



## MDX 9020 MEDIA DISTRIBUTION SWITCH

Network operators are faced with extraordinary challenges given the explosion of on-demand, rich media applications. Service offer planning now includes multi-screen convergence, time/place shifting, network PVR and advanced ad strategies to name a few. Amidst constant budget pressures, rapidly changing business models and increasing consumer expectation, operators must find new infrastructure solutions. To this end, the Verivue MDX 9000 Media Distribution Switch family has arrived to define the next generation of rich media distribution platforms.

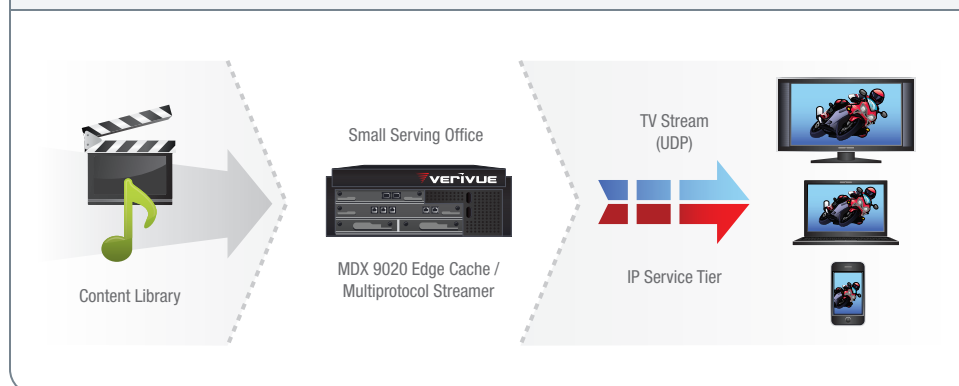
Designed around a compact, high-density 3-RU platform, the MDX 9020 merges solid-state flash memory, networking and delivery functions into a single platform. This multi-purpose design collapses racks of storage, servers and switches into a highly efficient and cost effective solution.

### Edge Caching and Streaming

The MDX 9020 serves Media distribution and caching needs of small serving offices of:

- Cable Service Providers
- Telco Broadband Providers
- On-Line Video Provider

*Designed to grow with the needs of the provider, the MDX 9020 can serve as a central site aggregation and streaming platform or sit at the edge of a large distribution network. Combined with the higher capacity MDX 9200, the MDX family provides an end to end solution for all topologies and site level requirements.*



**Seamless Multi-Screen Convergence** by supporting a wide range of transport protocols and container formats that allow networks to be designed for peak usage across multiple screens from a common network platform.

**Intelligent Content Distribution** operating as part of a fully distributed media network combining a storage hierarchy with intelligent algorithms that automatically adapt to unpredictable traffic patterns.

**VueStor™ Solid-State Storage Subsystem** implements a patent-pending control architecture for Flash Memory to provide higher reliability, longer life expectancy and higher, deterministic performance. VueStor eliminates in-efficient spindles which heretofore were unable to keep up with the bandwidth requirements of streaming media.

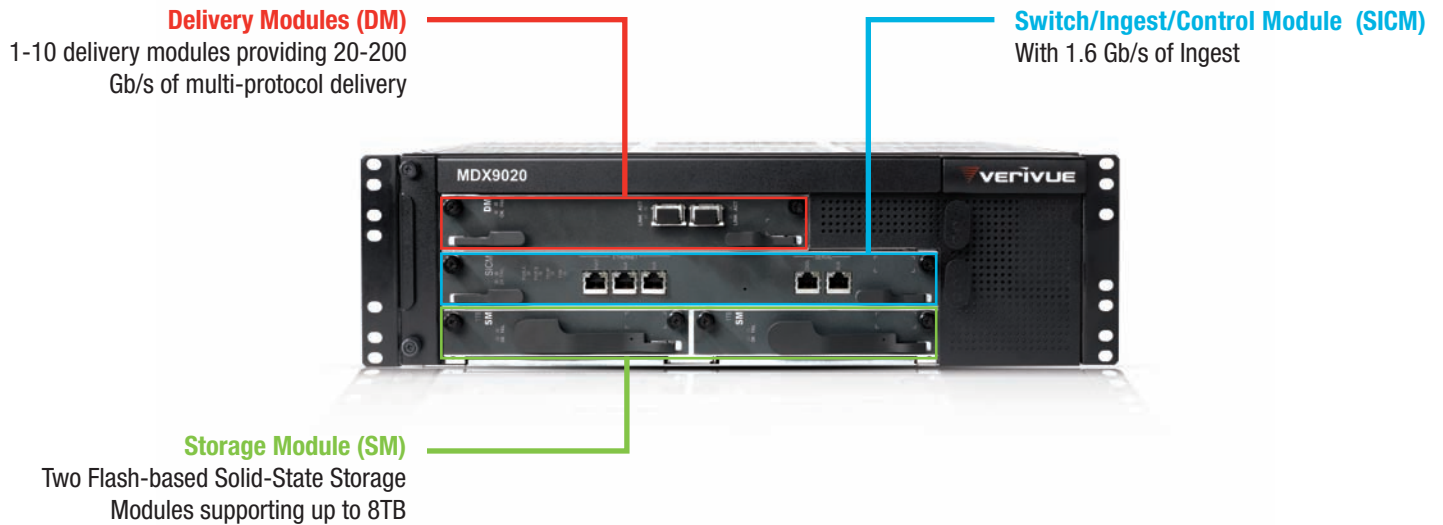
**Green Design Advantage** provides the most efficient power consumption, heat dissipation and space utilization, solving some of the most critical issues facing operators today.



### PLATFORM HIGHLIGHTS

- High performance and reliable Flash storage—No spin-up time, seek time or rotational latency
- Seamless support for HTTP and VOD/UDP media delivery from a single “Universal” Network Port.
- Ultra-low power consumption.
- Low footprint per stream density – 3RU
- Hot Swappable Storage; upgrade, add or replace modules with no down-time.
- Reduce the complexity/cost of multi-device solutions combining storage, Ethernet switching, Firewall, Load Balancer.
- Deliver long-tail content as easily and cost effectively as the most popular programming.
- Real time cache decision algorithms accounts for network availability/costs and fixed/on-demand content popularity.
- Dramatically reduced cooling requirements

## MDX 9020: HARDWARE SPECIFICATIONS



### MDX 9020 CHASSIS

Integrated L2/L3 Switch Fabric  
 Hot-Swappable Fan Trays  
 AC/DC Power Options, inc N+1  
 1 Delivery Module  
 1-2 Storage Modules, hot-swappable

### DIMENSIONS

Height: 13.3 cm (5.25 in.) 3-RU  
 Width: 44.2 cm (17.4 in.), 19 inch rack design  
 Depth: 55.88 cm (22 in.)  
 Weight: 35lbs

### POWER

800 Watts, Fully Populated  
 650 Watts, Minimal Populated

### INPUT VOLTAGE

-48V DC (-40 to -60)  
 110V/240v V (90-246 VAC)

### ENVIRONMENTALS

Operating Temperature:  
 - Long Term Operating: 5°– 40° C  
 - Short Term Operating: 5°– 50° C  
 Humidity  
 - Long Term Operating: 5%– 85%  
 - Short Term Operating: 5%– 95%

### Altitude

- Maximum at 30° C: 4000 Meters

### Minimum

- 650 Watts – 2218 BTU

### Maximum

- 800 Watts – 2730 BTU

### DELIVERY MODULE (DM)

Up to 20 Gb/s of streaming and delivery capacity

### STORAGE MODULE (SM)

Available in 1, 2 and 4 TB Capacities

### INTERFACE PORTS

#### Delivery Module

- 2 x 10 GbE – SM and MM XFP
- 20 x 1 GbE – Copper, SM and MM SFP

#### Switch/Ingest/Control Module

- 4 x 1GbE or 2 x 20 GbE

### NEBS COMPLIANCE

GR-78  
 GR-1089-CORE  
 GR-63-CORE

### SAFETY

EN 60950-1:2005  
 UI60950-1 :2007  
 CAN/CSA-C22.2 No. 60950-1 :2007

### ELECTROMAGNETIC EMISSIONS AGENCY

AS/NZS 3548:1995 (CISPR 22 Class A)  
 EMC Directive (89/336/EEC)  
 EN55022 Class A (CISPR-22 Class A)  
 ETSI 300-386  
 FCC Part 15 Class A  
 IEC60335-1 Class A  
 VCCI

### KEY FUNCTIONALITY

UDP/MPEG-2TS, HTTP-PDL, RTP  
 RTSP, RTP  
 MPEG-2, H.264, FLV, Silverlight,  
 Binary Images  
 Cable Environment:  
 NGOD, ISA

### MANAGEMENT SUPPORT

CLI  
 WebGUI  
 SNMP  
 MIB  
 NETCONF