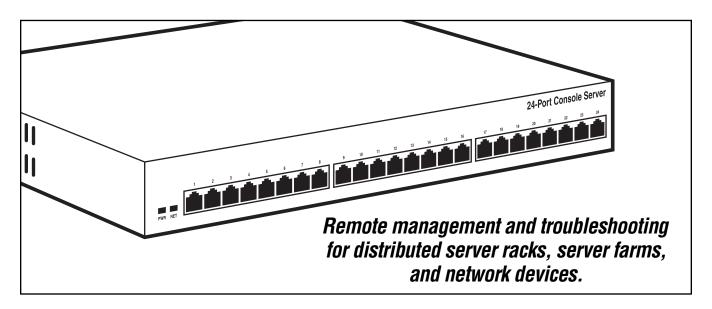


# BLACK BOX NETWORK SERVICES

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## **CONSOLE SERVERS**



### Key Features

➤ Just connect the console management port of a network device to an RJ-45 port of a Console Server for in-band or out-of-band management.

Safe for Sun servers.

- Selectable SSH security levels.
- Autosensing 10-Mbps RJ-45 serial ports.
- AUI connector for 10BASE2.

Our Console Servers are ideal for the remote management of distributed server farms and racks. Plus they're great for troubleshooting network appliances such as routers and remote access servers.

Simply connect the console management port of each network device to an RJ-45 serial port of a Console Server to manage equipment in band or out of band via a corporate LAN/WAN or dial-in connection.

The Console Servers enable you to connect anytime from anywhere. They save significant amounts of time and reduce overall costs by keeping system disruption to a minimum—especially systems with Sun® servers.

In the event of an unstable connection, the Console Servers issue a no-break signal on the power cycle to prevent costly Sun server reboots that can bring down all or part of your LAN/WAN.

Security features are built in, so you can implement a robust security plan that thwarts unauthorized access.

Protocols such as SLIP and PPP (which incorporate PAP and CHAP) permit authorized remote user dial-in connections plus support for RADIUS servers.

RADIUS authentication enables administrators who use Secure Shell (SSH) or Telnet™ to connect to devices attached to a Console Server.

SSH support means network administrators can make secure connections to attached servers, routers, RAIDs, and other devices without passwords and other sensitive configuration details being "sniffed" from the network. All data traffic between an administrator's PC and a Console Server is encrypted. Each

Console Server can be configured for SSH v.1 or v.2 or none. You select the level of security your installation needs.

The Console Servers each include a 10-Mbps RJ-45 network port and a 10-Mbps AUI port. The AUI port enables a connection to other network media—such as 10BASE2—via the use of a transceiver.

Extremely simple to configure, the Console Servers reduce setup time. Local or remote upgrades protect your investment and simplify management. At only 1U high, the Console Servers take up the minimum amount of rack space. Choose from units with 16 or 24 RJ-45 serial ports.



#26145

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

#### Recognize 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.

## Technically Speaking

Remote access servers enable remote users to connect to larger networks. A terminal server can perform the same basic function. So why does a distinction need to be made? Let's take a look at the specifics.

A remote access server has multiple asynchronous communication ports that connect to modems or other communication devices, which generally require more intelligence to support. Terminal servers are basically the same but were originally used to support dumb terminals because their intelligence is more limited than that of remote access servers.

Before intelligent PCs came about, terminals had no processing powers. Network hosts stored information and terminal servers enabled users attached to these dumb terminals to access this information from the hosts when needed.

Once connected to the terminal server, any user can access or switch between any number of network hosts, provided the network administrator has granted the necessary access rights.

Now terminal servers are often used to provide dedicated links between two workstations at separate locations. In this instance, separate devices attached to ports on separate terminal servers can talk to one another without dedicated wires. The existing network backbone is used as the transport medium.

For example, in an industrial environment that utilizes controllers with terminal servers, all devices could use async ASCII data and communicate with an ASCII host while using the network medium to transport data from one side of the link to the other.

### **Specifications**

#### **Operating Environment:**

Temperature: 32 to 110°F (0 to 43°C); Humidity: 5 to 95% noncondensing

Processor: 32-bit

Protocols: ARP, BOOTP, Clear TCP HTTP, CSLIP, DHCP, DNS, ICMP, PPP, Proxy ARP, RARP, RIP and Static Routing, RLogin, SLIP, SNMP, TCP/IP, Telnet™, UDP, WINS

Security: CHAP, PAP, RADIUS authentication and accounting (RFC2058 and RFC2059)

Serial Port Signals: TXD, RXD, RTS, CTS, DTR, DSR, DCD, GND

**Speed:** Up to 230 kbps throughput per port

**CE Approval:** Yes

Connectors: Serial ports: (16) or (24) RJ-45 (RS-232); Network: (1) RJ-45 (10BASE-T), (1) AUI (10BASE2); Management: (1) DB25 F (RS-232)

Indicators: LEDs: (1) Transmit, (1) Receive for each serial port, (1) Data, (1) Link for Network port,

(1) Power

Power: 110–240 VAC, 60–50 Hz internal, autoranging Size: 1.8"H x 16.9"W x 9"D

(4.6 x 42.9 x 22.9 cm)

Weight: 4.4 lb. (2 kg)



Black Box offers the best warranty program in the industry—Fido Protection\*. For more information, request **FaxBack 22512**.

## **Ordering Information**

 ITEM
 CODE

 Console Servers
 16-Port
 LS50116

 24-Port
 LS50124

