## Specifications

### Package Contents

NBX V3000 IP Telephony Solution

### System Requirements

100BASE-TX or 10BASE-T Ethernet LAN  
 3Com NBX V3000 IP Telephony Solution  
 Two 3Com business phones

### System Capacity

Supports up to 1,500 devices (lines/stations), including up to 720 PSTN Central Office lines and 48 Virtual Tie Lines

### PSTN Gateway Options

Loop-start analog, T1/PRI, E1/PRI, ISDN BRI-ST, Q.SIG/Q.931

### Port Connections

WAN: via external router with IP-ToS support  
 LAN: One 10/100 uplink port  
 Diagnostic: Serial port

### Analog Devices

Supports 2500 series-compatible analog devices, including cordless phones, fax machines, night bells, and door ringers

### Network, Prioritization, and Audio Compression Standards

100BASE-T, 10BASE-T, H.323, G.711, G.729a/b, ADPCM, 802.1d/p/Q, 802.2, 802.3, 802.3af, 802.11, IP, IP-ToS, DiffServ, TCP/IP, UDP/IP, DHCP, DNS

### Application Standards

TAPI 2.1, TAPI/WAV, IMAP4, HTTP, H.323, NetMerge, SMTP/MIME, VPIM

### Management

Built-in 3Com NBX NetSet™ utility; 3Com Network Supervisor support

### Languages/Dialects

Chinese (Cantonese), Chinese (Mandarin), English (Australian), English (UK), English (US), French (Parisian), German, Hebrew, Italian, Spanish (Castilian), Spanish (Mexican), Russian

### Power Requirements

NBX V3000: 100-120 VAC, 50-60 Hz, 1 A  
 220-240 VAC, 50-60 Hz, 0.5 A

### Power Dissipation

NBX V3000: 50 W  
 Phone: 5 W (maximum)

### Chassis/Call Processor Dimensions and Weight

Height: 4.445 cm (1.75 in)  
 Width: 37.465 cm (14.75 in)  
 Depth: 43.815 cm (17.25 in)  
 Weight: chassis—5.68805 kg (11.54 lb)

### Environmental Ranges

Operating temperature: 0° to 40°C (32° to 104°F)  
 Storage temperature: -40° to +70°C (-40° to +158°F)  
 Humidity: 5% to 85% noncondensing

### Network Access Standards

National Requirements FCC Part 68, Canada CS03 CTR4/A1 (Commission Decision 98/520/EC)

### Safety

UL/CUL 1950 3rd Edition  
 IEC 60950: 1991 + A1, A2, A3, A4; National deviations for Europe and Australia

### Emissions

FCC Part 15 Class A and B  
 EN 55022:1994/A1, 1995/A2, 1997 Class A  
 VCCI Class A  
 AS/NZS 3548:1995 Class A

### Immunity

EN 55024:1998

## Ordering Information

PRODUCT DESCRIPTION	3COM SKU
<b>NBX V3000 IP Telephony Solution</b> Support for 250 NBX devices (expandable up to 1,500 devices), 11 languages, and APX 4P/400H VM/AA system; one 10/100 uplink port; 4 analog FXO ports and 1 analog FXS port; one system hard disk; one autosensing 110/220 V, 50/60 Hz AC power supply, and one eight-foot power cord (order must specify country type); 19-inch rack-mounting ears.	3C10600A-XX
<b>NBX V3000 512MB Memory Upgrade Kit</b> Required to install with system capacity upgrade licenses beyond 250 devices (3C10317, 3C10287, 3C10325). One memory upgrade allows system to operate up to a maximum of 1,500 devices.	3C10240
<b>NBX Device License Upgrades</b> Unit-based licenses enable an incremental number (up to 1,500) of devices in addition to the 512MB Memory Upgrade Kit (3C10240). Single-Device Call Processor Upgrade 125-Device Call Processor Upgrade 250-Device Call Processor Upgrade	3C10317 3C10287 3C10325
<b>NBX V3000 Hard Drive Field Replacement Unit (FRU)</b> Replacement hard disk FRU enabling a customer to replace a faulty NBX V3000 system disk, eliminating costly downtime waiting for a service technician to replace the drive and restore system operation.	3C10118A
<b>NBX V3000 Chassis FRU</b> Replacement chassis FRU enabling a customer to replace a faulty V3000 chassis without returning hard disk assembly, eliminating costly downtime waiting for a service technician to replace the drive and restore system operation.	3C10241
<b>NBX Analog Line Card (FXO)</b> Terminates up to four Loop-start PSTN telephone lines to the NBX system via four RJ-11 interfaces. Includes built-in Caller ID support (service must be purchased from a telco/PTT) and built-in power failure transfer jack.	3C10114C

Ordering Information *(continued)*

PRODUCT DESCRIPTION	3COM SKU
<b>NBX Uplink Card</b> Includes eight RJ-45 uplink ports (10 Mbps shared Ethernet) to add an NBX chassis or to support other NBX devices.	3C10370
<b>NBX T1/PRI Card</b> Terminates a voice T1 or T1/PRI circuit into the NBX system. Includes a 10/100 MB MDI uplink port to connect to a LAN switch port for optimized network loading, plus a built-in CSU.	3C10116D
<b>NBX Analog Terminal Card (FXS)</b> Terminates up to four tip/ring analog devices, such as an analog phone, cordless phone, Group 3 fax machine, speakerphone adjunct, etc. Does not support modems.	3C10117C
<b>NBX BRI-ST Card</b> Terminates up to eight ISDN BRI-ST lines into the NBX system.	3C10164C-ST
<b>NBX E1 Card</b> Terminates a voice E1 circuit into the NBX system. Includes a 10/100 MB MDI uplink port to connect to a LAN switch port for optimized network loading, plus a built-in CSU.	3C10165D
<b>NBX Analog Adapter (FXS)</b> Standalone device that converts an Ethernet connection into an analog station port (FXS) for industry standard analog phones or similar devices. Provides a switched 10/100 Ethernet port for another device such as a PC. Supports IEEE 802.3af Power over Ethernet. Does not support modems. Local power supply included. Requires NBX R4.2 or greater.	3C10400-XX
<b>NBX APX Voicemail System Upgrade Licenses</b> One-port license Eight-port license 20-port license	3C10288 3C10326 3C10327
<b>3Com 3102 Business Phone</b> Provides full-duplex speakerphone, 18 programmable buttons with lights, 10 fixed-feature buttons, a two-line pixel display, plus two switched 10/100 Ethernet ports and a removeable language-specific faceplate for additional communications flexibility. Supports 3Com NBX H3 or SIP call control and IEEE 802.3af PoE standard. Local power supply not included; may be ordered separately. Requires NBX R4.2 or greater and an NBX Group 2 device license (3C10412), sold separately.	3C10402A
<b>3Com 3101SP Basic Phone with Speaker</b> Provides half-duplex speakerphone, four programmable buttons, multiline display with three softkeys and a four-way cursor controller, plus two switched 10/100 Ethernet ports. Supports 3Com NBX H3 or SIP call control and IEEE 802.3af PoE standard. Local power supply not included; may be ordered separately. Requires NBX R4.3 or greater and an NBX Group 1 device license (3C10411), sold separately.	3C10401SPKRA
<b>3Com 3101 Basic Phone</b> Provides listen-only speaker, four programmable buttons, multiline display with three softkeys and a four-way cursor controller, plus two switched 10/100 Ethernet ports. Supports 3Com NBX H3 or SIP call control and IEEE 802.3af PoE standard. Local power supply not included; may be ordered separately. Requires NBX R4.3 or greater and an NBX Group 1 device license (3C10411), sold separately.	3C10401A
<b>3Com 3105 Attendant Console</b> Provides up to 100 programmable functions via 50 buttons with high/low shift position, four pre-programmed buttons, and a 10/100 Mbps Ethernet port. Supports 3Com NBX H3 or SIP call control and IEEE 802.3af PoE standard. Requires NBX R4.3 or greater and an NBX Group 5 device license (3C10415), sold separately.	3C10405A
<b>NBX Group 1 Phone License</b> Permits connection of a 3Com 3101 phone to an NBX system. One license per phone required for operation; may be ordered in any quantity. Not required for NBX 1100 and 2100 series phones. One-port license (unit-based).	3C10411
<b>NBX Group 2 Phone License</b> Permits connection of a 3Com 3102 phone to an NBX system. One license per phone required for operation; may be ordered in any quantity. Not required for NBX 1100 and 2100 series phones. One-port license (unit-based).	3C10412
<b>NBX Group 5 Phone Licenses</b> Permits connection of a 3Com 3105 Attendant Console to an NBX system. One license per phone required for operation; may be ordered in any quantity. Not required for NBX 1105 console. One-port license (unit-based).	3C10415
<b>NBX IP On-the-Fly Site License</b> Allows local and remote NBX phones and Analog Line Card ports to operate as IP telephones at Layer 3 on a per-call basis with each LAN-based device returning its IP address to the "pool" on the NCP after call completion. 60-day trial license Site license License upgrade from NBX IP Serve	3C10270 3C10132 3C10133
<b>NBX IP Serve Site License</b> Allows local and remote NBX phones and Analog Line Card ports to operate as IP telephones at Layer 3 via static or DHCP IP addressing. Requires one IP address per MAC address (each device and CO port) in the system.	3C10131

Ordering Information *(continued)*

PRODUCT DESCRIPTION	3COM SKU
<b>NBX ConneXtions Gateway License</b> Software-based H.323 gateway license supporting one concurrent VoIP H.323 session added to existing installed session. Uses a dedicated Windows NT/2000 workstation or server (PC HW and OS license not included). One-port license (unit-based)	3C10315
<b>NBX IP Virtual Tie Line License</b> Enables NBX-to-NBX VoIP calling between sites. Includes 60-day trial NBX IP On-the-Fly license. One-port 60-day trial license Two-port license (unit-based)	3C10270 3C10328
<b>NBX VPIM Multisite Messaging Exchange License</b> Lets NBX solutions exchange voice mails with third-party VPIM-enabled voicemail systems. Requires NBX R4.0 or greater. 60-day trial license Site license	3C10276 3C10277
<b>NBX 3rd-Party Messaging License</b> Enables connectivity between NBX and third-party voicemail systems. Requires NBX R4.0 or greater and NBX WAV application ports. 60-day trial license Site license	3C10278 3C10279
<b>NBX Media Driver License</b> Supports seamless connections for TAPI/WAV and NetMerge-enabled applications to NBX solutions, eliminating need for T1/PRI card or analog connections between third-party application server and need for DSP resource boards once required for application server. Support for only NBX R4.1 or greater. 60-day trial license (four-port license) One-port license (unit-based)	3C10318 3C10319
<b>NBX pcXset™ License</b> Puts a "softphone," the equivalent of an NBX business phone (USB handset or headset not included) on the screen of a laptop or PC running Windows 98/NT/2000/XP. Incremental or site licenses available. One-user license (unit-based) Site license	3C10316 3C10154
<b>Polycom Device License</b> Allows one Polycom Soundstation IP 3000 to connect to an NBX solution. One license needed per Polycom unit. One-port license (unit-based).	3C10282
<b>3Com Legacy Link for Norstar</b> 16-port gateway that allows Nortel Norstar phones to connect to the NBX solution. Requires NBX R4.1 or greater and a 3Com SuperStack® 3 NBX Gateway Chassis (3C10200-XX). 60-day trial license One-board (unit based) One-board license (unit based)	3C10321 3C10390 3C10283
<b>3Com Legacy Link for Meridian</b> 16-port gateway that allows Nortel Meridian phones to connect to the NBX solution. Requires NBX R4.1 or greater and a 3Com SuperStack 3 NBX Gateway Chassis (3C10200-XX). 60-day trial license One-board (unit based) One-board license (unit based)	3C10321 3C10391 3C10283
<b>3Com Legacy Link—Analog</b> 16-port gateway that allows analog phones to connect to the NBX solution. Requires NBX R4.2 or greater and a 3Com SuperStack 3 NBX Gateway Chassis (3C10200-XX). One-board (unit based) One-board license (unit based)	3C10392 3C10361
<b>NBX Call Record and Monitor Licenses</b> Enables third-party call recording and monitoring systems to connect to the NBX 100 and SuperStack 3 NBX systems. Site license	3C10286

## Notes:

E1/PRI and BRI-ST cards not available in Canada or the U.S. where these services are not standard.

When ordering, replace XX with the applicable suffix: AA = Australia, New Zealand; ME = Europe; SA = South Africa; UK = United Kingdom; US = Canada, Latin America, United States



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To learn more about 3Com solutions, visit [www.3com.com](http://www.3com.com). 3Com is publicly traded on NASDAQ under the symbol COMS.

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