



XYPLEX Console Servers, MAXserver Console Server Console Server Management, Console Server Software



The MAXserver® Series of standalone console servers from MRV Communications provides comprehensive serial-based connectivity for a wide range of applications. The MAXserver allows seamless access from local or remote locations for a variety of devices, from terminals and PCs to bar code readers, print servers, internet servers and data acquisition devices. These console servers are ideal for remote and Internet access, as well as client/server or business automation applications. They are available in AC- and DC-powered versions. With three models ranging from 8 to 40 ports, the MRV Communications' MAXserver console server port management Series offers multiprotocol support, easy-to-use management options, extensive security features, accounting, and remote access servers capabilities.

Extensive Software Features

The MAXserver console server series offers a cost-effective, high-performance solution designed to accommodate growth and change in a network. For example, users whose access servers are configured for more traditional terminal serving applications can migrate easily to newer client/server applications using remote access servers features. With upgradable memory and flexible, robust software features, the MAXserver console server port management series makes migrations to new applications easy and trouble-free.

All operational parameters of the console server management can be set using software — no hardware switches are required.

Software can be loaded from a host network, or the unit can self-load using a flash memory card supplied by MRV Communications. The MAXserver can also act as a network load server for other MRV Communications access servers on the network.

Console Server & Automation

Because of its high-performance processor, the MAXserver's serial ports can reach a top speed of 115.2 kbps. This makes it ideal for remote access and business automation applications where speed of connections is essential. The MAXserver's console server memory can be upgraded using industry-standard SIMMs, allowing broader use of more memory-intensive protocols, as well as support for greater numbers of users or devices.

MRV Communications MAXserver console server port management series supports earlier protocols such as SLIP and CSLIP, in addition to PPP. Security options include

Features

- MAXserver console server series with 8,
 20 or 40 ports, and port speeds up to
 115.2 kbps; AC or DC power
- Support Novell IPX, TCP/IP, LAT, PPP, SLIP, and CSLIP with source and destination filters
- Extensive network security features including support for Kerberos, SecurID, RADIUS
- Expandable memory via industry standard SIMM
- Optional IPX Remote Access, ARAP, TN3270, and DECnet multisessions
- SNMP MIB I, MIB II, Telnet, and RCP

Benefits

- Stat mux replacement
- Console Server Management
- Traditional terminal serving
- Automating business applications requiring ethernet connectivity
- Server farm management
- Remote access
- Console Server Management and automation
- Server Management and Automation
- Secure Console Server Management





SecurID, Kerberos, and RADIUS. RADIUS standard or RADIUS accounting information may also be transmitted to the customer's accounting database for access accounting and billing.

Terminal Server Applications

Full terminal support for legacy applications is also provided. Ports on the standalone access servers supporting remote access applications can also be configured to operate with optional terminal features such as LAT, TN3270, XRemote, Telnet, and DECnet multisessions. This dual capability greatly simplifies the migration from host-based to client/server applications.

MRV Communications' MAXserver console server port management series also allows users to share printing resources in a widely distributed heterogeneous environment that includes VAX hosts, UNIX hosts, and Novell and NT servers that support BOOTP.

The MAXserver console server management series offers a rich array of local and remote management features that are accessible via full in-band SNMP, Telnet, and Digital's Remote Console Protocol (RCP), or via Telnet to an out-of-band management port. MRV Communications has implemented support not only for standard SNMP MIBs, such as MIB I and II and the extended Character MIB for asynchronous devices, but also for a full set of MIB extensions. This allows access servers parameters to be observed and changed via any SNMP-based management system, including MRV Communications' MegaVision™ network management software. All MIBs can be obtained from the Internet MIB repository and compiled via standard MIB compilers for use with SNMP-based network management packages.

For UNIX users, APGEN maintains access servers parameter files, converting the Local Parameter File generated on a MRV Communications servers to an ASCII script file and storing the converted file on a UNIX host.

For more information on these and other software features supported by MRV Communications access servers, refer to the Console Server Software data sheet.

Worldwide Service and Support

MRV Communications provides worldwide service and support through a highly-trained team of dedicated field engineers and channel partners. Service offerings include 24-hour technical phone support, 24-hour parts replacement, software and documentation update services, and warranty extension. Additional services such as network design and planning, project management, integration, performance analysis, migration planning, consulting, and installation are also available. In addition, intensive product courses ensure that customers get the most from their investment.

Some service offerings may vary by geographic location. Contact your local MRV Communications office or reseller for details.

Quality Process

All MRV Communications products are engineered and manufactured for exceptional reliability. Before new products are released, they are fully tested and certified to meet or exceed international standards.





| Technical Specifications | | | |
|-----------------------------|---|---|---|
| | MAXserver 8 | MAXserver 20 | MAXserver 40 |
| Terminal Cabling | Eight 8-wire RJ-45s | Twenty 8-wire RJ-45s | Forty 8-wire RJ-45s |
| Serial Line Speeds | 50 bps to 115.2 kbps | 50 bps to 115.2 kbps | 50 bps to 57.6 kbps |
| Cable Length | Serial Speed – Max. Length >9.6 kbps – 3000 ft/900 m 19.2 kbps – 1000 ft/300 m 38.4 kbps – 500 ft/150 m 57.6 kbps – 200 ft/60 m 115.2 kbps – 100 ft/30 m | Serial Speed – Max. Length >9.6 kbps – 3000 ft/900 m 19.2 kbps – 1000 ft/300 m 38.4 kbps – 500 ft/150 m 57.6 kbps – 200 ft/60 m 115.2 kbps – 100 ft/30 m | Serial Speed – Max. Lengtl >9.6 kbps – 3000 ft/900 m 19.2 kbps – 1000 ft/300 m 38.4 kbps – 500 ft/150 m 57.6 kbps – 200 ft/60 m |
| Power Requirements (DC) | 36 - 60 VDC 2A (max) | 36 – 72 VDC 3.3A (max) | 36 – 72 VDC 3.3A (max) |
| Power Requirements (AC) | 110 – 240 VAC, 50-60 Hz 25 W, 110 Btu/hr 0.7 A at 120 V (typ) | 110 – 240 VAC, 50-60 Hz 32 W, 110 Btu/hr 0.27 A at 110 V (typ) | 110 – 240 VAC, 50-60 Hz 42 W, 145 Btu/hr 0.35 A at 110 V (typ) |
| Dimensions | 0.3 A at 220 V (typ) Height: 4.1 cm/1.62 in Width: 23.3 cm/9.9 in Depth: 19.5 cm/7.7 in Weight: 1.7 kg/3.8 lbs with external power supply | 0.15 A at 220 V (typ) Height: 4.45 cm/1.75 in Width: 48.26 cm/19 in Depth: 29.71 cm/11.7 in Weight: 3.5 kg/8 lbs | 0.19A at 220 V (typ) Height: 4.45 cm/1.75 in Width: 48.26 cm/19 in Depth: 29.71 cm/11.7 in Weight: 3.5 kg/8 lbs |
| | For All Units | | |
| Network Interface | Ethernet/IEEE 802.3 AUI (10Base-5) or RJ-45 (10Base-T) | | |
| Base Memory | 4 MB DRAM | | |
| Expansion Memory | Can be upgraded in the field by qualified personnel in 2 MB increments for a total of 8 MB (6 MB on MAXserver 8) | | |
| Diagnostic LEDs | Run, LAN, Console, Port Status, Memory Card Status | | |
| Memory Card | 2 MB and 4 MB module flash cards (require Access Servers Software V6.0.3 or higher) | | |
| Memory Card Interface | JEIDA/PCMCIA | | |
| Non-volatile Storage | 32 kB | | |
| Serial Line Interfaces | RS-423/232 | | |
| Terminal Signals | DTR, DSR/DCD, RTS and CTS/RING modem control. Supports concurrent hardware and modem flow control. | | |
| Sessions/unit | 255 (software and memory configuration dependent) | | |
| Environment | Operating Temperature: 32 to 113°F (0 to 45°C) Storage Temperature: -4 to 140°F (-20 to 60°C) Humidity: 10% to 90% non-condensing | | |
| Safety Compliance | Complies with UL 1950, CSA M22.2 No. 950, TUV EN60950; verified by UL, CSA, and TUV | | |
| Emissions Compliance | FCC Class B, EN55022 Class B, EN50082-1, VCCI Class B, AS3548, BCIQ Class A | | |
| EC Directives | The console server access meets all applicable EC Directives | | |
| Warranty | One year | | |





Technical Specifications

Console Server Software MRV Communications MAXserver console server Software V6.1 or higher

Loading Platforms Digital: VAX hosts running VMS 4.7 or later with support for DECnet/MOP; Ultrix hosts 2.2

or later with DECnet/MOP, BOOTP/TFTP or RARP/TFTP UNIX: UNIX hosts with BOOTP/TFTP, RARP/TFTP or TFTP

Self-loading: The MAXserver can be self-loaded via MRV Communications flash card

Platforms: The MAXserver can load all MRV Communications 1600, 1000 MAXserver products, and all

Network 9000® products

Network Protocols IP/IPX, LAT, TN3270 (optional), and IPX RIP

Access Protocols Telnet, Rlogin, PPP, SLIP, CSLIP, XRemote, ARAP (optional), DECnet multisessions (optional)

Security Options SecurID, Kerberos, RADIUS

Compatible Systems LAT: VMS 4.7 or later, Ultrix 2.2 or later; LAT 5.1 and compatibles

TCP/IP: Alliant, Amdahl, Apollo, BTI, Celebrity, CMC, Convex, Digital, Data General, FTP, Hewlett Packard, IBM mainframes with TCP/IP software and a 3271 Channel attach device and compatibles, IBM hosts with FEP supporting TCP/IP Telnet sessions, MASSCOMP, McData, Network Research, Open Connect Systems, Pyramid, Process Software, IBM RS/6000, Sequent,

SUN, Symbolics, Wollongong, XLAN

DoD Compliance MIL-STD 1778 (TCP), MIL-STD 1777 (IP), MIL-STD 1782 (Telnet)

RFC Compliance 768 (UDP), 793 (TCP), 791 (IP), 792 (ICMP), 826 (ARP), 854 (TELNET), 903 (RARP), 906

(BOOTP/TFTP), 950 (Subnet), 951/1048 (BOOTP), 1034 & 1035 (DOMAIN NAMES),

1055 (SLIP), 1079 (Option Neg Term Type/Speed), 1144 (CSLIP), 1155 (SMI), 1157 (SNMP), 1156 (MIB I), 1213 (MIB II), 1284 (Ethernet), 1316 (Character MIB), 1317 (RS-232 MIB), 1331 (PPP),

1332 (PPP/IP), 1350 (TFTP)

Network Management SNMP MIB I, MIB II, proprietary MIB extensions, Telnet, APGEN, Digital's Remote Console Protocol

(RCP), TSM, and DSVCONFIG





| Ordering information | | |
|----------------------|---|--|
| | | |
| MX-1608B-014 | MAXserver 8, 4 MB RAM, unit only. Includes console servers software and documentation on CD-ROM, AC power | |
| MX-1608B-014DC | MAXserver 8, 4 MB RAM, unit only. Includes console servers software and documentation on CD-ROM, DC power | |
| MX-1608B-114 | MAXserver 8, 4 MB RAM. Includes base software on flash card and documentation on CD-ROM, AC power | |
| MX-1608B-114DC | MAXserver 8, 4 MB RAM. Includes base software on flash card and documentation on CD-ROM, AC power | |
| MX-1620-018 | MAXserver 20, 8 MB RAM, unit only. Includes software and documentation on CD-ROM and brackets for rack-mounting. | |
| MX-1620-014 | MAXserver 20,4 MB RAM, unit only. Includes console servers software and documentation on CD-ROM, AC power | |
| MX-1620-014DC | MAXserver 20,4 MB RAM, unit only. Includes software and documentation on CD-ROM, DC power | |
| MX-1620-114 | MAXserver 20,4 MB RAM. Includes base software on flash card and documentation on CD-ROM, AC power | |
| MX-1620-114DC | MAXserver 20,4 MB RAM. Includes base software on the console serverflash card and documentation on CD-ROM, DC power | |
| MX-1640-014 | MAXserver 40, 4 MB RAM, unit only. Includes software and documentation on CD-ROM, AC power | |
| MX-1640-014DC | MAXserver 40,4 MB RAM, unit only. Includes software and documentation on CD-ROM, DC power | |
| MX-1640-114 | MAXserver 40,4 MB RAM. Includes base software on flash card and documentation on CD-ROM, AC power | |
| MX-1640-114DC | MAXserver 40,4 MB RAM. Includes base software on flash card and documentation on CD-ROM, DC power | |
| MX-RACK-M01 | Mounting shelf (for 8-port units only) | |
| MX-130-0026 | Mounting bracket (for 20- and 40-port units only) | |
| | Refer to the Console Server Software data sheet for software ordering information. | |

MRV has more than 50 offices throughout the world. Addresses, phone numbers and fax numbers are listed at www.mrv.com.

Please e-mail us at **sales@mrv.com** or call us for assistance.

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