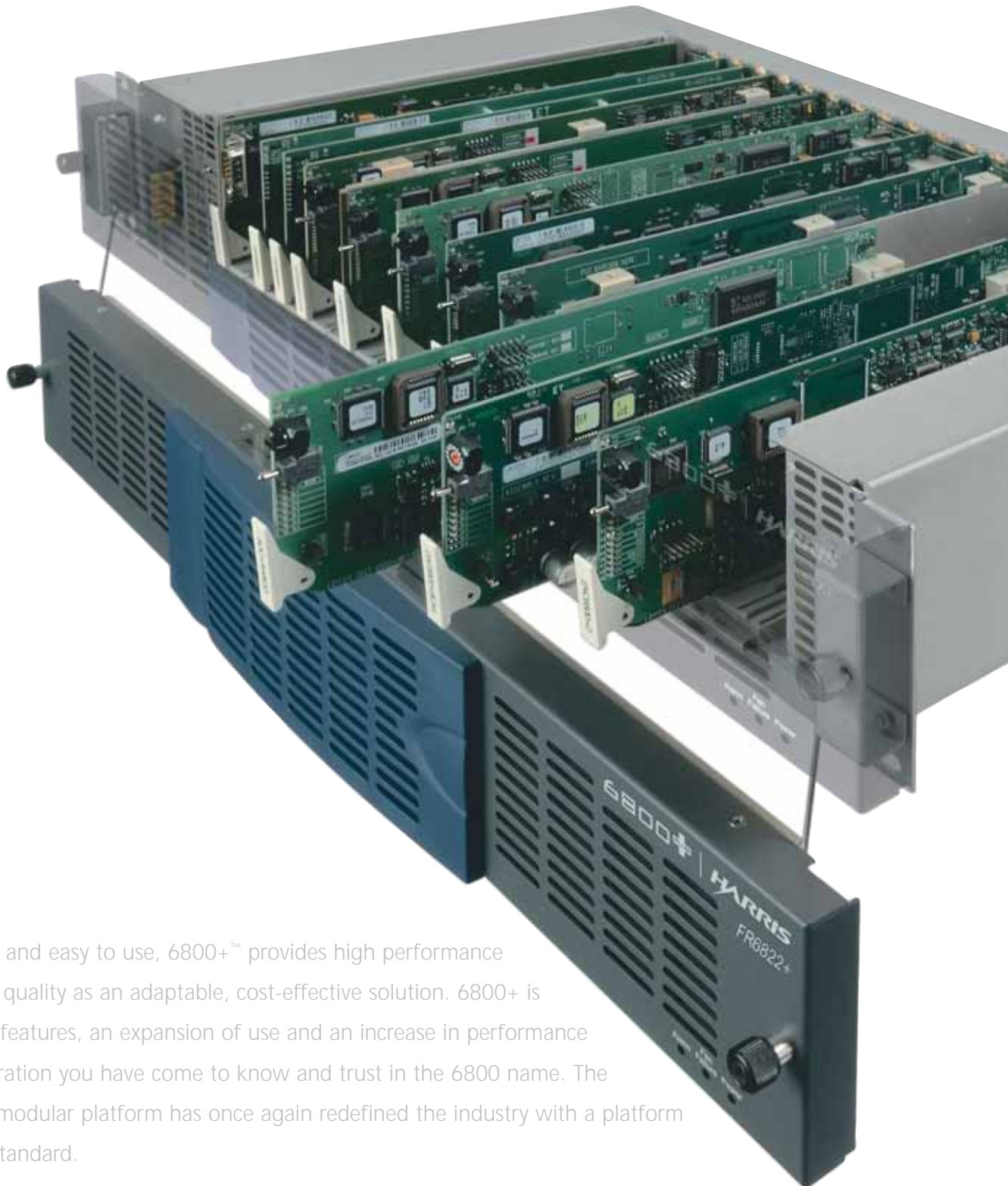


# 6800+™ Modular Platform



6800+<sup>™</sup> PLUS

# 6800+™ Modular Platform



Reliable, flexible and easy to use, 6800+™ provides high performance and exceptional quality as an adaptable, cost-effective solution. 6800+ is an extension of features, an expansion of use and an increase in performance to the solid operation you have come to know and trust in the 6800 name. The inventor of the modular platform has once again redefined the industry with a platform that resets the standard.

# PLUS Capacity PLUS Compatibility PLUS Control

The World's Leading Modular Platform Resets the Performance and Price Standards. Again.

Since its pioneering launch, 6800 has become the preferred platform of broadcasters internationally, with thousands of installations around the world. Today, 6800+ extends this leadership by improving technical performance; expanding module, thermal and power capacity; providing compatibility with new standards; and adding network communications.



## Capacity

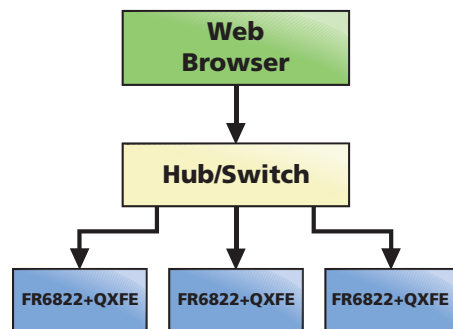
The 6800+ platform offers increased capacity to a maximum of 20 single-wide modules per 2RU frame. 6800+ reduces frame count in your facility, saving you rack space and capital costs.

## Compatibility

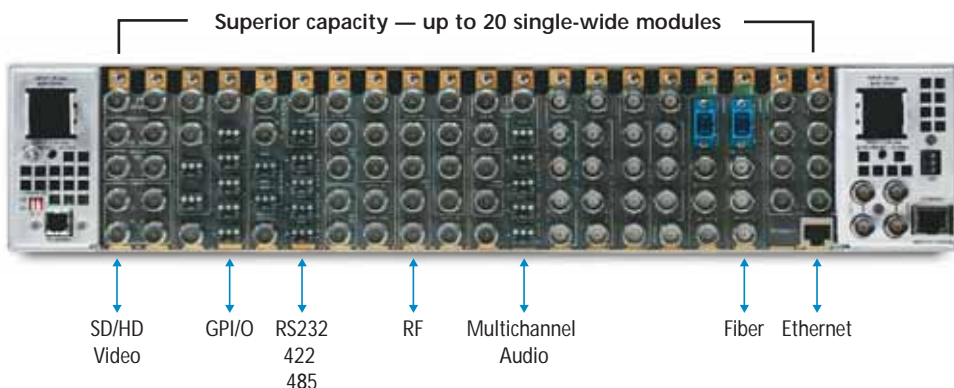
6800+ expands the product envelope, extending compatibility to virtually any standard and format. The 6800+ platform accommodates conversion, distribution, interface and routing applications. In addition, the 6800+ frame includes virtually any application in the modular arena. Protecting your investment, 6800+ is an icon for future-proof facilities, adapting to new technologies and standards as they emerge. One frame, one investment, an infinite number of possibilities: the true meaning of flexibility.

## Control

**Ethernet Control** — The optional Ethernet resource card provides connectivity to IP networks without sacrificing any of the 20 slots. It is Q-SEE™-compliant and fully supported by CCS Navigator™. It is also compatible with all other Command Control System (CCS™) products, such as CCS and NUCLEUS™ control panels.



**Web Control** — HTTP Web server running on FR6822+QXFE frame.



# 6800+™ Modular Platform

The 6800 frame became the industry standard and the industry leader by delivering outstanding reliability, ease of use and affordability. The 6800+ frame extends that leadership by incorporating advanced features and expanding its product line to include virtually any application available in an integrated modular platform. 6800+ makes it easy to migrate to new standards without rebuilding your infrastructure, thus providing significant savings.

## 2RU Frame Features

### Frame Self-Diagnostic Monitoring

Frame self-diagnostic monitoring (SDM) regulates and communicates major frame operations and functionality status. SDM monitors alarm and status bus and front panel open/closed, as well as power consumption and fan health.

### Compact Lightweight Construction

Lower frame weight and 11.5 in. (29.2cm) depth makes the 6800+ an even more convenient and powerful platform for mobile broadcast applications.

### 20 Slots

Plug in up to 20 distribution amplifiers or mix and match DAs and processing modules to completely fill the frame. With the increased numbers of slots, 6800+ provides greater flexibility in system designs. All 6800+ modules are hot-swappable to enable swift replacement.



### Enhanced Power Supply

A fully self-contained, hot-swappable, high-efficiency power supply module supports the entire frame. The 2RU frame can support a second, truly redundant power supply that takes over automatically and without interruption should the companion power supply fail. Operators can choose between AC and 48 V DC power supplies or mix and match within one frame.

### Frame Genlock

The 6800+ frame provides a looping reference input for video genlock. The reference is passively looped and distributed to all modules in the frame.

### Integral Cooling

Cooling fans are mounted in the front of the frame, forcing air out through the back. This front-to-back airflow configuration allows frames to be stacked one on top of the other without any thermal constraints. Fans shut off when the front door is opened to ensure operator safety.

### Circuit Protection

Self-correcting/self-limiting fuses ensure safe housing and operations in the event of short circuit conditions.

## Mix Box Desktop Frame

The FR6800+MB Mix Box frame extends the 6800+ family to the desktop, providing a standalone means of deploying individual 6800+ modules. The Mix Box frame has two slots to accommodate either a single card with dual-back connector module or two cards with single-back modules. Power is supplied via an off-the-shelf external power supply unit.



# High-Quality Signal Processing

## OPTO+™

In continuing to expand, the 6800+ has added the OPTO+™ fiber optic modular line. OPTO+ has grown and added the auto-sensing HD/SD/ASI transmitters and receivers, along with a complete line of Course Wave Division Multiplexer (CWDM) modular products. The addition of the new OPTO+ modules enables the 6800+ to meet the demands of facilities large or small.

## 3 Gb/s

The 6800+ modular platform continues to expand its HDTV portfolio with the introduction of 3 Gb/s support. Harris offers the industry's most comprehensive range of cost-effective 3 Gb/s-ready products. Whether you're building a new facility from the ground up, or adding 3 Gb/s products to your existing operation, Harris 3 Gb/s technology lays a solid foundation for broadcasting a 1080p signal now or whenever you need it.



## Networking and Compression

In addition to the proven baseband and optical signal processing on the 6800+ platform, new compression modules have been added as a result of Harris' expertise in digital video networking. Products include real-time H.264 and MPEG-2 SD and HD decoders, in addition to RF modulation products (e.g., DVB-S2) and IP/Gigabit Ethernet networking modules providing DVB-ASI signals.

## Effortless Control and Monitoring

Control and monitoring of signals passing through the 6800+ is enabled using IP over Ethernet, and control from the local card edge or NUCLEUS panels allows for easy manipulation of video and audio signals. Using the Ethernet port (for control and monitoring, video thumbnails, and streaming) makes the PC control and monitoring over large networks entirely manageable. The Harris CCS Navigator software further enhances the remote control aspects of the 6800+ for any application.

# The Ultimate Choice in Control

No matter what your control and monitoring requirements — from small operations with local control needs to 24x7, geographically dispersed operations requiring remote control over IP — the 6800+ platform offers control options to suit your specific operating environment.

## IP Networking: CCS and Q-SEE Applications

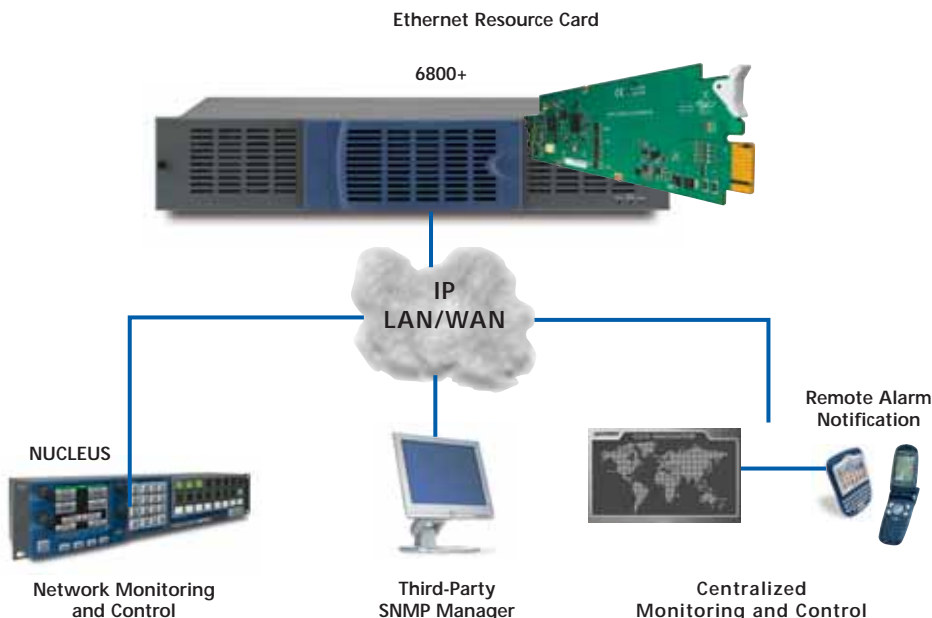
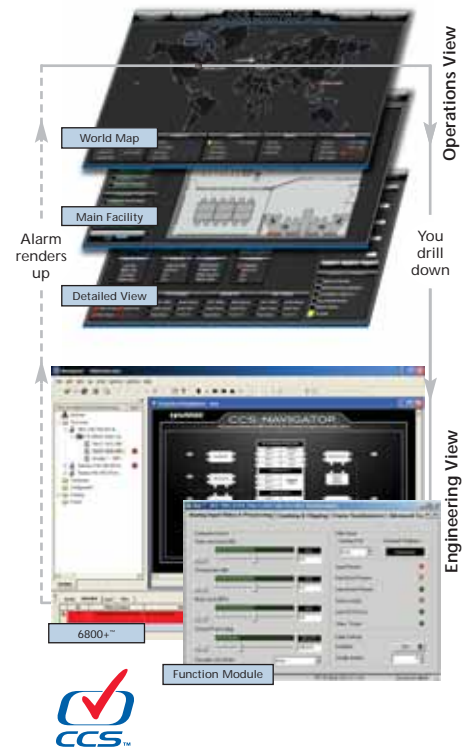
Harris offers a range of control and monitoring options for the 6800+ platform that enable practical, real-time control within an IP-based network.

The Harris Command Control System (CCS) represents a system of hardware devices, networking protocols, and intuitive, customizable user interface applications that provide unparalleled device and network management across a wide array of devices. 6800+ uses a network protocol common to all CCS-enabled products, ensuring seamless integration into field-proven CCS control/monitoring applications. Alarm data renders up from the network via the CCS Navigator monitoring and control application. Then, from your workstation, you can drill down

through the network and make any adjustment to any module — whether it's on the other side of your building or on the other side of the globe.

Harris® Q-SEE customizable monitoring technology further enhances device and network management by adding detailed quality control measurements via advanced alarm thresholds, thumbnails and optional MPEG-4 streaming.<sup>1</sup> Q-SEE integrates with CCS Navigator and enhances CCS capabilities by allowing a superior level of signal quality control.

<sup>1</sup>MPEG-4 streaming requires the QSEE6800+ module



The optional 6800+ETH Ethernet resource card allows 6800+ to communicate over industry-standard IP networks — without the need for high-cost, proprietary interfaces. Because it resides in the resource slot of the frame, the Ethernet resource card provides the additional benefit of leaving all 20 single slots available for the dense and high-capacity applications that have made 6800+ the leader it is today.

There are two ways to take advantage of Q-SEE monitoring functionality:

Add the optional Ethernet resource card to our next-generation 6800+ frame, along with any of our new Q-SEE-compliant 6800+ modules, to gain enhanced monitoring with alarm thresholds and thumbnail capabilities. The user-customizable alarm set is specific to the functionality of each Q-SEE-compliant module.

Alternatively, both the legacy 6800+ platform and the next-generation, Ethernet-enabled 6800+ platform can take advantage of Q-SEE technology via the QSEE6800+ module, which permits user-customizable alarm criteria, scalable thumbnail viewing and optional MPEG-4 streaming for up to eight SD/HD-SDI inputs per module.

### HTTP Control

Each FR6822+QXFE frame is equipped with standard Ethernet control, setup and monitoring. Use any Web browser to access the 6800+ equipment without having to perform the time-consuming task of installing third-party software.

### Web Control

An HTTP Web server running on FR6822+QXFE allows quick and easy control of your modular equipment.



### Local Control

For applications that require only rudimentary control — or in environments where a PC is just not practical — operators can adjust 6800+ modules manually at the card edge. This represents the most direct control of 6800+ modules.

### SNMP Support

In addition to supporting Harris' open, documented CCS Protocol, the 6800+ modular platform offers optional SNMP support, direct to frame, with support of both SNMPv1 and SNMPv2c. A Web server and SNMP are industry-standard means of controlling and monitoring over Ethernet. The CCS Navigator software further enhances the remote control aspects for any application. SNMP support is key for facility-wide monitoring applications and offers an industry-standard interface to address interoperability between multiple vendors.

### User-Configurable Control Panel

NUCLEUS unifies the operational control of processing, branding and routing products. NUCLEUS controls and monitors 6800+ platforms. When used in configuration with CCS Navigator you have the industry's most



powerful and versatile set of control and monitoring capabilities to deploy within your unique workflow.

## ONE Company for Workflow Solutions Throughout the Media Chain

Harris is the ONE company delivering interoperable workflow solutions across the entire media delivery chain — providing today's broadcaster with a single, integrated approach to capitalize on the benefits of IT and mobile applications. By providing unparalleled interoperability across our product portfolio, Harris is able to offer customers integrated solutions that improve workflows, save money, enable new revenue streams and provide a migration path to emerging media business models. To meet the evolving needs of broadcast, distribution, government agencies and entertainment businesses, Harris is the ONE answer for change.

## Service And Support

At Harris, we are committed to customer service excellence. It is our goal to provide the highest level of support by applying a simple rule: We take ownership of helping our customers succeed. Our support teams consist of innovative technical experts who support all situations regarding product performance, integration and operational processing. We are adept at providing proven solutions, making workflows better and ensuring reliability of the product and system. At Harris, our experienced and dedicated teams stand ready to help you meet your goals for premium product performance, 100% up-time and reduced maintenance investment.

## Warranty

Because we want to assure you that Harris stands beside its products and system solutions, our products carry a standard set of warranty services, which are competitive with — and in some cases outperform — others in the industry.

## Service Packages

We offer value-add services that allow you to customize the level of services you need in meeting mission-critical performance levels. Our service package options offer many ways to upgrade your standard warranty by choosing the All-Inclusive OnePak, or by selecting individual services from our extensive portfolio. Our service and support advisors can assist in the selection of the individual services that best suit your requirements.

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For more information, please visit [www.broadcast.harris.com/6800](http://www.broadcast.harris.com/6800).

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