

35HD-T and MMS 1000



### PROJECTOR PERFORMANCE SPECIFICATIONS

**Brightness** (±10%)  
18,000 Center lumens  
16,000 ANSI lumens

**Contrast Ratio** (±10%)  
1600:1 full-field

**Display Type** (one per R, G, B)  
3 x 1.26" dark metal HPO DMD™

**DMD Specification**  
2048 x 1080 pixels native, 12° tilt angle

**Fill factor**  
90% pixel fill factor

**Sealed Optics at DMD Interface**  
Protects DMD's from optical contamination

**Lamp Type**  
Proprietary xenon arc, bubble. Hyper-cooled lamp module with directional-flow reflector mask and radial heat exchanger.  
Digital Hour meter.

**Lamp Life**  
750 hours (typical)

**Lens Mount**  
Intelligent, programmable lens functionality  
Motorized horizontal and vertical lens shift, zoom and focus. 1/4 pixel landing accuracy.

**Lens Shift** (typical, dependent on lens)  
Vertical: ± 0.25-0.5 frame  
Horizontal: ± 0.1-0.25 frame

**Lens Options**

1.0	:1 fixed	1.8-2.4	:1 zoom
1.25-1.45	:1 zoom	2.2-3.0	:1 zoom
1.45-1.8	:1 zoom	3.0-4.3	:1 zoom

**Control**  
Rear touch screen with "ShowMode" diagnostics - provides direct control and feedback over projector functions.  
Wireless LAN "802.11b", LAN and RS232

**Mechanical Mounting**  
Floor or ceiling, front or rear. Integrated handles and rigging frame with pitch and roll adjustments, flexible stacking/rigging points.  
Rugged, stager tolerant chassis

**Orientation**  
360° front to back  
±15° left to right

**Dimensions** (excludes feet)  
43.4in(L) x 28.4in(W) x 18.7in(H)  
1103mm(L) x 721mm(W) x 475mm(H)

**Weight** (chassis only)  
249lbs (113kg)

Digital Projection International, the original innovator of the 3-chip DLP™ projector, proudly introduces the LIGHTNING 35HD-T Pro Series Display.

The 35HD-T carries forward all of the benefits of the Professional Series LIGHTNING Chassis - exceptional rigging and stacking hardware with integrated pitch and roll adjustments - while also delivering the enhanced benefits of active 3D capability, extended color depth and improved lumen maintenance.

Additional benefits of the LIGHTNING 35HD-T include:

- Active 3D compatibility up to 2K resolution
- Accepts sources up to 12 bits per color (R, G & B) through twin-dual DVI input.
- Sealed optics to protect DMD's and other focal plane components from airborne contaminants
- DPL's new, hyper-cooled lamp module with digital hour meter, dramatically improves projector thermal characteristics and extends reflector life and lumen maintenance.

When paired with the MMS 1000, the LIGHTNING 35HD-T can support any video, HD or computer source. The rack-mountable system includes DigiLink, a single-link DVI and twin-link DVI ultra-high bandwidth digital output to the projector, simplifying system wiring and reducing installation costs. The MMS 1000 also includes soft-edge blend and can be configured to incorporate options such as seamless switching and geometric warp.

The new LIGHTNING 35HD-T and MMS 1000 - an ultra powerful, immensely capable display for visualization, major events and color-critical applications - bringing the precision of Digital Projection, to the world's most demanding venues.

### MULTI-MEDIA SWITCHER 1000 SPECIFICATIONS

► Input capabilities-see table lower right

**Video Processing**  
10-bit processing from video input to output  
DigiScale - accurate image resizing for faithful reproduction of all displayed sources  
DigiView - optimized video processing, deinterlacing and 3:2 pull-down

**Edge Blending**  
DigiBlend - edge blending for tiling of multiple projected images

**Geometry**  
DigiWarp (optional) - user definable control over all image geometry. Horizontal/vertical and keystone warp correction for both cylindrical and spherical displays

**Interface To Projector Via DigiLink**  
High-bandwidth digital link extendable by rugged fibre optic cable providing optically-isolated interconnection - offering significant benefit to staging and installation customers by reducing cable complexity and signal interference due to grounding

**Control**  
Front panel LCD, IR/Hardwired remote control, external control via RS232/422, USB or LAN

**PC Card Slot**  
Wireless LAN, data download

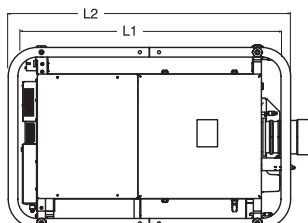
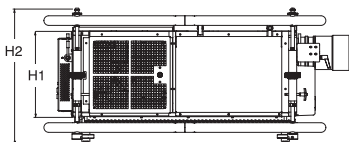
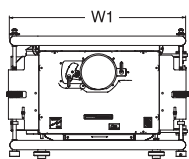
**Dimensions**  
Five RU 19" rack mountable  
17.7in(L) x 19in(W) x 8.7in(H)  
450mm(L) x 483mm(W) x 221mm(H)

### INPUT CAPABILITIES

Type	Connector	Quantity
<b>Projector input:<sup>1</sup></b>		
Single DVI wth loop through	DVI-D	1
(receives up to 8 bits per color (R,G,B) at up to 2048x1080 at 60Hz)		
Twin Dual DVI - MAIN + SUB	DVI-Dx2	1
(receives up to 12 bits per color (R,G,B) at up to 2048x1080 at 110Hz)		
<b>MMS 1000 input/output:</b>		
Four available input slots:		
<b>standard modules:<sup>2</sup></b>		
Composite / component video / S-video input module (mm-video)	BNCx1,BNCx3, 4-pin mini DIN	1 each
RGB HV / component input module (MM-RGB)	BNCx5	1
<b>optional modules:</b>		
DVI-D input module (MM-DVI)	DVI-D	1
SD-SDI / HD-SDI input module (MM-SDI)	BNCx2	1
<b>Output:</b>		
DigiLink	DVI-D	1

<sup>1</sup> Input selection is automatic but is prioritised to the MAIN+SUB input. Selection is by detection of DVI signal.

<sup>2</sup> See MMS 1000 user manual for detailed input specifications



Projector dimensions (in)  
W1 28.4 H1 17.1 L1 43.2

Frame dimensions (in)  
W1 28.4 H2 18.7 L2 43.4

Projector dimensions (mm)  
W1 721 H1 434 L1 1097



Frame dimensions (mm)  
W1 721 H2 475 L2 1103



Lightning 35HD-T back panel

## ADVANCED TECHNICAL SPECIFICATIONS

PARAMETER	 	
Color Temperature	3000-9300°K	NA
HDTV Formats Supported	All progressive formats	1080i/24p, 720p, 480p and other current and emerging formats
Scan Rates Supported	All progressive formats Horizontal: 31.5kHz to 105kHz / Vertical: 24Hz to 120Hz	Horizontal: 15kHz to 105kHz / Vertical: 24Hz to 110Hz
Remote Control	Secure wireless LAN "802.11b"	Infrared Remote, Secure 802.11b wireless LAN compatible
Automation Control	Secure wireless LAN "802.11b" LAN, RS232	RS232, USB, LAN
Operating/Storage Temperature	Operating: 10 to 35°C / Storage: -10 to 50°C	Operating: 10 to 35°C / Storage: -20 to 60°C
Operating Humidity	up to 80% non-condensing	
Thermal Dissipation	13640 BTU	1023 BTU maximum
Fan Noise	Less than 59dBA	NA
Power Requirements	200-240 VAC, 50/60Hz single phase	100-240 VAC, 50/60Hz single phase
Power Consumption	4000 watts	300 watts maximum

PROJECTOR	PART NO.	LENSES	PART NO.	OPTIONAL SYSTEM COMPONENTS	PART NO.
	105-033	1.0 :1 fixed	103-350	Replacement Lamp Module	103-238
		1.25-1.45:1 zoom	103-351	MMS 1000	001-724
		1.45-1.8 :1 zoom	102-451	Input cards:	
		1.8-2.4 :1 zoom	102-676	- Composite / component / S-Video input module (MM-Video)	001-726
		2.2-3.0 :1 zoom	102-677	- RGB HV / component input module (MM-RGB)	001-722
		3.0-4.3 :1 zoom	102-678	- DVI-D input module (MM-DVI)	001-721
				- SD-SDI / HD-SDI input module (MM-SDI)	001-720
				Processing options:	
				- Seamless switching / crossfade: <sup>2</sup>	
				• Scaler	001-729
				• Image processor	001-730
				- Geometry / Warp <sup>3</sup>	001-727
				- Wireless LAN card	001-723
					
				MMS 1000	

<sup>1</sup> See Digital Projection's Product Warranty Statement for details on lamp warranty

<sup>2</sup> Seamless switching requires the addition of two cards (image processor / scaler) which must be factory installed

<sup>3</sup> Geometry / warp is available only as a factory installed option