BLACK BOX®
NETWORK SERVICES

ADVANCED CONSOLE SERVER
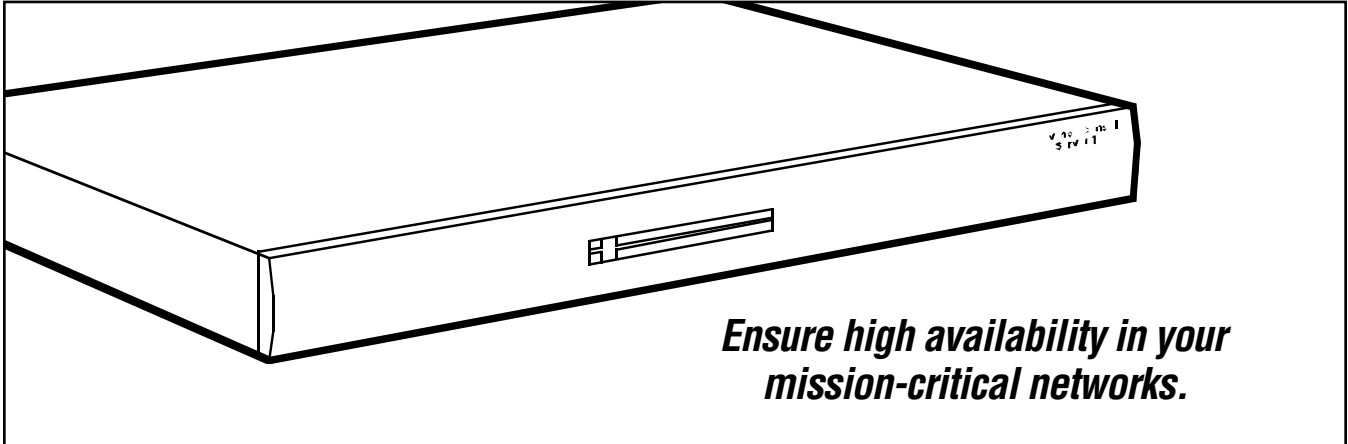
Ensure high availability in your mission-critical networks.

Key Features

▶ *Use as a terminal server, console server, and a remote access server.*

▶ *Manage clusters and server farms locally or remotely.*

▶ *Secure in-band and out-of-band control.*

▶ *IP filtering, RADIUS, and SSHv2 support.*

▶ *Power circuitry prevents spurious "breaks."*

▶ *Has two PCMCIA slots. Just add the interface cards you need.*

▶ *Dual power supplies and DC power options available on request.*

▶ *Rackmountable.*

The BLACK BOX® Advanced Console Server provides the functionality of a terminal server, a console server, and a remote access server all rolled into a 1U rackmountable chassis.

It gives you an efficient way to conveniently and securely access your network, server farm, or data center console ports from anywhere in the world—even when the network is down.

What's more, with an Advanced Console Server, you have a reliable way to access all nodes of your network from a single location without having to move from one terminal to another.

The Advanced Console Server has 16, 32, or 48 RS-232 serial ports for connecting to the console ports of your data centre devices, *plus* an Ethernet LAN port for connecting to the local network backbone. In addition, the unit has dual PCMCIA slots, providing the flexibility to support both current and future interface types. Install a wireless Ethernet card, a hard disk drive, an ISDN line interface card, an internal modem card, or

whatever PCMCIA compliant device you want.

Platform independent, the Advanced Console Server works with RS-232 manageable devices (including servers, switches, routers, firewalls, and more). The console server is ideal for Internet Service Providers (ISPs), Application Service Providers (ASPs), and network managers who manage a large number of console ports and must maintain a reliable link to them. It's also a valuable tool for industrial applications where it's absolutely critical that you always have access to automated serial devices, such as sensors and alarms.

As an option, you can order the Advanced Console Server with dual power supplies to ensure its operation during critical times. If one power circuit fails, the unit server switches to the other power supply. (For more information on this option, call Tech Support.)
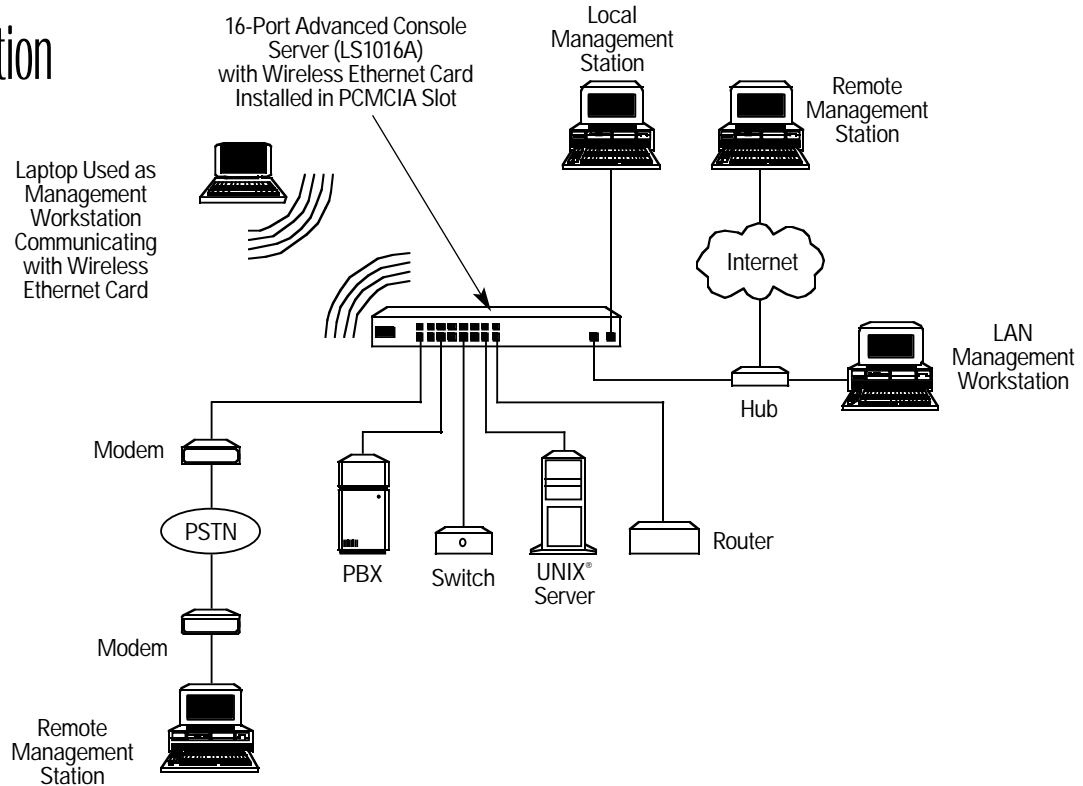
You can access the network several ways with the Advanced Console Server:

• Locally, via the network—from any LAN workstation, get access to the devices through the network by using Telnet or Secure SHell (SSH) sessions.

• Remotely, via the network—from anywhere in the world, establish a secure SSH connection and access the console ports to perform operations, such as BIOS configuration, OS boot message monitoring, or system power cycling.

• Remotely, independent of the network—from anywhere in the world, establish a dialup connection directly to the Advanced Console Server without having to rely on the network at all.

So, if you're off-site and you lose the in-band network route to your equipment rack, you can still reach it by dialing into the Console Port Server using a route independent of the data-carrying network.

The RS-232 ports feature ordinary RJ-45 connectors, so you can get away with using the RJ-45 terminated cable in your network

10834

Sample Application

16-Port Advanced Console Server (LS1016A) with Wireless Ethernet Card Installed in PCMCIA Slot

Local Management Station

Remote Management Station

Laptop Used as Management Workstation Communicating with Wireless Ethernet Card

Internet

LAN Management Workstation

Hub

Modem

PSTN

Modem

PBX

Switch

UNIX® Server

Router

Remote Management Station

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environment and not have to buy an array of serial device adapters.

The console server is secure, too. It features Secure SHell (SSH) Version 2 encryption so you can manage your infrastructure without worrying about intruders intercepting your sensitive data. What's more, because the Advanced Console Server offers compatibility with many of today's most-popular user authentication schemes, it can be seamlessly integrated into existing security policies. In addition to SSH services, it works well with Remote Dial-In Service (RADIUS) servers, Lightweight Directory Access Protocol (LDAP) services, legacy Terminal Access Controller Access Control System (TACACS) communications, and SecurID authentication.

The Advanced Console Server protects against spurious RS-232 break signals at the console, too. This makes it the perfect in-band and out-of-band management tool for applications that rely on Sun® servers.

Used as a terminal server, the Advanced Console Server supports either a single IP address or a single IP address per serial port. You can also cluster multiple units to appear as one logical unit for wide area management of up to 512 ports. By virtual clustering, all ports appear grouped together as a single, high-density server that occupies only a single IP address.

Unlimited port mirroring enables any number of users to concurrently access specific consoles in both read-only and read/write modes. By distributing server-management operations this way, your team can resolve issues more quickly and bring a higher level of efficiency to your enterprise.

And you won't spend a lot of time setting up and enabling the advanced features on the Advanced Console Server. In fact, it can be configured several ways: through a Web-based GUI; by using its built-in interactive setup wizards; or via the command line interface.

Specifications

Approvals: UL® 1950; FCC Part 15, A; EN55022, A (CE); EN55024; Solaris Ready

Console Management: Windows® 2003 Server EMS support; Sun break-safe (Solaris Ready™ certified); Break Over SSH support; local or remote off-line data buffering (NFS/syslog); time stamp for data buffering; unlimited number of simultaneous sessions; simultaneous access on the same port (port sniffing); secure clustering (for central access to multiple Advanced Console Servers); event notification

Memory: 128-MB DIMM SDRAM; 16-MB CompactFlash

Security & Authentication: SSHv2; IP packet and security filtering; User access lists per port, system event syslog; IPSec

support; Local, RADIUS, TACACS+, LDAP, and Kerberos authentication; Token-based authentication (SecurID); Local backup user authentication support; PAP/CHAP

Connectors: Serial ports: (16), (32), or (48) RJ-45 (RS-232); Network: (1) RJ-45 (10BASE-T/100BASE-T); Management: (1) RJ-45 (RS-232)

Temperature Tolerance: 50 to 112°F (10 to 44°C)

Humidity Tolerance: 5 to 90% noncondensing

Power: 100–240 VAC, 50–60 Hz, internal power supply

Size: 1.75"H (1U) x 17"W x 8.5"D (4.4 x 43.2 x 21.6 cm)

Why Buy From Black Box? Exceptional Value. Exceptional Tech Support. Period.

Recognise any of these situations?

• You wait more than 30 minutes to get through to a vendor's tech support.

• The so-called "tech" can't help you or gives you the wrong answer.

• You don't have a purchase order number and the tech refuses to help you.

• It's 9 p. m. and you need help, but your vendor's tech support line is closed.

According to a survey by Data Communications magazine, 90% of network managers surveyed say that getting the technical support they need is extremely important when choosing a vendor. But even though network managers pay anywhere from 10 to 20% of their overall purchase price for a basic service and support contract, the technical support and service they receive falls far short of their expectations—and certainly isn't worth what they paid.

At Black Box, we guarantee the best value and the best support. You can even consult our Technical Support Experts before you buy if you need help selecting just the right component for your application.

Don't waste time and money—call Black Box today.

Package Includes:

• Advanced Console Server

• (2) power supply cables

• (1) CAT5 cable

• (1) DB25 male to RJ-45 cable for remote modem management

• (1) DB25 loopback adapter

• (1) DB25 male console adapter

• (1) DB25 female console adapter

• (1) DB9 male console adapter

• (1) DB9 female console adapter

• (1) Cisco/Sun Netra console adapter

• (1) set of mounting brackets

Ordering Information

ITEM	CODE
Advanced Console Server	
16-Port	LS1016A
32-Port	LS1032A
48-Port	LS1048A

NOTE: 48-VDC and dual, fault-tolerant AC power supplies are also available. For more information, call Tech Support.