



## Global Enterprise IPTV Delivered

Delivering Windows Media® video and audio has never been easier. Bridging low bandwidth bottlenecks, the WM Reflector enables live video across an entire WAN and extends live multi-cast video to the edge of the network.



### Capabilities

VBrick's WM Reflector Appliance is based on the award-winning VB6000 platform and provides multiple capabilities in one portable and reliable appliance.

**Reflecting** – Receive a live stream over the network and deliver it locally via unicast or multicast

The Reflector functionality allows a WM Appliance to receive video over a low bandwidth link and retransmit onto a local area network. This important capability allows the appliance to bridge low bandwidth bottlenecks by only delivering one video stream over the low bandwidth link and then delivering video to multiple end users at the far end.

**Serving** – Serve up to 200 live unicast streams or 20 on-demand streams

**Multicasting** – Multicast a live video directly from the appliance

**Pushing** – Push up to 25 simultaneous streams to VBricks or Windows Media® Servers

**Recording** – Record video that is being received over the network (requires optional hard drive)

**Remote Management** – Complete remote configuration and management solution via SNMP, or enable automated configuration download (new) via periodic configuration polling

### Models

#### Windows Media®

**9190-0200** – Windows Media® Reflector

#### Windows Media® Options

Hard Drive

### Compatibility

- IGMP v3
- SNMP v3
- Windows Media® Player 11 on Windows® XP and Vista
- Windows Media® Player 10 on Windows® XP
- Windows Media® Player 9 on Windows® 2000/XP and Mac OS X

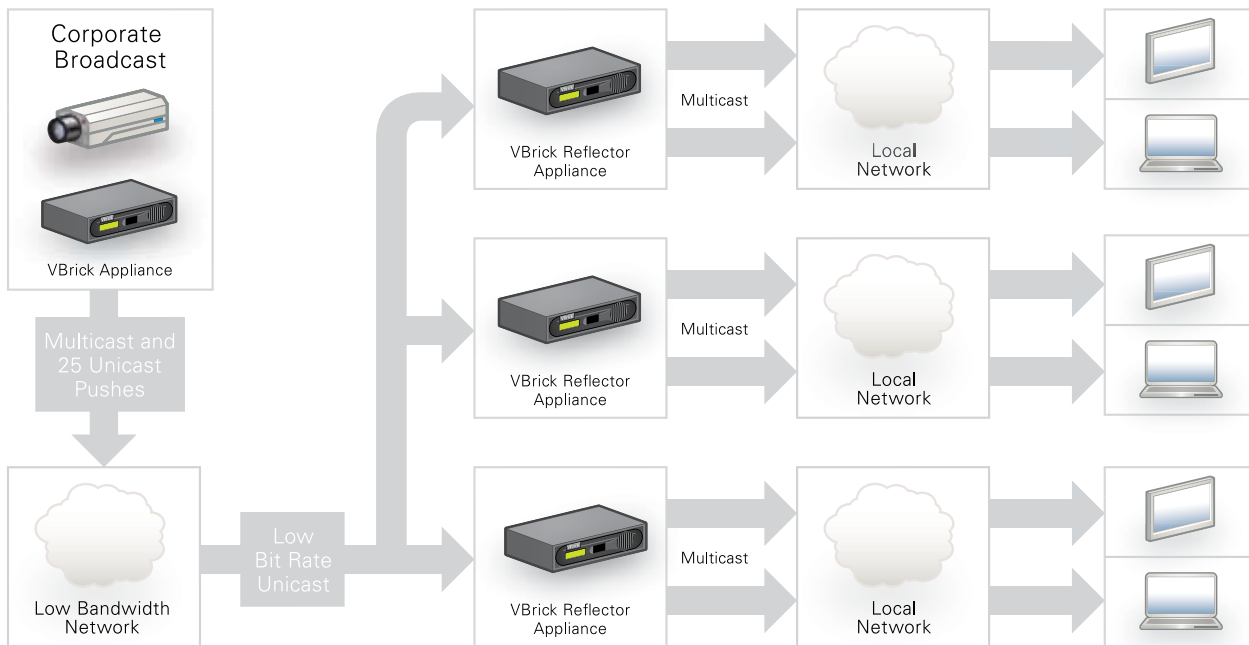
### Interoperability

- EtherneTV Suite – Portal Server, Scheduler, and Network Video Recorder
- EtherneTV IPR – low-cost video decoding
- VBrick VODWM servers
- Streamplayer software for desktop video decoding
- Microsoft Windows Media® Player and desktop media player

### Benefits

- Integrates seamlessly into existing Windows Media® deployments
- Eliminates Windows Media® Server requirements at the network edge
- Reflects any Windows Media® stream, including HD resolutions
- Easy to configure and use – streaming in a matter of minutes
- Streams to publishing points via push or pull
- Much lower delay (3-5 seconds) than with PC-based systems

The Reflector acts as a "bandwidth amplifier," enabling a bridge across low bandwidth sections of the enterprise network to provide multicast capability even at the edge of the network.



**Features and Specifications**

**Reflector**

- Receive a stream over the network and retransmit

**Protocols**

- Unicast / Multicast, DiffServ (QoS), UDP / IP / RTSP / HTTP / ASF

**Push**

- Up to 25 concurrent HTTP pushes to VBrick Appliances or Windows Media® Servers

**Server**

- Live multicast server
- Live streaming server - up to 200 concurrent live streams
- On-demand server - up to 20 concurrent on-demand streams

**Ethernet Network**

- 10/100 Mbps Ethernet via RJ-45, Static, or DHCP
- Auto sense Full / Half duplex

**Maintenance Port**

- Serial port for local maintenance or data transport

**Control Port**

- Serial port for data transport

**IR Remote Control**

- IR Remote Control for local control and configuration

**Dimensions**

- W 8.75 x H 2.3 x D 12.5 (W 22.2cm x H 5.8cm x D 31.7cm)

**Weight**

- Approx. 3.2 Kg (7 lbs)

**Temperature Range**

- Operating: 0° to +70° Celsius, operating humidity up to 90% non-condensing
- Non-operating: -10° to +70° Celsius

**Power Supply**

- Input: 100 to 240 VAC, 50 / 60 Hz, approximately 55 Watts  
Output: +24V up to 3.0A

**Regulatory**

- FCC Part 15, UL, CE

**Relay**

- Dry contact, 75mOhms, 2A @ 30VDC, 0.3A @ 110VDC, 0.5A @ 125VDC

**LCD**

- 32-Character display (16x2), backlit

**LED Status**

- Power In (24VDC), Activity, Link, 10/100

**SDK**

- Allows third-party developers and integrators to create custom applications and systems that incorporate video



VBrick's Network Video Appliances are renowned for their reliability, functionality, low delay, and ease of use. The VBrick WM Reflector Appliance can be used as a stand-alone video delivery device, or can be deployed as an integrated component of VBrick's award winning EtherneTV video delivery system. Additionally, the WM Reflector Appliance can be used in conjunction with VBrick's VBPresenter presentation software to provide an easy to deploy presentation system that synchronizes video from the WM Appliance with PowerPoint® slides and advanced features such as Q and A, polling, and guided web browsing.

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