

Spectrum™ MediaDirector 2252D

SYSTEM CONTROLLER



Spectrum™ MediaDirector 2252D system controllers are the core of Harmonic's Spectrum media server system, actively managing the flow of data to and from Spectrum media I/O modules and MediaStore 5100 storage arrays.

MediaDirector 2252D provides media I/O ports for up to 32 standard channels and the processing power to support a wide range of configurations and workflows. Its SAS interface provides redundant data paths between the MediaDirector and MediaStores.

MediaDirector can be dedicated to both real-time and IP packet processing. Four MediaDirectors can be linked together for the scaling of channels or IP bandwidth — or both. MediaDirectors, individually or grouped, strictly manage overall system bandwidth to ensure uninterrupted real-time operations, even under heavy IP file-transfer loads.

MediaDirector 2252D systems are designed with a real-time Linux OS for fast startup and secure, reliable operation. In the unlikely event of a drive failure in a connected MediaStore storage array, software RAID file system management enables efficient recovery of data.

Additional Features and Functions

System Expansion — A Spectrum system based on the MediaDirector 2252D can be expanded to a maximum of six MediaStore 5100 storage arrays, each containing 24 disk drives. Four MediaDirector 2252D units can be connected to the same file system via an Extended File Sharing (EFS) license.

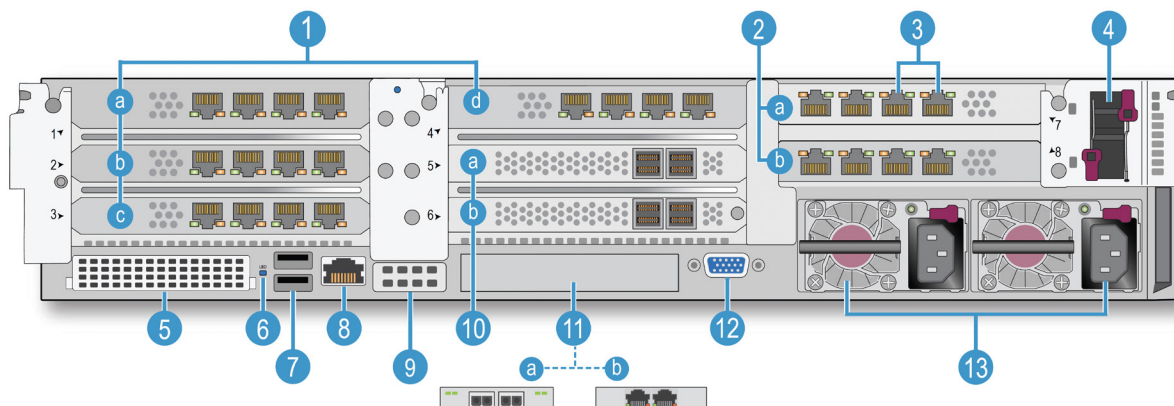
External Clock Synchronization — An optional LTC input on MediaDirector supports a TOD clock.

Resiliency — The MediaDirector 2252D supports multiple diagnostic, monitoring and notification features for system resiliency and maximum up time, and may be configured to automatically rebuild protected MediaStore 5100 RAID sets in hot spare configurations.

HIGHLIGHTS

- Integrates file system, management, communication and all connectivity for the Spectrum media server
- Dual redundant 12-Gbps SAS interfaces provide multiple data paths to system storage
- 16 high-speed media I/O ports supporting up to 32 channels
- Enables maximum scalability of Spectrum channels, IP bandwidth and storage capacity
- Supports multiple diagnostic, monitoring and notification features for Spectrum system resiliency and availability

Rear view of the MediaDirector MCP-2252D chassis



1. 1Gbps connections to Spectrum I/O
 - a. Ports 0-3, left to right
 - b. Ports 4-7, left to right
 - c. Ports 8-11, left to right
 - d. Ports 12-15, left to right
2. 1Gbps connections for extended file system (EFS); license required for EFS.
 - a. Ports 1-2, left to right
 - b. Ports 3-6, left to right
3. 1Gbps for connections for system management (eth0, eth1 in software, left to right)
4. NVME redundant boot drives
5. Filler panel
6. UID and wink LED (the wink function blinks the UID LED once per second)
7. USB connectors
8. Integrated lights-out (iLO) service management port
9. Filler panel
10. Serial-attached SCSI (SAS) connectors
 - a. Port A-B, left to right
 - b. Port C-D, left to right
11. 10 Gb Eth port options (use for file transfers):
 - a. Two optical SFP ports
 - b. Two copper RJ-45 ports
12. VGA connector
13. Redundant, hot-swappable power supplies (bay 2, bay 1, from left to right)

SPECIFICATIONS

CONNECTIVITY

SAS	Dual redundant SAS 3.0 connectivity to MediaStore 5100 storage arrays via miniSAS-to-miniSAS cables
Ethernet	NIC Options: Two 10-Gb Ethernet optical SR or copper with RJ45 connectors Base: Two 1-Gb Ethernet ports
EFS I/O	Six 1-Gb Ethernet ports for EFS private network connectivity
High-Speed Media I/O	16 1-Gb Ethernet ports

INTEGRATED SERVICES

File Access	FTP, SAMBA, AFP
API	Native player and media API

POWER

Power Supplies	Dual, hot-swappable
Power Consumption	Maximum 750 W at 35C, Typical 350 W at 20C

PHYSICAL

Dimensions (W x H x D)	17.53 in x 3.44 in x 28.75 in 2RU 44.55 cm x 8.74 cm x 73.03 cm
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ORDERING INFORMATION

Part Number	Description
MCP-2252D-2XC	MediaDirector 2252D with dual SAS HBAs to support 4-Director EFS and 2-port copper 10GbE (10GBASE-T)
MCP-2252D-2XO	MediaDirector 2252D with dual SAS HBAs to support 4-Director EFS and 2-port optical 10GbE

SPARES KITS

Part Number	Description
SPR-SPECT-12G-SAS-CABLE-1M	1 m SFF-8644 to SFF-8644 SAS cable for MediaDirector 225xC connection to MediaStore 5100
SPR-SPECT-12G-SAS-CABLE-3M	3 m SFF-8644 to SFF-8644 SAS cable for MediaDirector 225xC connection to MediaStore 5100
SPR-HWR-HPE-G11-1KW-PSU	Spare AC 1000W PSU with cable for DL360/380/325 G11 HPe chassis
HWR-MCP-LTC-CONNECTOR	Required connector for use of SMPTE LTC timecode