

ConvergeMedia™ XMS Flex

Service providers face several important challenges in transitioning to next generation services for IP-based, multi-screen video delivery. These challenges include the need for the highest performance and density at the lowest possible cost, the requirement for streaming resiliency to maximize availability, and the desire to deploy a single platform that supports the full range of video applications.

ConvergeMedia™ XMS FLEX with the next generation Streaming Media Engine (SME) addresses all of these challenges, combining commercial off-the-shelf (COTS) server technology and adaptive storage with proven, patented media delivery software to provide the flexibility for any market size, deployment architecture or video application.



FEATURES

- High-density Linux COTS platform
- Multiple codec, container and transport protocol support for delivery of multi-screen services
- Single platform for VOD, Time-Shifted TV, Linear and Advanced advertising applications
- Provides independent scaling of ingest, storage and streaming
- Streaming resiliency for high availability
- Adaptive storage enables platform tuning for any application



XMS Flex Servers



XMS Flex External Module (VOD)

XMS FLEX SERVER - GENERAL SPECIFICATIONS

Applications Supported

- Linear Digital Program Insertion (DPI)
- Dynamic Advertising Insertion (DAI)
- Video On Demand (VOD)
- Time-Shifted TV / Start Over / Look Back

Streaming Format

MPEG-4 AVC / H.264 & MPEG-2

Streaming and Storage Options

Streaming interfaces	10 Gigabit Ethernet (10GbE) / Optics (XFP): 10GBASE-SR Gigabit Ethernet (1GbE) / 1000BASE-T, RJ45
Management interfaces	Gigabit Ethernet (1GbE) / 10/100/1000BASE-T, RJ45 6 management ports
Storage options	HDD & SSD Media Supports both internal and external storage options

Redundancy

Streaming Interfaces	Support for Link aggregation for resilient streaming
Content Storage	RAID-10
Power Supply	Dual redundant hot-swappable
Fans	Dual redundant hot-swappable

Dimensions

Height	3.5 inches / 89mm
Width	17.2 inches / 437mm
Depth	24.8 inches / 630mm

Environmental

Operating Temperature	10-35 C (50-95 F)
Storage Temperature	-40-70 C (-40-158 F)
Operating Humidity	8-9% (non-condensing)
Storage Humidity	5-95% (non-condensing)

Power Supply Modules

AC Switching PS module

AC Input Rating

750W: 180-240V / 8.5 – 5A / 50 – 60HZ
1000W: 100-140V / 11.5 – 8A / 50 – 60HZ

DC Output

1000W: +12V / 83A
1200W: +12V / 100A

DC Switching PS Module

DC Input Rating

850W: -36 to -76 V / 30-25A
1010W: -43 to -76V / 30-17A

DC Output

850W: +12V / 70A
1010W: +12V / 83A

EXTERNAL MODULE - GENERAL SPECIFICATIONS (VOD only)

Power

Power Consumption	325W
Input Voltage	100-240VAC, 60/50Hz

Dimensions

Height	6.89 inches / 175mm – 4 EIA Units
Width	19 inches / 483mm – IEC Rack Compliant
Depth	24.8 inches / 630mm
Weight	101.41 lbs / 46 Kg (with drives)

Performance

Content Store	24TB or 48TB module configurations
Typical Store	5,000 hours or 10,000 hours (SD content at 3.75 Mbps)
Maximum Modules	8

Environmental

Temperature	5-40 C (41-104 F)
Humidity	20-80% (non-condensing)
Operating Altitude	0-3048 m (10,000ft)
Storage Altitude	-300-12,192m (-1,000-40,000ft)

Regulatory & Safety Compliance

FCC Part 15B Class A

EN55022, EN55024, EN61000-3-2/3

CISPR 22 Class A, CISPR24

EN/IEC/UL60950-1

CB Report: CE, UL, cUL, FCC, BSMI

CSA/IEC/EN/60950-1, CB report, CB Certification

RoHS 6/6 compliant

WEEE (EU only)

PRODUCT CONFIGURATION DETAILS

Model	Applications Supported	Bandwidth	Streaming Interfaces / Type	Power Consumption	Weight	Storage options
XMS Flex 4x10G	VOD, DAI, Time-Shifted TV / Start Over / Look Back	Up to 30Gbps	4 / 10GbE	450W ²	45lb / 20.4 Kg	24TB to 384TB raw storage (external ¹)
XMS Flex 12x1G		Up to 10Gbps	12 / 1GbE			
XMS Flex 10x1G		Up to 10Gbps	10 / 1GbE			
XMS Flex 8x1G		Up to 8Gbps	8 / 1GbE			
XMS Flex 8G-14TB	VOD, DAI, Linear DPI, Time-Shifted TV / Start Over / Look Back	Up to 8Gbps	12 / 1GbE	611W ²	55lb / 25 Kg	14TB raw storage (internal HDD Media)
XMS Flex 6G-14TB		Up to 6Gbps	12 / 1GbE	598W ³		
XMS Flex 4G-7TB		Up to 4Gbps	12 / 1GbE	515W ² 485W ³		
XMS Flex SSD	DAI, Linear DPI	Up to 8Gbps	12 / 1 GbE	445W ² 428W ³	44.6lb / 20.2 Kg	4 TB raw storage (internal SSD Media)
			4 / 10 GbE			
		Up to 6Gbps	12 / 1 GbE			
			4 / 10 GbE			
Up to 4Gbps	12 / 1 GbE					

¹ See external storage module specifications

² Power Consumption @ 120V AC

³ Power Consumption -48V DC

VOD SERVER ORDERING INFORMATION

Part Number	Description
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Server and Storage Bundles

792642	(XMS-FB/10G-24TB) XMS Flex VOD Bundle, 10Gbps+24TB storage. Includes base server w/4x10Gbps interfaces, 24TB external storage array, and associated software licenses.
792643	(XMS-FB/20G-48TB) XMS Flex VOD Bundle, 20Gbps+48TB storage. Includes base server w/4x10Gbps interfaces, 2x24TB external storage arrays, and associated software licenses.
792644	(XMS-FB/30G-72TB) XMS Flex VOD Bundle, 30Gbps+72TB storage. Includes base server w/4x10Gbps interfaces, 3x24TB external storage arrays, and associated software licenses.

VOD Servers

792640	(XMS-FLEX/8X1G) Base XMS Flex Server, with 8x1Gbps streaming interfaces for VOD
792748	(XMS-FLEX/10X1G) Base XMS Flex Server, with 10x1Gbps streaming interfaces for VOD
792778	(XMS-FLEX/12X1G) Base XMS Flex Server, with 12x1Gbps streaming interfaces for VOD
792641	(XMS-FLEX/4X10G) Base XMS Server, with 4x10Gbps streaming interfaces for VOD

External Storage Module

792654	(XMS/STO/XH-24TB) 24TB (raw) external HDD storage expansion for XMS Flex - 24 x 1TB drives for VOD
792655	(XMS/STO/XH-48TB) 48TB (raw) external HDD storage expansion for XMS Flex - 24 x 2TB drives for VOD

Spares Kit

795911	(XMS/FLEX-L/FRUKIT) XMS Flex Server spares kit, with 2 600GB 2.5" HDDs, dual fans and power supply for VOD server
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ADVERTISING SERVER ORDERING INFORMATION

Part Number	Description
XMS Flex SSD Internal Storage (AC Power)	
782525	(XMS-MBD-4G-SSD) XMS Flex bundle for DPI, 4Gbps (500 channels). Includes base server w/ 12x1Gbps interfaces, 4TB internal SSD storage, associated SME licenses, and ACM.
782490	(XMS-MBD-6G-SSD) XMS Flex bundle for DPI, 6Gbps (750 channels). Includes base server w/ 12x1Gbps interfaces, 4TB internal SSD storage, associated SME licenses, and ACM.
782526	(XMS-MBD-6GX-SSD) XMS Flex bundle for DPI, 6Gbps (750 channels). Includes base server w/ 4x10Gbps XFP interfaces, 4TB internal SSD storage, associated SME licenses, and ACM.
782476	(XMS-MBD-8G-SSD) XMS Flex bundle for DPI, 8Gbps (1,000 channels). Includes base server w/ 12x1Gbps interfaces, 4TB internal SSD storage, associated SME licenses, and ACM.
782527	(XMS-MBD-8GX-SSD) XMS Flex bundle for DPI, 8Gbps (1,000 channels). Configured with DC Power. Includes base server w/ 4x10Gbps XFP interfaces, 4TB internal SSD storage, associated SME licenses, and ACM.
XMS Flex SSD Internal Storage (DC Power)	
782528	(XMS-MBD-4G-SSD-DC) XMS Flex bundle for DPI, 4Gbps (500 channels). Configured with DC Power. Includes base server w/ 12x1Gbps interfaces, 4TB internal SSD storage, associated SME licenses, and ACM.
782529	(XMS-MBD-6G-SSD-DC) XMS Flex bundle for DPI, 6Gbps (750 channels). Configured with DC Power. Includes base server w/ 12x1Gbps interfaces, 4TB internal SSD storage, associated SME licenses, and ACM.
782530	(XMS-MBD-6X-SSD-DC) XMS Flex bundle for DPI, 6Gbps (750 channels). Configured with DC Power. Includes base server w/ 4x10Gbps XFP interfaces, 4TB internal SSD storage, associated SME licenses, and ACM.
782531	(XMS-MBD-8G-SSD-DC) XMS Flex bundle for DPI, 8Gbps (1,000 channels). Configured with DC Power. Includes base server w/ 12x1Gbps interfaces, 4TB internal SSD storage, associated SME licenses, and ACM.
782532	(XMS-MBD-8X-SSD-DC) XMS Flex bundle for DPI, 8Gbps (1,000 channels). Configured with DC Power. Includes base server w/ 4x10Gbps XFP interfaces, 4TB internal SSD storage, associated SME licenses, and ACM.
XMS Flex SSD Internal Storage Spares Kits	
780957	(XMSFLEX-SSD/SPARES) XMS Flex Server spares kit, with 2 - 480GB SSD, fan and AC power supply
780958	(XMSFLEX-SSD/DC/SP) XMS Flex Server spares kit, with 2 - 480GB SSD, fan and DC power supply
782442	(XMSFLEX-SSD-UPG) – Array of 10 SSD’s to upgrade existing XMS Flex HDD servers to SSD model. On-site upgrades only.
XMS Flex HDD Internal Storage (AC Power)	
794293	(XMS-MBD-4G-7TB) XMS Flex bundle for DPI, 4Gbps (500 channels) + 7TB storage. Includes base server w/ 4x 1Gbps interfaces, 7TB internal HDD storage, associated SME licenses, and ACM.
794294	(XMS-MBD-6G-14TB) XMS Flex bundle for DPI, 6Gbps (750 channels) + 14TB storage. Includes base server w/ 6x 1Gbps interfaces, 14TB internal HDD storage, associated SME licenses, and ACM.
794295	(XMS-MBD-8G-14TB) XMS Flex bundle for DPI, 8Gbps (1,000 channels) + 14TB storage. Includes base server w/ 8x 1Gbps interfaces, 14TB internal HDD storage, associated SME licenses, and ACM.
XMS Flex HDD Internal Storage (DC Power)	
799737	(XMS-MBD-4G-7TB-DC) XMS Flex bundle for DPI, 4Gbps (500 channels) + 7TB storage. Configured with DC Power. Includes base server w/ 4x 1Gbps interfaces, 7TB internal HDD storage, associated SME licenses, and ACM.
799738	(XMS-MBD-6G-14TB-DC) XMS Flex bundle for DPI, 6Gbps (750 channels) + 14TB storage. Configured with DC Power. Includes base server w/ 6x 1Gbps interfaces, 14TB internal HDD storage, associated SME licenses, and ACM.
799739	(XMS-MBD-8G-14TB-DC) XMS Flex bundle for DPI, 8Gbps (1,000 channels) + 14TB storage. Configured with DC Power. Includes base server w/ 8x 1Gbps interfaces, 14TB internal HDD storage, associated SME licenses, and ACM.
XMS Flex HDD Internal Storage Spares Kits	
795909	(XMS-FLEX-L-SPARES) XMS Flex Server spares kit, with 2 600GB 2.5" HDD, fan and power supply
799741	(XMS-FLEX-SPARES-DC) XMS Flex Server spares kit, with 2 600GB 2.5" HDD, fan and DC power supply.
781042	(XMSFLEX/PS-DC/FRU) 1 - DC Power Supply for XMS Flex servers

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