

NCD ThinSTAR™ 400 Windows-based Terminal and NCD ThinSTAR™ 450 Windows-based Terminal

NCD

High performance, easy-to-manage access to Windows NT and Windows 2000 applications and legacy systems

NCD ThinSTAR 400 and NCD ThinSTAR 450 offer the highest performance and flexibility with the lowest cost of ownership of any Windows-based Terminal in its class.

Highlights

- Microsoft-compliant Windows-based Terminal (WBT)
- Design based on high performance Intel architecture including L2 cache
- High-speed Ethernet connectivity (10/100BaseT)
- Direct access to web servers from the desktop
- High performance WBT supporting fast display of Windows applications
- Complete, centralized manageability featuring simple plug-and-play deployment and hands-free management
- Largest memory configuration for maximum flexibility and future software support
- Ergonomically friendly, vertical, fan-less design for quiet operation

Superior access to Windows 2000 and Windows NT servers

The NCD ThinSTAR 400 and NCD ThinSTAR 450 Windows-based Terminals and Windows 2000 are designed for each other. Each edition of Windows 2000 Server includes Terminal Services as an integrated feature. The NCD ThinSTAR 400 and NCD ThinSTAR 450 provide the industry's most robust end user experience in a Microsoft Remote Desktop Protocol (RDP) environment for either Windows NT Server 4.0 or Windows 2000 Server.

When combined with NCD ThinPATH Software, the NCD ThinSTAR 400 and NCD ThinSTAR 450 provide direct access to web servers, high performance graphics over RDP, audio input and output, and a wide range of local peripheral connectivity options. For those environments utilizing Citrix ICA, the same robust support is provided.

New levels of performance and flexibility

The NCD ThinSTAR 400 and NCD ThinSTAR 450 are NCD's premier products for delivering the highest levels of performance and flexibility. An Intel Pentium architecture with MMX acceleration and 512 kilobytes of Level 2 cache provides power to the desktop while maintaining enterprise-wide desktop consistency. The integration of that power with fast graphics rendering via a high performance graphics subsystem and high-speed network connectivity, results in the new standard in Windows-based Terminals.

The performance of the 400 series complements the flexibility it offers. Its standard 32MB of system RAM is expandable to 288MB to support many simultaneous connections and web pages. The standard Flash RAM is 16MB, the most in its class. It can hold existing and future software options to expand the functionality and extend the reach of the NCD terminal. The NCD ThinSTAR 400 and NCD ThinSTAR 450 also include a standard, secure PCI card slot for extending the terminal into other environments such as wireless.

NCD ThinSTAR 400 and NCD ThinSTAR 450 can meet unique industry application requirements with its multiple, standard peripheral connectivity adapters. The NCD ThinSTAR 400 and NCD ThinSTAR 450 feature two serial ports, one parallel port, two Universal Serial Bus (USB) ports, and 16-bit audio input and output. Windows applications can use local peripherals, printer or audio over either Microsoft RDP or Citrix ICA protocols. For remote connectivity, a modem is supported.

NCD ThinPATH Software adds value

NCD ThinPATH is a family of software that enhances the functionality and flexibility of Terminal Servers and its embedded RDP from a PC or NCD ThinSTAR WBT. NCD ThinPATH software lets ThinSTAR 400 and NCD ThinSTAR 450 directly access legacy host environments such as IBM or UNIX systems.

Direct Access to Web Servers

With NCD ThinPATH Manager software, users can browse the Internet from the NCD ThinSTAR 400 and NCD ThinSTAR 450. NCD ThinPATH Manager allows customers to centralize the browser configuration, including the home page, and the ability to control browsing history, cookies, and a list of favorites. This allows IS departments to implement large-scale deployments of new code on a policy basis with minimal impact on network traffic and eliminate the need to individually configure the attributes of each terminal.

Advanced manageability for fast, easy deployment and maintenance

NCD ThinPATH Manager software delivers true "hands-free" management and administration. Each terminal's personality can be remotely configured via a web browser. Wake-on-LAN technology allows for off-hours updates, diagnosis and maintenance. With the Centralized Configuration Tool, system administrators can configure terminals individually or in work groups for fast and easy set-up. With its SNMP support, industry-standard enterprise management suites can administer and maintain the NCD ThinSTAR 400 and NCD ThinSTAR 450.

World-class technical support

NCD and NCD Technology Certified Resellers have a decade of experience in thin client computing. Backed by formal service level agreements with Microsoft® and Citrix®, a wide range of services are available that cover the entire thin client environment.

NCD — The Thin Client Experts

NCD ThinSTAR 400 and NCD ThinSTAR 450 take advantage of NCD's 12 years of experience in simplifying access to network-based information and applications. Our award-winning hardware and software combined with NCD's relationship with companies like Intel®, Microsoft®, and Citrix®, together provide the most flexible thin client solutions.

NCD ThinSTAR™



NCD ThinSTAR™ 400 Windows-based Terminal and NCD ThinSTAR™ 450 Windows-based Terminal

Technical Specifications

Hardware

| | |
|---------------------|--|
| CPU: | NCD ThinSTAR 400 – 166MHz Intel Pentium w/MMX NCD ThinSTAR 450 – 266MHz Intel Pentium w/MMX |
| L2 Cache: | 512KB |
| RAM Memory: | 32MB SDRAM standard, expandable to 288MB |
| Flash Memory: | 16MB |
| Graphics Subsystem: | Integrated |
| Video Memory: | 2MB UMA |
| Audio: | 16-bit stereo output and 8-bit input Internal speakers |
| Expansion: | PCI internal slot |

Software

| | |
|----------------------|--|
| Operating System: | Microsoft Windows CE, Version 2.12 |
| Transport Protocols: | TCP/IP, PPP, RAS |
| Display Protocols: | Microsoft RDP, Citrix ICA |
| Key Features: | <ul style="list-style-type: none"> • Setup Wizard for easy configuration • Built-in PPP dialer support for RDP and ICA • SNMP Agent • Terminal Properties Security |

Terminal Update Utility

NCD ThinSTAR Operating Software (one per enterprise required)

Display

| | |
|---------------------|--|
| Resolution Support: | Up to 1600x1200 @8-bit color 1024x768 @16-bit color |
| Refresh Rate: | Up to 85Hz, DDC2 monitor support |

Peripheral Ports

| | |
|-----------------|---|
| Serial port: | 2 DB-9 RS232C ports, up to 115.2K baud |
| Parallel port: | 1 DB-25 bi-directional Centronics-compatible Enhanced Parallel Port (EPP) IEEE 1284 compliant |
| Expansion slot: | PCI or ISA compatible |
| Mouse: | 2-Button Mouse PS/2 style |
| Keyboard: | PS/2 Windows-95 104 keyboards <ul style="list-style-type: none"> • English (US) • English (UK) • English (Canadian) • French (Standard) • French (Belgian) • French (Swiss) • German (Standard) • German (Swiss) • Italian (Standard) • Japanese (Kana) • Norwegian • Spanish (Latin American) • Swedish (Finnish) |

| | |
|--------------------|-----------------------------------|
| USB: | 2 USB ports |
| Networking | 10/100BaseT auto-sensing Ethernet |
| Modem connectivity | via built-in serial port |

Physical Characteristics

| | |
|----------------|------------------|
| Dimensions | |
| Width (body): | 2.4" (55mm) |
| Width (stand): | 4.5" (115mm) |
| Depth: | 11.2" (281mm) |
| Height: | 9.5" (240mm) |
| Weight: | 2.95 lbs (1.3kg) |

Environmental

| | |
|--------------|------------------------------|
| Temperature: | 5°C to 40°C |
| Humidity: | 10% to 90% non-condensing |
| Altitude: | Up to 10,000 ft. |
| Power: | 29 watts maximum input power |

NCD ThinPATH Software

- NCD ThinSTAR 400 and NCD ThinSTAR 450 is compatible with:
- NCD ThinPATH Manager - enables remote configuration and administration from central location.
 - NCD ThinPATH Desktop Mirror - remotely mirrors an entire thin client desktop over TCP/IP network.
 - NCD ThinPATH Plus - enhances Microsoft's RDP to support local printers, peripheral devices and Windows audio.
 - NCD ThinPATH Connect - delivers cost effective access to legacy systems.
 - NCD ThinPATH X Windows - provides direct connections between NCD ThinSTAR Windows-based Terminals and legacy host applications.
 - NCD ThinPATH Xware - delivers X Windows emulation to Microsoft Windows Terminal Server.

Server Operating System Support

- Microsoft Windows 2000 Server
- Microsoft Windows NT Server 4.0, Terminal Server Edition
- Citrix MetaFrame™ thin-client/server software
- Citrix WinFrame™ thin-client/server software 1.6 or above

Regulatory Compliance

Energy Star
FCC-B
UL
CSA
CE compliant
TUV/GS
VCCI
C-Tick

Warranty

36 month system warranty return to factory

All specifications are subject to change



Corporate Headquarters

Network Computing Devices, Inc.
301 Ravendale Drive
Mountain View, California 94043
Tel: 650-694-0650
Fax: 650-961-7711
Web: www.ncd.com

For More Information

| | |
|--------------------------------------|--|
| North America 800-800-9599 | Germany 49-89-458728-0 |
| Australia 61-1300-368-455 | Sweden 46-18-601080 |
| France 33-1-34-58-21-21 | United Kingdom 44-1-491-848300 |