

ODEL MMMStarter-E

Multi/Iodem/Ionager

MMMStarter
MR4800E
MR4800
Chassis
Power Supplies
eplacement Modules
Networking Hubs



MMMStarter-E

Starter system for platform-independent modem management via any TCP/IP Ethernet* network.

Available for North America with 115v AC or -48v DC style chassis and power supply (specify when ordering).

International and U.K. countryspecific models available with 230v AC or 240v AC (BABT-approved) chassis and power supply (specify when ordering).

Various phone line connector options.

MMMStarter

Starter system for proprietary modem management via a dedicated console. Available with same power and phone line connector options as the MMMStarter-E.

Key Features

MMMStarter-E Starter System

- ➤ Includes a sixteen-slot chassis (see Chassis section for options).
- Includes an MR4800E controller with integrated 10BaseT Ethernet interface for platform-independent system management.
- Includes one power supply (see Power Supplies section for options). Accepts a second load-sharing power supply (recommended) for zero-switchover redundancy.
- ➤ Includes MMMSNMP management software that runs on any computer with Windows® 3.1x, Windows 95™, or Windows NT™ 4.x.

MMMStarter Starter System

- Includes a sixteen-slot chassis (see Chassis section for options).
- Includes an MR4800 controller and AN301TP management interface card (MIC) for proprietary system management.

MMMStarter (continued)

- Includes one power supply (see Power Supplies section for options). Accepts a second load-sharing power supply (recommended) for zero-switchover redundancy.
- Includes MMMSNMP management software.
- ➤ Requires a user-supplied management console (any 486/33 PC or faster with an available ISA-bus expansion slot, 8 meg of RAM, and Windows* 3.1x, Windows 95, or Windows NT* 4.x).

Chassis North America

➤ CC4800A-11/96/115v has 96 RJ-11 phone line connectors and a 115v AC power cord. Use with PS4800A power supplies and dial-up MR-Series modems (e.g., MT2834MR-PSTN and MT2834MR6).

Chassis (continued)

- CC4800A-11/96/-48v has 96 RJ-11 phone line connectors and wiring terminals for battery power. Use with PS4800A/-48v power supplies and dial-up MR-Series modems.
- CC4800A-21/115v has 6 RJ-21 (50-pin Amphenol*) phone line connectors and a 115v AC power cord. For use with PS4800A power supplies and all MR-Series modems.
- ➤ CC4800A-21/-48v has 6 RJ-21 phone line connectors and wiring terminals for battery power. For use with PS4800A/-48v power supplies and all MR-Series modems.



Key Features (continued)

Chassis

International

- ➤ CC4800-11-230v has 48 RJ-11 phone line connectors and a European-style (230v AC, 50/60 Hz) power cord. Use with PS4800 power supplies and dial-up MR-Series modems (i.e., MT2834MRI-PSTN) only.
- CC4800-21-230v has 6 RJ-21 (50-pin Amphenol) phone line connectors and a European-style (230v AC, 50/60 Hz) power cord. Use with PS4800 power supplies and any MR-Series modems approved for International use.

Chassis

United Kingdom

➤ CC4800-UK has 16 DB-25 (25-pin D-style) phone line connectors and a UK-style (240v AC, 50/60 Hz) power cord. Use with PS4800 power supplies and any MR-Series modems that carry the BABT approval.

Power Supplies

PS4800A

North America

- ➤ Universal input (90 260v AC) supply.
- Remote Sense: Monitors the power supply output at the load and regulates voltage with load compension.
- Supports load balancing and zeroswitchover redundancy when two PS4800A power supplies are installed.
- Front panel on/off switch and power LED indicator (power LED lights only if all three outputs are good).
- Short circuit protection on all outputs.
- Over-voltage protection on 5v DC output.
- DC fan for cool operation.

Power Supplies (continued)

PS4800A/-48v North America

Special version of the PS4800A for -48v DC power. For use with a CC4800A-11/96/-48v or CC4800A-21/-48v chassis only.

PS4800 International & U.K.

- Universal input (90 260v AC) supply.
- Supports load balancing and zeroswitchover redundancy when two PS4800 power supplies are installed.
- Front panel on/off switch and power LED indicator (power LED lights only if all three outputs are good).
- Short circuit protection on all outputs.
- Over-voltage protection on 5v DC output.
- > DC fan for cool operation.

Replacement Modules

MR4800E Controller

with Ethernet Connector Backplane interface to network

- Backplane interface to network, modems, and power supplies for control, management, and updates.
- ➤ Integrated web, FTP, and telnet servers and embedded SNMP agent support platform-independent management, reporting and control over TCP/IP.
- Integrated 10BaseT concentrator supports direct connection to UTP Ethernet.
- Supports an unlimited number of modem networks (requires Ethernet networking hardware).

MR4800 Controller

and Management Interface Card

- Backplane interface to modems and power supplies for control, management, and updates.
- 2.5M bps proprietary interface to the management console (usersupplied PC running MMMSNMP) via the MIC.
- ➤ Supports private networks with up to 12,192 modems (networks of four or more systems require additional MultiModemManager Networking Hubs, see right).

Networking Hubs

AN508TP Networking Hub

Eight-port hub for use when four or more MMMStarters are connected to the same central management PC (not used with MMMStarter-E's).

AN516TP Networking Hub

Sixteen-port hub for use when four or more MMMStarters are connected to the same central management PC (not used with MMMStarter-E's).

Specifications

CC4800A-11/96/115v Chassis

Dimensions:

19" W × 12.1" H × 18.3" L or $(48.3 \text{ cm} \times 30.7 \text{ cm} \times 46.4 \text{ cm})$

Weight: 27.5 lbs. (12.3 kg)

Operation: Dial-up lines only

Connectors:

96 DB-25S serial ports, 1 DB25P (command), and 96 RJ-11 (6-pin modular) phone jacks

Required Power Supply: PS4800A

Fuses:

5A (100-120v AC) 2.5 A (220-240v AC)

CC4800A-11/96/-48v Chassis

Same as CC4800A-11/96/115v except for the following:

Required Power Supply: PS4800A/-48v

CC4800A-21/115v Chassis

Same as CC4800A-11/96/115v except for the following:

Operation:

Dial-up, 2- or 4-wire leased lines

Connectors:

6 RJ-21 (50-position Amphenol®) phone jacks

Required Power Supply: PS4800A

CC4800A-21/-48v Chassis

Same as CC4800A-11/96/115v except for the following:

Operation:

Dial-up, 2- or 4-wire leased lines

Connectors:

6 RJ-21 (50-position Amphenol*) phone jacks

Required Power Supply: PS4800A/-48v

CC4800-11-230v Chassis

Same as CC4800A-11/96/115v except for

the following:

Operation: Dial-up lines only

Connectors: 48 RJ-11 phone jacks Required Power Supply: PS4800 Power Cord (supplied): 230v AC

Certification

CE Mark

CC4800-21-230v Chassis

Same as CC4800-11-230 except for the following:

Operation:

Dial-up, 2- or 4-wire leased lines

Connectors: Six RJ-21 phone jacks

CC4800-UK Chassis

Same as CC4800-21-230 except for the following:

Connectors: 16 DB-25 (25-pin "D-Style") phone jacks

Power Cord (supplied): 240v AC

MR4800 Controller

Dimensions:

4" W \times 2.2" H \times 15" L or (10.2 cm \times 5.6 cm \times 38.1 cm)

Weight: 1.0 lb. (0.45 kg)

Processor: Z80181 (12 MHz)

RAM: 128K static RAM

LEDs:

16 two-color LEDs indicate modem-to-backplane connection

Display:

3-digit, 7-segment display for cage number/node ID

Connectors: 2-RJ45 jacks

Topology:

Proprietary management link

MR4800E Controller

Dimensions:

4" W \times 2.2" H \times 15" L or (10.2 cm \times 5.6 cm \times 38.1 cm)

Weight: 13.2 oz. (0.374 kg)

Processor: 68360 (25MHz)

RAM:

1 meg for Flash code, 1 meg for programs

LEDs:

16 two-color LEDs indicate modem-to-backplane connection status; Ethernet: LI (Link), CD (Carrier Detect), TX (Transmit), RX (Receive)

Connectors:

1-RJ45 (network), 1-DB9P (future use)

Specifications

AN508TP Networking Hub

Dimensions:

19" W \times 1.75" H \times 11.5" L 48.3 cm \times 4.4 cm \times 29.2 cm

Weight: 8.0 lbs. (36 kg)

LEDs:

TRF (Traffic), JAM, COL (Collision), PWR (Power), LI (Link Integrity), AUI CRS, CS (Coax) CRS, UTP Link Integrity, and 16 Carrier Sense LEDs

Connectors:

RJ45 internal crossover for twisted pair connections DB15S for AUI connection

BNC for coax connection

Ports:

8 twisted pair 1 AUI 1 coaxial

Power Rating:

115/230v AC (Auto-select), 47-63 Hz

Power Consumption: 30 watts Data Transfer Rate: 10M bps

Topology: Star

Protocol: CSMA/CD

Compatibility:

10BaseT, 10Base5, and 10Base2 Multi-Tech EN-Series NICs

Operating Temperature: 32° to 158° F (0° to 70° C)

Humidity Range:

5-95% (non-condensing)

Warranty: Two years

AN516TP Networking Hub

Same as the AN508TP, except for the following:

Ports:

16 twisted pair 1 AUI

1 coaxial

PS4800A Power Supply

Dimensions:

4.0" W \times 4.7" H \times 15.7" L or (9.2 cm \times 9.9 cm \times 11.5 cm)

Weight: 4.0 lbs. (1.8 kg)

Power: 115v AC

Load Compensation:

Output voltage regulation stable to

full load (96 modems)

Input:

90 to 260v AC RMS @ 47 to 63 Hz

Current: 1.5A @ 220v full load

Insulation:

3750v RMS dielectric strength

Required chassis:

CC4800A with 115v receptacle (any connector configuration)

PS4800A/-48v Power Supply

Same as the PS4800A, except for the

following: Power: -48v DC

Input: -48v battery or power supply

Required chassis:

CC4800A with -48v DC connec-

tors

PS4800 Power Supply

Same as the PS4800A, except for the

following:

Required Chassis: CC4800 Load Compensation: None

PS4800/-48v Power Supply

Requires a special version of the CC4800

card cage not listed.

Power: -48v DC

Each model carries a two-year warranty and is manufactured in Mounds View, MN, U.S.A.

Trademarks: MultiModemManager, Multi-Tech, and the Multi-Tech logo: Multi-Tech Systems, Inc. / Amphenol: Amphenol Corporation / Windows: Microsoft Corporation.

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