

QVM6800+

Quad-Split Multiviewer Card with Cascading Capability



The Harris® QVM6800+ processors provide full multi-image processing functionality for the popular Harris 6800+™ modular core processing platform. Providing comprehensive control and monitoring at a low cost, the QVM6800+ cards offer a revolutionary, small-footprint multiviewer solution that is ideal for outside broadcast/mobile production vehicles, studio production facilities and existing 6800+ users.

The QVM6800+ operates in two modes — as a standalone quad card for standard four-inputs-to-one-display applications; and, using its unique cascading capabilities, as a modular multiviewer offering 8-, 12-, 16-, 20- or 24-inputs-to-one display. The QVM6800+ cards are designed for use in the 2RU, 20-slot 6800+ frame. This industry-leading frame offers integral cooling, enhanced hot-swappable power supplies and a lightweight construction, while supporting a full range of modules for processing, distribution and conversion. As each QVM6800+ card occupies only three 6800+ slots, up to six quads can be populated in a single frame alongside any of the other hundreds of 6800+ cards — offering a great space-saving solution.

Each QVM6800+ card version features four auto-sensing inputs, as well as simultaneous DVI and HD-SDI outputs — ensuring exceptional image quality. In addition, both cards offer resolutions up to 1920x1200 (1920x1080 when cascading) and embedded audio and video alarm capabilities.

PRODUCT DETAILS

Cascading Function

The unique cascading function of the QVM6800+C allows the user to build or reconfigure a multiviewer architecture to suit the varied and changing applications in any workflow. In the cascading model, the fifth loop input becomes active — the user can take the output from one card and cascade to the next, and connect multiple cards to build up larger single-output systems (for instance, link four cards together to form a 16-inputs-to-one-display). The cascade function operates without any loss of quality or any additional processing delays. The worst possible delay for any source to the output is one frame. The control of multiple cards in this mode has been simplified by the Z-Configurator cascade editor, which allows the user to select and group cascaded units so they can be viewed and controlled as a single multiviewer.

Control/Ease of Use

With an extensive standard feature set, the QVM6800+ multiviewer cards have numerous control options, including the intuitive Z-Configurator layout editing software — an easy-to-use Windows®-based editor that allows a user to quickly configure any Harris multiviewer for setup and operation. With Z-Configurator, the user can create and edit onscreen layouts; adjust system configurations such as network settings and resolution; set up and enable alarms; and access control functionality by selecting audio monitor output and full-screen operation. Cascade “make and break” is quickly and simply achieved through the Z-Configurator software’s frame view. Once a cascade has been created, the cards operate and are controlled as a single multiviewer system.

FEATURES

The QVM6800+ series provides a high-quality 3 Gb/s monitoring solution in a small form factor, allowing up to six quads in a single 2RU frame. The cascading function provides the flexibility to build and rebuild systems to suit changing monitoring requirements.

- Auto-detection of up to four analog, HD (720p, 1080i, 1080p) or SDI (525, 625) inputs
- Cascading model can be configured to provide up to 24 sources on one display
- Auto-detection of analog, HD (720p, 1080i, 1080p) or SDI (525, 625) inputs
- 3 Gb/s-capable
- Native HD and SD input processing to ensure excellent in picture quality
- DVI-D output up to 1920x1080 when cascading or 1920x1200 in fixed quad model with simultaneous DVI and HD-SDI output
- Lowest minimum frame delays (<1 frame), even for cascaded model — critical in production environments
- Embedded audio ballistic meters and alarms
- Full-screen, quad-split and any four-window display configuration
- NTP + LTC timecode support and digital clock display
- Instant display reconfigurability — all four inputs are scalable and resizable
- Numerous options for flexible operator control, including Z-Configurator™ software
- Dynamic and static UMD protocol support
- Configurable preset layouts
- Configurable tally lamps with up to four tally lamps per video window
- Onscreen alarms and SNMP notification for immediate response
- Onscreen clock and timer
- Four GPI inputs for fullscreen, preset or tally selection



Z-Configurator Cascade Editor

Applications

The superb image quality and low latency of the QVM6800+ cards make them ideal for production applications. Low power consumption (<15 W per quad) and compact size combine to make the QVM6800+ a popular choice for outside broadcast (OB) vehicles as well. Furthermore, the flexibility of the cascading function makes this card an excellent option in flyaway kits, where the ability to quickly and easily reconfigure the number of inputs to a display to match changing requirements is a key feature.

6800+ Modular Platform

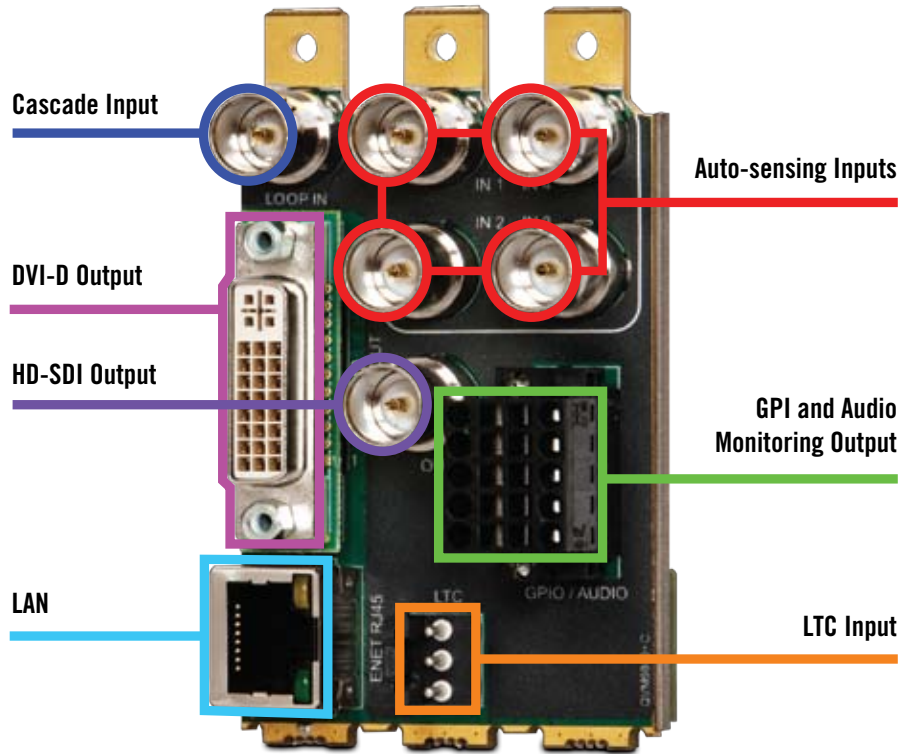
The 6800+ modular core processing platform addresses virtually any application and makes it easy to migrate to new standards without rebuilding the existing infrastructure, thus providing significant savings. With a lightweight construction perfect for any fixed or mobile installation, the frame supports a full range of modules for AV processing and multiplexing, advanced audio, networking, 3 Gb/s processing, compression, distribution, frame synchronization, HD conversion, fiber optics and multi-source monitoring.

QVM6800+

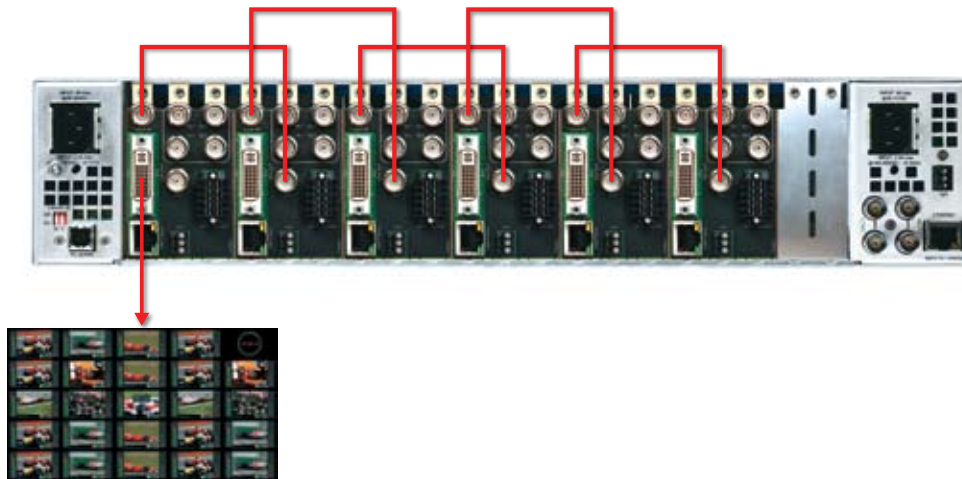
Quad-Split Multiviewer Card with Cascading Capability

MULTIVIEWERS // HVIEW™ QS — SPACE-SAVING, QUAD-SPLIT CARDS

IMAGES/DIAGRAMS



1 x 24 QVM6800+C Frame Configurations

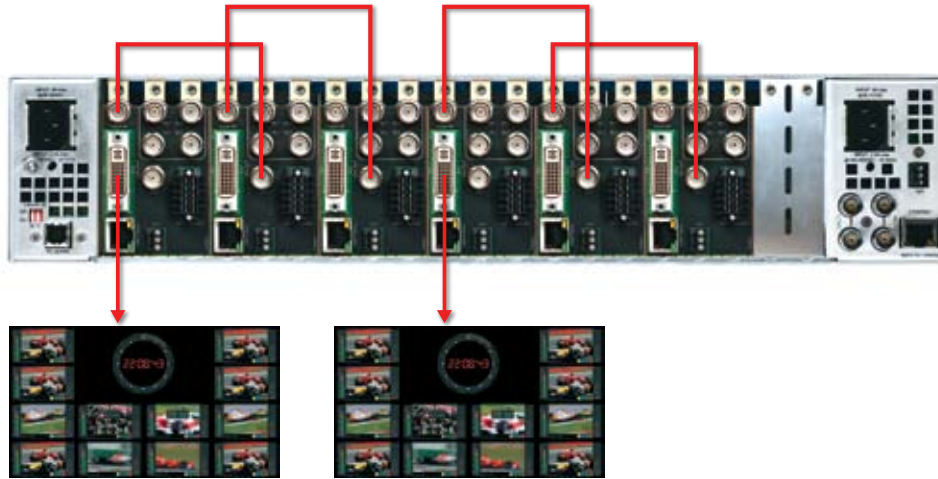


QVM6800+

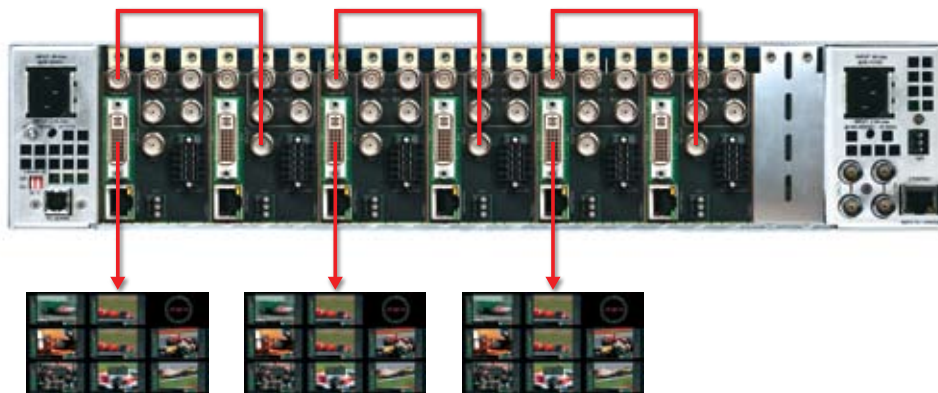
Quad-Split Multiviewer Cards for the 6800+™ Platform

MULTIVIEWERS // HVIEW™ QS — SPACE-SAVING, QUAD-SPLIT CARDS

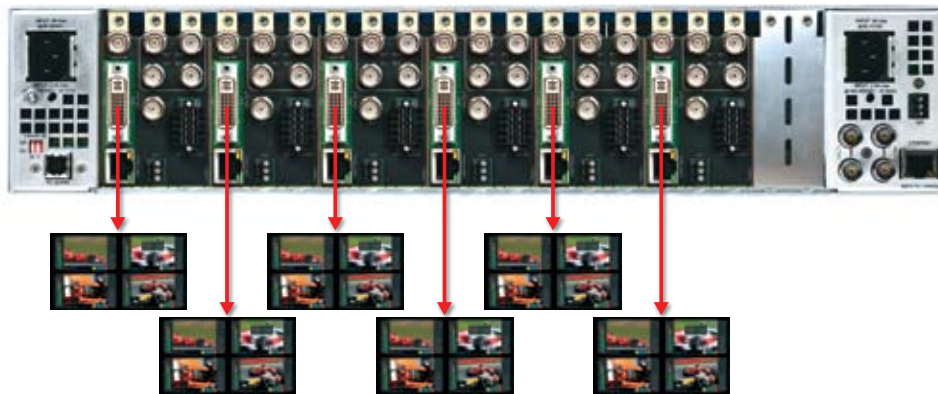
2 x 12 QVM6800+C Frame Configurations



3 x 8 QVM6800+C Frame Configurations



6 x 4 QVM6800+C Frame Configurations



QVM6800+

Quad-Split Multiviewer Cards for the 6800+™ Platform

SPECIFICATIONS

Specifications are subject to change without notice.

Video Inputs

Input Type	3 Gb/s; SMPTE 424M (2.97, 2.97/1.001 Gb/s) HD-SDI (SMPTE 292M 1.485 Gb/s) and/or SDI (SMPTE 259M 270 Mb/s) and or composite (PAL/NTSC)
Number of Inputs Per Card	4; up to 6 cards may be cascaded to provide additional inputs
Number of 6800 Slots Required	3
Connector	BNC
Input Resolution	Supports 1080p, 1080i, 720p 50/59.94/60, SDI 525, SDI 625, PAL, NTSC

Display Outputs

Output Type	Simultaneous DVI-D and HD-SDI output
Number of Outputs	1 (same image on DVI and HD-SDI); when cascaded, only master card output is active
Connector	DVI-D and BNC
Output Resolution	User-programmable up to 1920x1200; Up to 1920x1080 if in cascade mode or HD-SDI output active

Control/Operation

Software	Z-Configurator layout configuration software
Ethernet	Ethernet control, via RJ-45
GPI	4 inputs per card
Audio Output	Stereo, analog audio

Physical

Housing	6800+ frame 19-in. rackmount: 2RU high
Dimensions (W x D x H)	3.5 x 19x 11.5 in. (8.8 x 48.3 x 29.2 cm)
Weight Frame	9 lb (4.08 kg) empty; 12 lb (5.44 kg) with 2 power supplies
Power Frame	Auto-detected of 100 or 240 V and within 47/63 Hz; redundant PSU option
Power Consumption Card	14 W per card
Environmental	Operating temperature 32° to 95° F (0° to 35° C), storage is 32° to 122° F (0° to 50° C), humidity 70% maximum
Compliance	CE product emission standard EN 55 022:1994, CE generic immunity standard 50082-1:1992 (as per the EMC directive 89/336/EEC), FCC Class A digital device, pursuant to part 15 of the FCC rules; RoHS-compliant
UMD Protocol Support	TSL Image Video
Graphics Overlay	Ability to download bitmaps for logos on screen Stylized video window skins In-picture embedded audio bargraphs 2 analog clocks 6 up/down timers 4 tally lamps - red, green, yellow, blue Dynamic UMD/tally 6 digital clocks
Fault Detection And Alarms	Loss of video sync Frozen picture Audio over-level Audio under-level
Status Indicator	Input standard

ORDERING INFORMATION

QVM6800+T	Quad multiviewer card for 6800+ frame; occupies three 6800+ slots; embedded audio monitoring; GPI inputs; Z-Configurator supplied as standard, includes cascading as standard feature
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