
BROADCAST DISPLAYS
SHADING MULTIPLIED
sonoVTS **HD2LINE** and **HDQLINE** series of broadcast displays combine the best of 2 worlds:

- The robust workhorse HD2LINE incorporates a modular structure, analog and digital inputs, selected full HD LC panels, and proven digital processing.

- The future-proof HDQLINE, based on a platform concept, incorporates all-digital inputs and is readily upgradable to new standards such as video-over-IP. Heart of the platform is a powerful high-precision processing engine which, in combination with high quality UHD/FHD LC panels and cleverly designed software, fulfils the requirements of broadcast professionals.
The HDQLINE series of multistandard displays are ideally suited for critical high-end applications – wherever the brilliance and sharpness of ultra-high resolution images together with usability and future proofness are required.
In designing these displays, the priority was to achieve the full performance and capabilities required by broadcast professionals.

- No compromises in core features like colour reproduction, resolution, precise imaging, and picture quality.
- Ability to fit into most of today’s production environments without the need for additional options.
- Future proof platform design which allows adaptation to emerging technologies and upcoming standards.
- Fast and easy set-up and operation, even in stressful live applications.
MAIN FEATURES

Performance
- 24/7 operation, optimized for long life
- Powerful processing engine

Future proof
- Platform design, open for upcoming requirements and standards
  Optional:
  - HDR preview

Flexibility: input and output
- Input: 4 x 3G SDI (QDP models only), 2 x SDI, 2 x HDMI
- Output: 3G SDI
  Optional:
  - Input: 2x 12G SDI
  - Input: 2 x 6G SDI, 2 x 10GigE, SMPTE ST 2022 Video over IP *
  - SMPTE ST 2110 *
  - Input/Output: 4 x 3G SDI (SFP modules), 2 x 3G SDI
  - GigE

Display panel performance
- 10-bit FHD/UHD/4K Panels qualified by sonoVTS
- Wide viewing angle

Perfect colour reproduction
- Accuracy and consistency
- 3D LUT

System integration
- Wide range of control protocols (Image Video, TSL, Ember+)

Widgets
- IMD/UMD, Tally, ViTC, WSS, Markers, Borders

Applications:
- Direction rooms
- OB Van
- QC
- Videowall

Fast setup and control
- Remote and local keyboard
  Optional:
  - Display control software

Future proof
- Platform design, open for upcoming requirements and standards

Optional:
- HDR preview

Display panel performance
- 10-bit FHD/UHD/4K Panels qualified by sonoVTS
- Wide viewing angle

Perfect colour reproduction
- Accuracy and consistency
- 3D LUT

High quality alignment procedure
- Unique automatic colour alignment, MATCH+, adapted for UHD and WCG

* Version 1.5
FEATURES

HDQLINE display features (list not complete)
High quality panel, 16 bit signal processing, 4x 3G SDI (QDP models only), 2x 3G SDI, 2x HDMI, IMD (in monitor display), OSD (on screen display), quad-view, picture modes like A/B split, programmable alarms, protocols like Ember+.

Accepted signal formats amongst others are
3840x2160 (60/59.94/50/30/29.97/25/24p) QDP models only,
1920x1080 (60/59.94/50/48p), 1920x1080 (60/59.94/50/30/29.97/25/24I),
1920x1080 (30/29.97/25/24/23.98PsF).

The list of options includes
Powerful configuration and management software, high quality automatic colour management MATCH+, QIO Expansion Module, SMPTE ST 2022 interface*, SMPTE ST 2110 interface*.

Tally and remote control
HDQLINE displays integrate easily with existing Tally systems and controllers. Dynamic and static UMD/Tally support is provided via ethernet network protocols (sonoVTS IMD/Tally protocol/image video/TSL/Ember+) or up to 6 GPI contact closures, each GPI is individual configurable. In addition, an optional hardware control panel is available.

Widgets
HDQLINE displays can display a variety of additional information needed by professionals. This includes up to 16 channel audio level meters (AES/EBU/BBC/nordic scales)**, static and dynamic UMD, TV standard display, two independent timers, clocks (locked to external NTP)**. Furthermore, various markers can be used, e.g. for aspect ratio, safe area and centre. In addition to standard-based settings according to SMPTE and EBU specifications, each marker can be set manually. Moreover, users can also choose to display two safe area markers at the same time**. The colour, brightness, horizontal/vertical position, and width of any element can all be modified to your individual needs.

* Version 1.5  ** Version 2.0
# OVERVIEW MODELS

<table>
<thead>
<tr>
<th>CLASS 2 DISPLAY</th>
<th>CLASS 1 DISPLAY</th>
<th>CLASS 2 DISPLAY</th>
<th>CLASS 1 DISPLAY</th>
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<th>CLASS 1 DISPLAY</th>
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<td>HDP 174-A</td>
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<td>QDP 550-A</td>
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<td>65”</td>
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<td>QDP 650-A</td>
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**QIO Processing Engine**
At the heart of the HDQLINE displays is the custom-designed processing engine. In addition to providing most of the interfaces and the processing power needed for professional broadcast applications, it also enables adaptation to upcoming requirements and future standards.

**Flexibility:** input and output

**Complete list of interfaces:**
- 4x 3G SDI input (QDP models only) → 2x Dual coax/fiber (2x SFP modules, QDP displays only)
- 2x SDI input (3G) → 2x BNC
- 2x HDMI input → 1x BNC
- 2x 3G SDI input/output → HDMI 1.41
- 1x Displayport input → DP 1.1 (future use)
- 1x Audio output → Phone jack, analog stereo
- 1x AUX → RJ10, external keyboard, standard light control
- 1x GPI I/O → RJ 45, 8pin
- 1x LAN (1GigE) → RJ 45, display control/management
ST 2110 license (requires universal QIO Expansion Module)*
This license enables receiving of professional media over IP streams according to SMPTE ST 2110.*

Display control software
The display control software is the graphically-orientated, intuitive and user-friendly tool to control all parameters on individual displays as well as predefined groups of displays in a larger system like direction room or OB van. A complex video wall can easily be created by drag and drop display icons into your layout, either online (real time) or offline. The display control software gives a perfect overview of the settings of each display.

Automatic colour adjustment Match+ license
True and stable colour reproduction under various conditions is essential for many applications. The newly developed Match+ plugin for our display control software, based on the experience of the renowned colour calibration tools of HD2LINE and QLine series, Match+ is the ultimate tool for automatic colour space adjustment. It supports many professional spectro radiometer measurement kits like Minolta CS200, CS2000, Klein K-10 or Jeti specbos 1211, etc.
QIO Expansion Module
This plugin board adds multiple in- and outputs to the HDQLINE display platform and therefore increases the flexibility and the number of possible applications for this new family of professional displays. Among them are 2x 10GigE SMPTE ST 2022/ST 2110 video-over-IP (up to 4 channels each) interfaces* and 2x 12G SDI single link UHD/4K interfaces.

Complete list of interfaces:
- 2 independent 10GigE interfaces prepared to support SMPTE ST2022 or ST2110 video-over-IP*
- 2x 2x 3G SDI input/output
- 2x 12G SDI input
- 2x 3G SDI input/output
- 1 GigE

* Version 1.5
QIO 12G Input Module
This optional board adds 2x 12G SDI single link UHD/4K inputs to the HDQLINE display platform. To widen the application area one input supports SFP modules, thereby allowing fiber or copper connection.

Complete list of interfaces:
- 1x 12G SDI input (1.5G – 12G) A → 1x BNC
- Loop out channel A → 1x BNC
- 1x 12G SDI input (1.5G – 12G) → 1x Coax/fiber (SFP module not included)
- Loop out channel B → 1x BNC
- 1x 3G SDI output (monitoring of a single quadrant) → 1x BNC
High dynamic range (HDR) allows to capture an enormous range of luminance values – much more than most of the available broadcast displays are able to reproduce.

**HDRpreview option helps to overcome this situation by delivering:**
- A set of EOTF (electro optical transfer function) curves, perfectly adapted to the LCD panel build in the display, render images to appear closer to how the human eye perceives the real world compared to existing SDR displays. Up to 8 different curves are available in the display. The list of supported HDR formats include HLG, PQ, Sony S-Log3, and ARRI LogC.
- EOTF Split, split screen function, allows to compare the impact of 2 different EOTFs on a single image (available on UHD models).
Common to all HDQUALINE FHD displays is the usage of high quality professional grade LCD panels, the unique processing engine from the UHD display series, and the platform concept devised to enable subsequent upgrades to video over IP, 12G SDI input, and other future options.

- **TYPE**
  - Multiformat FHD LCD display
- **PANEL**
  - Professional grade LCD panel
- **GAMMA CORRECTION**
  - 10 bit gamma correction 1.8, 2.0, 2.2, 2.35, 2.4, 2.6 or User 1.8 - 2.6 in 0.05 steps
- **COLOUR TEMPERATURE**
  - 6504 K, user selectable by Match+ software
- **SCALING**
  - Native/4:3/16:9/full screen/user
- **MOTION ADAPTATION**
  - High performance motion adaptive deinterlacer
- **INPUT**
  - 2x BNC, 3G SDI; 2x HDMI 1.41; 2x SFP cages (for optional fiber or copper I/F)
- **VIDEO OUTPUT**
  - 1x BNC, 3G SDI
- **AUDIO OUTPUT**
  - Analog stereo (phone jack)
- **ETHERNET NETWORK**
  - Remote control, colour alignment, dynamic IMD and Tally/RJ-45, 10/100/1000 Base-T
- **AUX**
  - 4 pin RJ 10 connector, external keyboard
- **GPI**
  - Static IMD and Tally, function key/8 pole RJ45 connector
- **POWER REQUIREMENT**
  - AC 100 – 240 V, 50/60 Hz
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<td>16:9</td>
<td>16:9</td>
<td>16:9</td>
<td>16:9</td>
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<tr>
<td>ACTIVE SCREEN (in mm)</td>
<td>374.40 x 234.00</td>
<td>408.96 x 230.04</td>
<td>475.20 x 267.30</td>
<td>518.40 x 324.00</td>
<td>698.40 x 392.85</td>
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<td>927.94 x 521.96</td>
<td>1209.60 x 680.40</td>
<td>1209.60 x 680.40</td>
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<td>COLOURS</td>
<td>16.7 M</td>
<td>16.7 M</td>
<td>16.7 M</td>
<td>16.7 M</td>
<td>16.7 M</td>
<td>1.07 B</td>
<td>1.07 B</td>
<td>1.07 B</td>
<td>1.07 B</td>
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<tr>
<td>BRIGHTNESS</td>
<td>100 cd/m² (conforms to EBU spec.) or user selectable</td>
<td>100 cd/m² (conforms to EBU spec.) or user selectable</td>
<td>100 cd/m² (conforms to EBU spec.) or user selectable</td>
<td>100 cd/m² (conforms to EBU spec.) or user selectable</td>
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<td>100 cd/m² (conforms to EBU spec.) or user selectable</td>
<td>100 cd/m² (conforms to EBU spec.) or user selectable</td>
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<tr>
<td>CONTRAST RATIO</td>
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<td>1000:1</td>
<td>1000:1</td>
<td>1000:1</td>
<td>1300:1</td>
<td>1300:1</td>
<td>1300:1</td>
<td>1300:1</td>
<td>1200:1</td>
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<td>70% NTSC (CIE 1931)</td>
<td>72% NTSC (CIE 1931)</td>
<td>72% NTSC (CIE 1931)</td>
<td>72% NTSC (CIE 1931)</td>
<td>72% NTSC (CIE 1931)</td>
<td>72% NTSC (CIE 1931)</td>
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<td>DIMENSIONS (in mm)</td>
<td>399 x 260 x 137</td>
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<td>558 x 359 x 90</td>
<td>737 x 442 x 87</td>
<td>954 x 548 x 91</td>
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<td>1212 x 683 x 113, Bezel 0.9</td>
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<td>4.4 kg</td>
<td>4.8 kg</td>
<td>approx. 6.6 kg</td>
<td>9.6 kg</td>
<td>approx. 16.8 kg</td>
<td>20.6 kg</td>
<td>approx. 27.5 kg</td>
<td>approx. 22.5 kg</td>
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<td>25W/40W</td>
<td>30W/45W</td>
<td>approx. max. 45W</td>
<td>30W/65 W</td>
<td>approx. max. 120W</td>
<td>45W/140W</td>
<td>approx. max. 150W</td>
<td>approx. max. 275W</td>
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<tr>
<td>MOUNTING</td>
<td>VESA MIS-D, 100 x 100, M4 x 10 mm, C</td>
<td>VESA MIS-D, 100 x 100, M4 x 10 mm, C</td>
<td>VESA MIS-D, 100 x 100, M4 x 10 mm, C</td>
<td>VESA MIS-D, 100 x 100, M4 x 10 mm, C</td>
<td>VESA MIS-D, 100 x 100, M4 x 10 mm, C</td>
<td>VESA MIS-F, 400 x 400, M6 x 20 mm, C (200 x 200), with optional adapter</td>
<td>VESA MIS-F, 400 x 400, M6 x 20 mm, C (200 x 200), with optional adapter</td>
<td>VESA MIS-F, 400 x 400, M6 x 20 mm, C (200 x 200), with optional adapter</td>
<td>VESA MIS-F, 400 x 400, M6 x 20 mm, C (200 x 200), with optional adapter</td>
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</table>

**Notes:**
- All models comply with the EBU spec.
- Bezel dimensions are approximate.
TECHNICAL SPECIFICATIONS
FHD REFERENCE DISPLAYS

Common to all HDQLINE FHD reference displays is the usage of superior quality professional grade LCD panels, the unique processing engine from the HDQLINE UHD display series, and the platform concept devised to enable subsequent upgrades to video over IP, 12G SDI input, and other future options.

- **TYPE** → Multiformat FHD reference LCD display
- **PANEL** → Superior quality professional grade LCD panel
- **GAMMA CORRECTION** → 10 bit gamma correction 1.8, 2.0, 2.2, 2.35, 2.4, 2.6 or user 1.8 - 2.6 in 0.05 steps
- **COLOUR TEMPERATURE** → 6504 K, user selectable by Match+ software
- **SCALING** → Native/4:3/16:9/full screen/user
- **MOTION ADAPTION** → High performance motion adaptive deinterlacer
- **INPUT** → 2x BNC, 3G SDI; 2x HDMI 1.41; 2x SFP cages (for optional fiber or copper I/F)
- **VIDEO OUTPUT** → 1x BNC, 3G SDI
- **AUDIO OUTPUT** → Analog stereo (phone jack)
- **ETHERNET NETWORK** → Remote control, colour alignment, dynamic IMD and Tally/RJ-45, 10/100/1000 Base-T
- **AUX** → 4 pin RJ 10 connector, external keyboard
- **GPI** → Static IMD and Tally, function key/8 pole RJ45 connector
- **POWER REQUIREMENT** → AC 100 – 240 V, 50/60 Hz
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<th>HRDP 240-A</th>
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<td>16:10</td>
<td>16:9</td>
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<td>SCREEN SIZE</td>
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<td>COLOURS</td>
<td>1.07 B</td>
<td>1.07 B</td>
<td>1.07 B</td>
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<td>BRIGHTNESS</td>
<td>100 cd/m² (conforms to EBU spec.) or user selectable / 450 cd/m²</td>
<td>100 cd/m² (conforms to EBU spec.) or user selectable / 400 cd/m²</td>
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<td>1500:1</td>
<td>1400:1</td>
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<td>DIMENSIONS</td>
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<td>WEIGHT</td>
<td>4.5 kg</td>
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<td>9.6 kg</td>
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<td>POWER CONS.</td>
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<td>30W/65W</td>
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<td>VESA MIS-D, 100 x 100, M4 x 10 mm, C</td>
<td>VESA MIS-D, 100 x 100, M4 x 10 mm, C</td>
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Common to all HDQLINE UHD displays is the usage of superior quality professional grade UHD/4K LCD panels, the unique processing engine from the HDQLINE UHD display series, and the platform concept devised to enable subsequent upgrades to video over IP, 12G SDI input, HDRpreview, and other options.

- **TYPE** → Multiformat UHD LCD display
- **PANEL** → Superior quality professional grade UHD LCD panel
- **GAMMA CORRECTION** → 10 bit gamma correction 1.8, 2.0, 2.2, 2.35, 2.4, 2.6 or user 1.8 - 2.6 in 0.05 steps
- **COLOUR TEMPERATURE** → 6504 K, user selectable by Match+ software
- **SCALING** → Native/4:3/16:9/full screen/user
- **MOTION ADAPTATION** → High performance motion adaptive deinterlacer
- **INPUT** → 4x HD BNC 3G SDI (in 2x SFP cages, fiber optional), 2x BNC, 3G SDI; 2x HDMI 1.41
- **VIDEO OUTPUT** → 1x BNC, 3G SDI
- **AUDIO OUTPUT** → Analog stereo (phone jack)
- **ETHERNET NETWORK** → Remote control, colour alignment, dynamic IMD and Tally/RJ-45, 10/100/1000 Base-T
- **AUX** → 4 pin RJ 10 connector, external keyboard
- **GPI** → Static IMD and Tally, function key/8 pole RJ45 connector
- **POWER REQUIREMENT** → AC 100 – 240 V, 50/60 Hz
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<td>COLOURS</td>
<td>16.7 M</td>
<td>1.07 B</td>
<td>1.07 B</td>
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<td>100 cd/m² (conforms to EBU spec.) or user selectable / 350 cd/m²</td>
<td>100 cd/m² (conforms to EBU spec.) or user selectable / 500 cd/m²</td>
<td>100 cd/m² (conforms to EBU spec.) or user selectable / 500 cd/m²</td>
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</tr>
<tr>
<td>CONTRAST RATIO</td>
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<td>1000:1</td>
<td>1100:1</td>
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<tr>
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<td>100% ADOBE RGB</td>
<td>100% sRGB</td>
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<td>68% NTSC (CIE 1931)</td>
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</tr>
<tr>
<td>DIMENSIONS (in mm) (w x h x d)</td>
<td>412 x 265 x 137</td>
<td>555 x 333 x 90</td>
<td>743 x 442 x 87</td>
<td>1105 x 638 x 91</td>
<td>1242 x 715 x 91</td>
<td>1461 x 838 x 92</td>
</tr>
<tr>
<td>WEIGHT</td>
<td>3.9 kg</td>
<td>6.4 kg</td>
<td>10.7 kg</td>
<td>20.2 kg</td>
<td>23.6 kg</td>
<td>approx. 35 kg</td>
</tr>
<tr>
<td>POWER CONS. (min/max)</td>
<td>30W/40W</td>
<td>45W/100W</td>
<td>50W/85W</td>
<td>50W/120W</td>
<td>50W/130W</td>
<td>approx. max. 145W</td>
</tr>
<tr>
<td>MOUNTING</td>
<td>VESA MIS-D, 100 x 100, M4 x 10 mm, C</td>
<td>VESA MIS-D, 100 x 100, M4 x 10 mm, C</td>
<td>VESA MIS-D, 100 x 100, M4 x 10 mm, C</td>
<td>VESA MIS-F, 400 x 400, M6 x 20 mm, C (200 x 200), with optional adapter</td>
<td>VESA MIS-F, 400 x 400, M6 x 20 mm, C (200 x 200), with optional adapter</td>
<td>VESA MIS-F, 400 x 400, M6 x 20 mm, C (200 x 200), with optional adapter</td>
</tr>
</tbody>
</table>
Common to all HDQLINE UHD reference displays is the usage of superior quality professional grade UHD/4K LCD panels, the unique processing engine, and the platform concept devised to enable subsequent upgrades to video over IP, 12G SDI input, HDRpreview, and other future options.

- **TYPE** ➔ Multiformat UHD/4K reference LCD display
- **PANEL** ➔ Superior quality professional grade UHD/4K LCD panel
- **GAMMA CORRECTION** ➔ 10 bit gamma correction 1.8, 2.0, 2.2, 2.35, 2.4, 2.6 or user 1.8 - 2.6 in 0.05 steps
- **COLOUR TEMPERATURE** ➔ 6504 K, user selectable by Match+ software
- **SCALING** ➔ Native/4:3/16:9/full screen/user
- **MOTION ADAPATION** ➔ High performance motion adaptive deinterlacer
- **INPUT** ➔ 4x HD BNC 3G SDI (in 2x SFP cages, fiber optional), 2x BNC, 3G SDI; 2x HDMI 1.41
- **VIDEO OUTPUT** ➔ 1x BNC, 3G SDI
- **AUDIO OUTPUT** ➔ Analog stereo (phone jack)
- **ETHERNET NETWORK** ➔ Remote control, colour alignment, dynamic IMD and Tally/RJ-45, 10/100/1000 Base-T
- **AUX** ➔ 4 pin RJ 10 connector, external keyboard
- **GPI** ➔ Static IMD and Tally, function key/8 pole RJ45 connector
- **POWER REQUIREMENT** ➔ AC 100 – 240 V, 50/60 Hz
<table>
<thead>
<tr>
<th>MODEL</th>
<th>QRDP 310-A</th>
<th>QRDP 550-A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>31”</td>
<td>55”</td>
</tr>
<tr>
<td>ASPECT RATIO</td>
<td>17:9</td>
<td>16:9</td>
</tr>
<tr>
<td>ACTIVE SCREEN (in mm)</td>
<td>697.96 x 368.04</td>
<td>1209.60 x 680.40</td>
</tr>
<tr>
<td>COLOURS</td>
<td>1.07 B</td>
<td>1.07 B</td>
</tr>
<tr>
<td>BRIGHTNESS</td>
<td>100 cd/m² (conforms to EBU spec.) or user selectable / 350 cd/m²</td>
<td>100 cd/m² (conforms to EBU spec.) or user selectable / 700 cd/m²</td>
</tr>
<tr>
<td>CONTRAST RATIO</td>
<td>1500:1</td>
<td>1400:1</td>
</tr>
<tr>
<td>COLOUR GAMUT</td>
<td>108% NTSC (CIE 1931)</td>
<td>73% NTSC (CIE 1931)</td>
</tr>
<tr>
<td>DIMENSIONS (in mm) (w x h x d)</td>
<td>740 x 411 x 95</td>
<td>1262 x 733 x 95</td>
</tr>
<tr>
<td>WEIGHT</td>
<td>9.6 kg</td>
<td>approx. 30 kg</td>
</tr>
<tr>
<td>POWER CONS. (min/max)</td>
<td>40W/100W</td>
<td>approx. max. 275W</td>
</tr>
<tr>
<td>MOUNTING</td>
<td>VESA MIS-D, 100 x 100, M4 x 10 mm, C</td>
<td>VESA MIS-F, 400 x 400, M6 x 20 mm, C (200 x 200), with optional adapter</td>
</tr>
</tbody>
</table>
High performance broadcast full HD displays
HD2LINE stands for the proven and well-known generation of full HD broadcast displays, utilizing high quality video and audio processing hardware combined with broadcast-grade LC display technology. HD2LINE delivers the performance and features broadcast professionals require, robustness, stability, colour accuracy, precise imaging and picture quality.
FEATURES

HD2LINE displays feature include:
1920x1080 (1200) panel resolution, high quality signal processing, modular slot concept, DVI, VGA, and CVBS inputs, IMD (in monitor display), OSD (on screen display), programmable alarms, control protocols like Ember+, TSL.

Accepted signal formats amongst others are:
1920x1080 (60/59.94/50/25/24/23.98p), 1920x1080 (60/59.94/50/30/29.97/25/24i), 1920x1080 (30/29.97/25/24/23.98PsF), 1280x720 (60/50p), 768x576 (25i), 640x480 (29.97i).

The list of options includes
High quality automatic colour management MATCH. User friendly configuration and management software DCS, PDP SDI-3G-F 3GB/HD/SD-SDI-Fiber Optic interface, dual-link, loudness and 3D mixer.

Tally and remote control
HD2LINE displays interface to many existing Tally systems and controllers. Dynamic and static UMD/Tally support is provided via ethernet network protocols (HD2LINE/image video/TSL/Ember+) or up to 12 GPI contact closures, each GPI is individual configurable.

Widgets
HD2LINE monitors can display a variety of additional information required by professionals. This includes up to 16 channel audio level meters, static and dynamic UMD, timecode (VITC) display, TV standard display, two independent timers, clocks (locked to external NTP), a WSS indicator and a Dolby signal indicator. Furthermore, various markers can be used, e.g. for aspect ratio, safe area, and centre. In addition to norm settings according to SMPTE and EBU specifications, each marker can be set manually. In addition, users can also choose to display two safe area markers at the same time.
The colour, brightness, horizontal/vertical position, and width of any element can all be modified to your individual requirements.
Flexible input & output configuration
HD2LINE displays feature DVI, VGA, and CVBS inputs as standard. The HD2LINE series displays use a modular slot concept, enabling one or more optional SDI input boards to be installed in any of the three available slots according to individual needs. Installed boards are automatically recognised by the display without having to reconfigure the device.

Complete list of interfaces:
- 1x CVBS (composite video) input → 1x BNC
- 1x DVI-I input → 1x DVI-I connector
- 1x VGA input → 1x Sub-D, 15pin
- 1x LAN (10/100) → RJ 45-8pin, display control/management
- 1x GPI I/O → Sub-D, 15pin, static IMD and Tally
PDP SDI-3G-F

This option board widens the application field by adding several 3G inputs (1080P) to the HD2LINE family of displays. In the basic configuration the board comes with 2 SDI BNC inputs, but up to 2 more inputs can be added by inserting an optional (fiber/copper) SFP module. The selected inputs can be ‘looped through’ to the SDI output connectors.

Complete list of interfaces:

- 2x SDI input (3G) → 2x BNC
- 2x SDI input (3G) → Single/dual coax/fiber (SFP module not included)
- 2x SDI output (active loop thru of selected inputs) → 2x BNC

Available Licenses: dual-link (2x 1.5G), loudness and 3D mixer
Common to all HD2LINE displays is the usage of professional grade LCD panels, the proven processing engine, and the slot concept to enable later upgrades to 3G SDI via copper or fiber.

<table>
<thead>
<tr>
<th>TYPE</th>
<th>Full HD LCD display</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAMMA CORRECTION</td>
<td>10 bit gamma correction 1.0, 1.5, 1.8, 2.0, 2.2, 2.35, 2.5 or User 1.0 – 5.0 in 0.05 steps</td>
</tr>
<tr>
<td>COLOUR TEMPERATURE</td>
<td>3200 K/5500 K/6504 K/9300 K</td>
</tr>
<tr>
<td>SCALING</td>
<td>Native/4:3/16:9/full screen/WSS/AFD/user</td>
</tr>
<tr>
<td>MOTION ADAPTATION</td>
<td>Motion adaptive deinterlacer</td>
</tr>
<tr>
<td>INPUT</td>
<td>1x DVI-I, 1x VGA, 1x CVBS, optional 2x BNC (3G SDI), 1x SFP cage (for optional fiber or copper I/F)</td>
</tr>
<tr>
<td>VIDEO OUTPUT</td>
<td>optional: 2x BNC, 3G SDI</td>
</tr>
<tr>
<td>ETHERNET NETWORK</td>
<td>Remote control, colour alignment, dynamic IMD and Tally/RJ-45, 10/100 Base-T</td>
</tr>
<tr>
<td>GPI</td>
<td>Static IMD and Tally, function key/15pin Sub-D male connector</td>
</tr>
<tr>
<td>POWER REQUIREMENT</td>
<td>AC 100 – 240 V, 50/60 Hz</td>
</tr>
<tr>
<td>MODEL</td>
<td>PDP 17,3W</td>
</tr>
<tr>
<td>-------</td>
<td>-----------</td>
</tr>
<tr>
<td></td>
<td>17.3&quot;</td>
</tr>
<tr>
<td>ASPECT RATIO</td>
<td>16:9</td>
</tr>
<tr>
<td>ACTIVE SCREEN (in mm)</td>
<td>381.89 x 214.81</td>
</tr>
<tr>
<td>COLOURS</td>
<td>1.07 B</td>
</tr>
<tr>
<td>BRIGHTNESS</td>
<td>80, 90, 95, 100 conform to EBU, user selectable / 300 cd/m²</td>
</tr>
<tr>
<td>CONTRAST RATIO</td>
<td>1000:1</td>
</tr>
<tr>
<td>COLOUR GAMUT</td>
<td>110% NTSC (CIE 1931)</td>
</tr>
<tr>
<td>DIMENSIONS (in mm) (w x h x d)</td>
<td>409 x 265 x 122</td>
</tr>
<tr>
<td>WEIGHT</td>
<td>4.0 kg</td>
</tr>
<tr>
<td>POWER CONS. (min/max)</td>
<td>20W/40W</td>
</tr>
<tr>
<td>MIS-D, VESA 100, M4 x 10, C</td>
<td>MIS-D, VESA 100, M4 x 10, C</td>
</tr>
</tbody>
</table>
HDQLINE VIDEO WALL XSB-SERIES

HDQLINE XSB represents the latest generation of video wall broadcast displays, incorporating a super narrow bezel with a minimum of **1.8 mm thinness** (bezel to bezel) for seamless large screens. The XSB family allows either horizontal or vertical installation, without any difference in panel lifetime. The HDQLINE XSB-Series is based on the powerful processing platform of HDQLINE and the latest 10 bit full HD panels – the guarantee for colour accuracy, precise imaging, and picture quality.