MediaMaster™ Video On Demand System

Single-School Media Delivery Server — MM-8400

Specifications

Height: 4U
Width: 19 inch rack
Depth: 21 in
Weight: 45 lbs*
Power: 95 W idle;
125 W loaded*
UPS required

Description

The MediaMaster MM-8400 is a mid-line server intended for video on demand and multicast video service applications on a single typical K-12 sized school campus.

This server is based on the MM-8200, primarily offering more video storage options by allowing up to 10 hard disk drives in parity RAID configurations.

The base feature set from the MM-8200 is:

- Video-on-demand title playback; titles may be locally uploaded, recorded via the optional MediaRecorder (MM-1138) feature, or added via content libraries such as Discovery Education
- Control the classroom displays via Ethernet, RS-232 or IR
- Page arbitrary classrooms, whether singly, by zone, or all-call
- Automatic events with the optional Playlist (MM-1160) software
- Access locally-originated camera cart (MM-1581) and legacy video sources (e.g. VHS and DVD) via IPTV
- Direct the tuning of cable, satellite, OTA, and IPTV channels
- Integrate with the PrestoVideo (MM-1142) presentation and digital signage server; playout to MM-127*x* and MM-177*x* STBs
- Integrate with the MM Live Internet broadcast and VoD service
- Integrate with the school's legacy media library (e.g. Blu-ray)

Sites may use our built-in user management system or integrate with an existing LDAP server such as Microsoft's Active Directory, allowing centralized user and role management.

The server enclosure has locking doors with washable air filters and ball bearing fans. Power is cTUVus, TUV, and Energy Star certified.

Included Software

- Core server software
- Single building license for MediaController (MM-1150) and MM Administrator (MM-1185)

Included Hardware

- NVMe SSD for system software and the DBMS
- 3-10 hot-swap He-filled datacenter 3.5 in HDDs
- Dual 10GBase-T copper Ethernet; gigabit capable
- 1GBase-T IPMI port

Optional Software

- MM Playlist (MM-1160)
- PrestoVideo (MM-1142)
- MediaRecorder (MM-1138)
- MM Live (MM-2564)

Optional Features

- Hot swap power supplies
- Hot spare drives
- 10 Gbit/sec SFP+ fiber connectors

MEDIAMASTER.COM, INC.
1 Las Olas Circle • Unit 601 • Ft. Lauderdale, FL 33316
tel 631.589.4300 • fax 631.589.4311 • www.mediamaster.com

Revised 2023.09.07

Optional Features

MediaMaster part number MM-8400-DG represents the stock configuration of the server. Add or replace the following suffix codes to that to indicate optional features:

Code	Feature
A-E	CPU type: A=fastest, D=best value, E=special-purpose low-speed low-cost configuration
F	SFP+ 10 Gbit/sec fiber alternative to option code "G"; customer provides transcievers
G	10GBase-T Ethernet (stock configuration)
H	1000Base-T Ethernet (special-purpose configuration only; saves little over "G")
M	Multiple CPUs (2) for high throughput needs; combine with options A-C for more speed
P	Dual hot-swap power supplies
S	Hot spare drive in the video storage array; SS=two spares, SSS=three spares, etc.
T	Triple parity redundancy in the video storage array (default is dual parity)
X	Ten drive capacity in two 5-drive hot-swap cages; runs hotter than the stock 4-drive cages

Video Array Configuration Options

The stock configuration uses 3 to 8 hard disks arranged in a dual-disk parity redundancy configuration. This allows loss of two disks in the array before you lose the data on the whole array.

We normally use the maximum number of drives allowed in a server chassis since more spindles generally means more speed, and more drives gives a better ratio of usable storage to raw storage. An MM-8400-DG-32 server would therefore have its 32 TB of raw storage arranged as 8 × 4 TB disks, rather than as 4 × 8 TB disks. With two drives worth of storage given to parity, you'd have 24 TB of usable storage in this configuration. The lower limit on this is that we currently use drives no smaller than 4 TB.

Triple redundancy is available, allowing loss of *three* drives in the array at a cost of one extra drive over the dual parity stock configuration. An MM-8400-DGT-32 would use the same 8 × 4 TB disk set as above, but you'd lose a third drive to redundancy, giving 20 TB of usable stoarage.

If you need more than triple redundancy, you can add one or two hot spare (**S**) drives; multiple spares may be specified by adding **S**'s: an MM-8400-DGSST-32 would be implemented as 6 × 4 TB for the video array plus two 4 TB hot spares, giving 12 TB of available space. (Calculate this as 32 ÷ 8 bays for the non-**X** configuration, giving 4 TB drives; subtract two drives for option **SS**, then three more for option **T**, leaving 3 × 4 TB = 12 TB.)

The stock server enclosure has hot-swap bays for eight drives. Option **X** adds space for two more drives. This not only allows for more video storage, it may be necessary in combination with other options; for example, the 8 × 4 TB configuration given above would prevent use of a hot spare (**S**) unless combined with the **X** option to allow mounting a ninth drive.

Footnotes

* Server weight and fully-loaded power ratings depend on server configuration. Given values are for a single typical configuration, but each specific configuration may vary.

ETR... Educational Technology Resources, Inc.
1742 Church Street • Holbrook, New York 11741
tel 631.589.4300 • fax 631.589.4311 • www.etr-usa.com
Revised 2023.09.07