Satellite Modular Laser System
Specification (Preliminary)

Satellite MLS is a (r)evolution in projection technology.

- Totally configurable to overcome traditional installation challenges.
- Simple building blocks for complex applications.
Satellite TITAN MLS 4K-UHD
(Preliminary Specification)
8,600 to 35,000 Lumens @ 4K-UHD | 9,500 to 39,000 Lumens @ WUXGA
Contrast Ratio: 2,000:1

Key Features:
Satellite TITAN Head
Display Resolution 3840 x 2160
Separate Head - compact, lightweight & low noise
Sealed Optics
Near Maintenance free

Modular Light Source
RGB Laser Modular Light source
Near BT2020 colour space
Rack mountable • Fully Interlocked
Interconnection - Satellite Link Cable available in various lengths
Combine up to 4 Modular Light Sources, or share one source to multiple Heads

Key Specifications:

<table>
<thead>
<tr>
<th>Colour System:</th>
<th>RGB Laser</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display Type:</td>
<td>3 x 0.96&quot; DarkChip™ DMD™</td>
</tr>
<tr>
<td>Aspect Ratio:</td>
<td>16:9 (4K-UHD), 16:10 (WUXGA)</td>
</tr>
<tr>
<td>Video &amp; Graphics processing</td>
<td>Up to 120 fps 1920 x 1200 pixels sequential input via single DisplayPort or HDMI input. Up to 4K-UHD 60Hz compatibility. Smear reduction in WUXGA mode.</td>
</tr>
<tr>
<td>Colour adjustments</td>
<td>Up to 10 bits per colour (RGB) processing (depending on source and input type). Degamma table maps input to 16 bit palette (R, G &amp; B) for display. Degamma selection from a list. Individual R, G &amp; B lift and gain. Black and White level adjustment via Brightness &amp; Contrast control.</td>
</tr>
<tr>
<td>ColorMax™</td>
<td>Accurate colour matching of projectors in tiled or blended applications. User selection and storage of primary and secondary user defined color targets up to 7 points.</td>
</tr>
<tr>
<td>Mounting</td>
<td>Head mounting Fixing points on Top/Bottom and Sides. Additional front fixing for third party attachments e.g. optical blenders. MLS Mounting 19” 3U rack mounting SCM Mounting 19” 4U rack mounting</td>
</tr>
<tr>
<td>Lens Features</td>
<td>Robust lens mount with memorised position, zoom and focus. Extensive lens shift encompassing all lens capabilities. High quality, sharp lenses with wide focal ranges.</td>
</tr>
<tr>
<td>Source Compatibility</td>
<td>2D Graphics standards up to 4K-UHD (3840x2160) at 60Hz via HDMI 2.0 and DisplayPort. HDBaseT up to 30Hz. WUXGA (1920 x 1200) up to 120Hz. WUXGA mode - 2D sources up to WUXGA 120Hz and 4K-UHD 60Hz can be displayed and scaled to fit WUXGA. 4K-UHD mode - 2D sources up to 4K-UHD 60Hz will be scaled to fit 4K-UHD.</td>
</tr>
<tr>
<td>Inputs/Outputs</td>
<td>Video &amp; Computer</td>
</tr>
<tr>
<td>DisplayPort 1.2</td>
<td>DisplayPort</td>
</tr>
<tr>
<td>HDMI 2.0a</td>
<td>HDMI</td>
</tr>
<tr>
<td>HDBaseT</td>
<td>RJ45</td>
</tr>
</tbody>
</table>

|                      | Service         | Mini USB | 1 |

Document ref: 121-903A
**Formats Supported**
- 3840 x 2160p (24, 25, 30, 50, 60 Hz)
- 1080p/WUXGA (24, 25, 29.97, 30, 59.94, 60 Hz) (Up to 120 Hz)

**Computer Compatibility**
Up to 3840 x 2160

**Projector Head Control**
IR remote control & on-board keypad with OSD

**Automation Control**
LAN

**Colour Temperature**
User selectable from 3300 to 10000K

**iluminant Type**
RGB Laser Light Source

**Typical Illumination Life**
> 20,000 Hours

**Lenses**

<table>
<thead>
<tr>
<th>Lens Description</th>
<th>Part No.</th>
<th>Lens Shift (Frame)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.37:1 (Right Angled)</td>
<td>120-510</td>
<td>Ver: 0.6 (U) 0.6 (D) frame, Hor: 0.3 (L) 0.3 (R)</td>
</tr>
<tr>
<td>0.65:0.85:1 (Right Angled)</td>
<td>120-511</td>
<td>Ver: 0.5 (U) 0.5 (D) frame, Hor: 0.2 (L) 0.2 (R)</td>
</tr>
<tr>
<td>0.8-1.16:1 (inc support bracket)</td>
<td>120-827</td>
<td>Ver: 0.4 (U) 0.4 (D) frame, Hor: 0.19 (L) 0.19 (R)</td>
</tr>
<tr>
<td>1.16 - 1.49:1 zoom HB</td>
<td>109-236</td>
<td>Ver: 0.44 (U) 0.44 (D) frame, Hor: 0.188 (L) 0.188 (R)</td>
</tr>
<tr>
<td>1.39 - 1.87:1 zoom HB</td>
<td>105-610</td>
<td>Ver: 0.629 (U) 0.5 (D) frame, Hor: 0.188 (L) 0.188 (R)</td>
</tr>
<tr>
<td>1.87 - 2.56:1 zoom HB</td>
<td>105-611</td>
<td>Ver: 0.629 (U) 0.5 (D) frame, Hor: 0.188 (L) 0.188 (R)</td>
</tr>
<tr>
<td>2.56 - 4.16:1 zoom HB</td>
<td>105-612</td>
<td>Ver: 0.629 (U) 0.5 (D) frame, Hor: 0.188 (L) 0.188 (R)</td>
</tr>
<tr>
<td>4.16 - 6.96:1 zoom HB</td>
<td>105-613</td>
<td>Ver: 0.629 (U) 0.5 (D) frame, Hor: 0.188 (L) 0.188 (R)</td>
</tr>
<tr>
<td>6.92 - 10.36:1 zoom HB</td>
<td>109-235</td>
<td>Ver: 0.629 (U) 0.5 (D) frame, Hor: 0.188 (L) 0.188 (R)</td>
</tr>
</tbody>
</table>

**Lens Mount**
Motorised shift, zoom and focus. Intelligent Lens Memory with user-definable preset positions.

**Mechanical Mounting**
- Front/Rear Table
- Front/Rear Ceiling
- Adjustable Front/Rear Feet

**Orientation**
- Table Top or Inverted: Pointing Up, Pointing Down, Roll (Portrait)

**Power Requirements**
- **Head, MLS & SCM**
  - 110 - 240VAC 50/60Hz single phase

**Power Consumption**
- **Head**
  - 400W.
- **Single MLS**
  - 1000W
- **SCM**
  - 100W.

**Thermal Dissipation**
- **Head**
  - From 1700 to 2750 BTU/Hr, depending on number of Modular Light Sources connected
- **Single MLS**
  - 3412 BTU/hr

**Fan Noise**
- **Head**
  - <45 dBA
- **MLS**
  - <43 dBA
- **SCM**
  - <40 dBA

**Operating/Storage Temperature**
- Operating: 0 to 40°C (32 to 104°F)
- Storage: -20 to 60°C (-4 to 140°F) (Over 35°C Eco Mode)

**Operating Humidity**
- 20 to 80% non-condensing

**Weight**
- **Head**: 34.5 kg
- **MLS**: 17 kg (TBC)
- **SCM**: 10 kg (TBC)

**Dimensions**
- **Head**
  - H: 35.5 cm W: 45 cm L: 49.4 cm
  - H: 14 in W: 17.7 in L: 19.5 in
- **Modular Light Source (MLS)**
  - 19” 3U rack unit 70cm deep
- **Satellite Control Module (SCM)**
  - 19” 4U rack unit 40cm deep

**Systems**
- **Satellite TITAN 8,600 4K-UHD 60Hz with 10m Satellite Link Cable** - 121-380
- **Satellite TITAN 17,000 4K-UHD 60Hz with 10m Satellite Link Cable** - 121-381
- **Satellite TITAN 26,000 4K-UHD 60Hz with 10m Satellite Link Cable** - 121-382
- **Satellite TITAN 35,000 4K-UHD 60Hz with 10m Satellite Link Cable** - 121-383