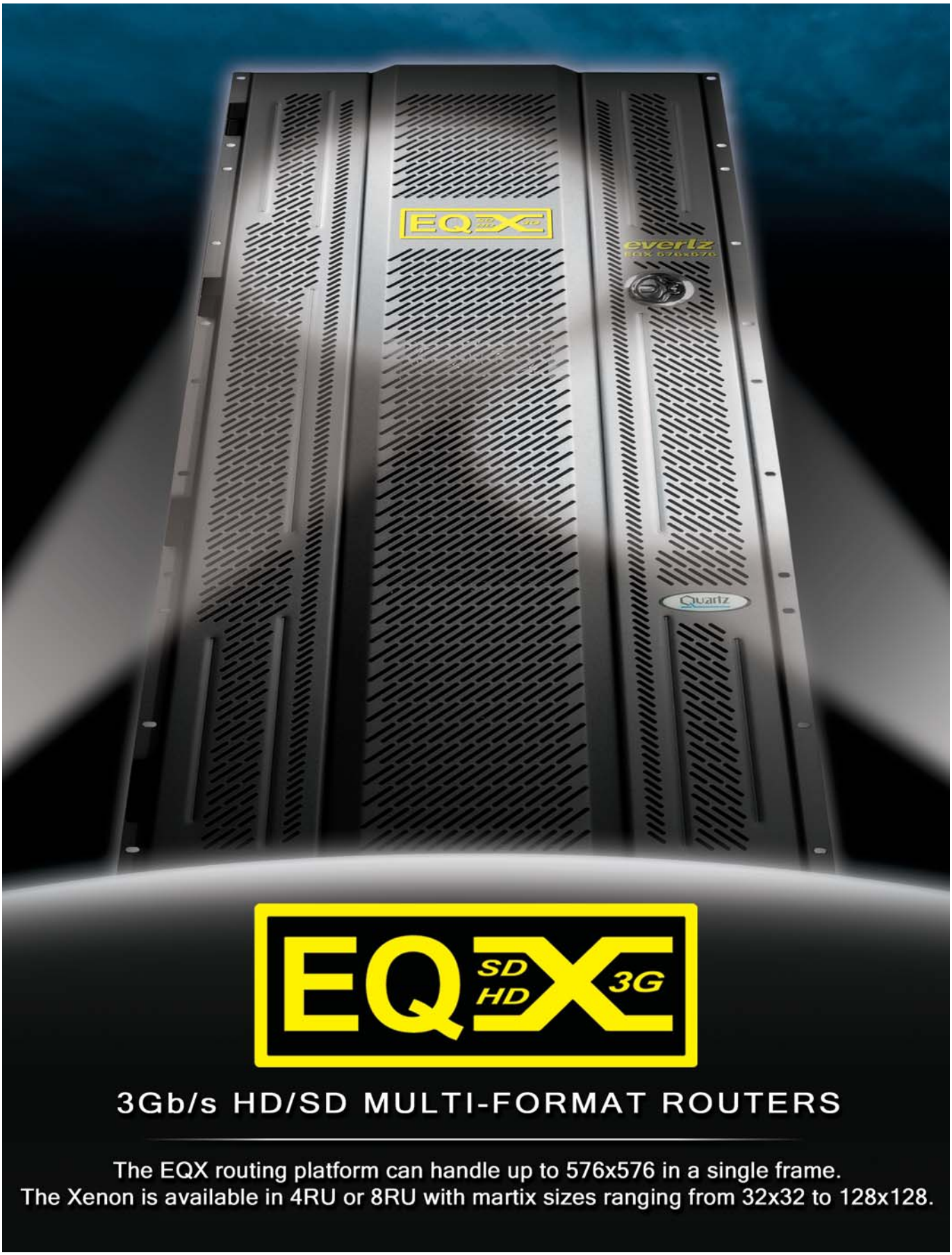
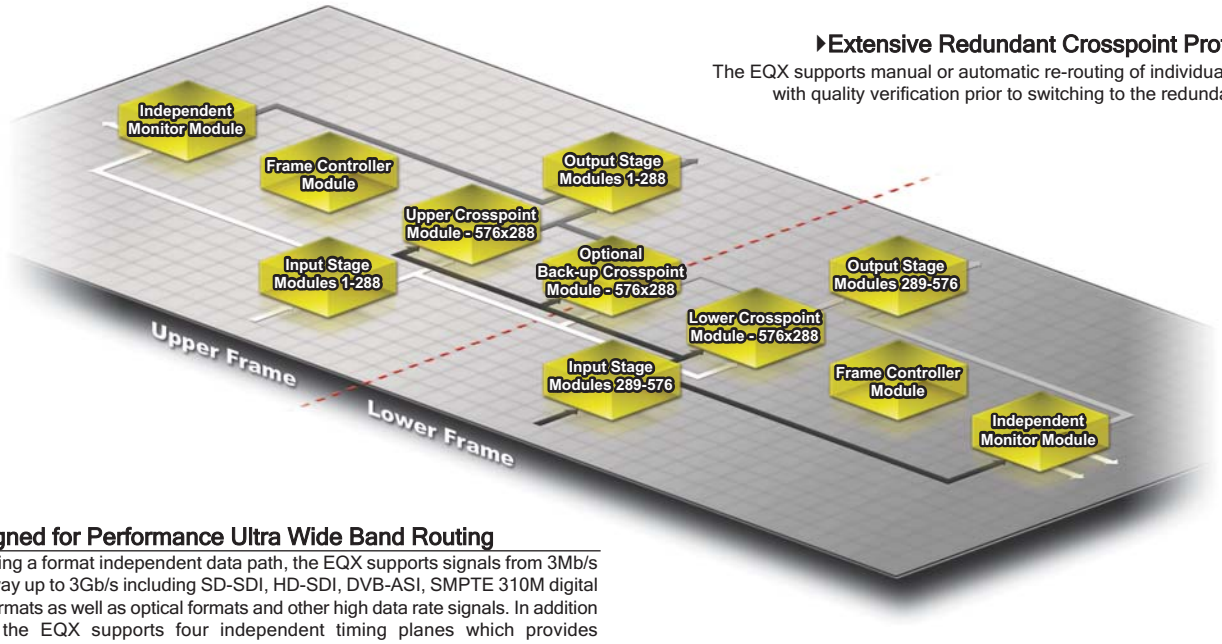

EQX
SD HD 3G
3Gb/s HD/SD MULTI-FORMAT ROUTERS
The EQX routing platform can handle up to 576x576 in a single frame.
The Xenon is available in 4RU or 8RU with martix sizes ranging from 32x32 to 128x128.

EQX - 288x288, 576x576 and 1152x1152

High Density Core Router

The only routing solution for mission critical applications...the EQX platform has the ability to route up to 576x576 signals in a compact 26RU frame or up to 288x288 in the 16RU frame. The EQX is ideal for mission critical and demanding 24/7 environments, including network, local broadcaster, mobile production, cable, military, government and corporate applications.



Extensive Redundant Crosspoint Protection

The EQX supports manual or automatic re-routing of individual signals with quality verification prior to switching to the redundant path.

Designed for Performance Ultra Wide Band Routing

By offering a format independent data path, the EQX supports signals from 3Mb/s all the way up to 3Gb/s including SD-SDI, HD-SDI, DVB-ASI, SMPTE 310M digital video formats as well as optical formats and other high data rate signals. In addition to this the EQX supports four independent timing planes which provides independent SMPTE compliant switching for up to four different digital video signal formats.

Intelligent Auto-Configuration

The EQX's exceptional Source-By-Source intelligent auto configuration facility allows the path to each destination to be independently and instantly re-configured to suit the requirements of the source being switched. This includes auto selecting the Reclocking/Non-reclocking circuitry, the ASI mode as well as selecting the correct switch point.

System Flexibility

The inspired modular approach of the EQX's design provides excellent in-service expansion capabilities. In convenient steps of 18, the number of inputs and/or outputs can be increased from the base size of 18x18 all the way up to 576x576, and beyond, in square and non-square configurations.

1152x1152 Expansion

The EQX offers the ability to scale up to 1152x1152 without requiring complex, expensive and difficult to install and maintain external splitting and combining or active DA-ing of sources and switching of destinations.

High Density

Available Double Density Outputs allow the EQX to grow past 576 outputs in the 26RU chassis and past 288 outputs in the 16RU chassis.

Multiview Processor Integration

The EQX now integrates X-Link on both 16 and 26RU models. X-Link is a high density interconnect to a wide variety of Evertz® Multiveiw Processors that DOES NOT use up standard router outputs. A 576x576 EQX will still have the full 576 outputs while supporting more than 200 additional outputs to an Evertz® Multiview Processor. X-Link technology is a unique Evertz® signal interconnect carrying a large block of signals over a single connector.

Audio Routing

The EQX router is an integral part of the Evertz Integrated audio system which allows operators the ability to reduce cost and space while giving the flexibility to route embedded AES, discrete analog, discrete AES and MADI inputs to embedded AES, discrete analog, discrete AES and MADI outputs. Any audio input in the system can be routed to any output.

Compact Design

The EQX delivers a high broadcast quality 576x576 routing capability in a compact 26RU frame, while expansion to 1152x1152 ensures a migration path for even larger applications.

Comprehensive Control

The EQX provides comprehensive connectivity to suit the most demanding installations. The internal frame controllers provide complete connectivity to any number of remote control panels and 3rd party control devices such as automation systems via multiple Q-Link, F-Link, Ethernet and Serial ports. The optional advanced EQX control system makes enterprise installations with advanced tie-lines, automated pathfinding, and advanced control surfaces easy to implement and manage.

Independent Monitoring

EQX provides extensive signal monitoring of both inputs and outputs, power supply voltages, interior temperatures and fan speeds. All monitored data is available through SNMP for facility-wide monitoring systems such as VLPRO.

Simple Maintenance

The advanced design of the EQX ensures that all active components, including input, output, crosspoint modules, frame controllers, cooling fans and power supplies, are accessible from the front of the frame and can be hot swapped at any time for maintenance.

Outstanding Redundant Protection

The EQX is the ultimate design in terms of system availability. The EQX architecture contains redundant protection for all of the critical system elements. The architecture provides redundant cross-point configurations, redundant frame controllers, external redundant load sharing power supplies, redundant easy access cooling fans and a dedicated monitoring bus that is independent of the system cross-points. In the event of a failure, manual or automatic re-routing of signals on an output-by-output Path-by-Path basis is fully supported by the system software.

Using the EQX monitoring capabilities, output quality can be verified prior to switching to redundant signal paths. The EQX is fully SNMP enabled and supports seamless integration with VistaLINK® PRO command and control systems.

Features & Benefits

High performance format independent platform
- SD-SDI, HD-SDI, 3G-SDI, DVB-ASI, SMPTE 310M and more!
- Any fiber optical signal from 3Mb/s up to 3Gb/s
- Scalable to 576x576 in a single 26RU frame
- Scalable to 288x288 in a single 16RU frame
- Input expansion in steps of 18
- Output expansion in steps of 18
- Up to 1152x1152 in multiple frames
- Source-by-source intelligent auto configuration
- Input equalization (On/Off)
- Output reclocking (On/Off)
- ASI Mode (On/Off)
- Switch Point (Variable)

Advanced system control & interfacing
- Supports the full range of Quartz remote control panels
- Full VistaLINK® PRO command & control, SNMP & AVM
- Full integration with 3rd party automation systems
- Supports a wide selection of control protocols
- Ethernet, Serial RS-422/232, F-Link and Q-Link ports

High availability, 24/7 design
- Full modular design
- All modules are hot swappable
- All components are front accessible (electronics & cooling fans)
- Passive I/O
- Full redundant design
- Redundant crosspoint
- Redundant frame controller
- Redundant power supply (separate IRO)
- Redundant cooling fans
- Comprehensive system monitoring bus
- VistaLINK® PRO SNMP & AVM monitoring of I/O & crosspoint modules
- Temperature monitoring
- Power supply monitoring

Specifications

Configuration:

576x576 in 26RU	(PSU separate 1RU)
288x288 in 16RU	(PSU separate 1RU)
Inputs:	Selectable in blocks of 18
Outputs:	Selectable in blocks of 18

Redundant Protection: Redundant Crosspoint
Redundant Frame Controller
Redundant Power Supply
Redundant Cooling Fans

Video Inputs:

Formats	SMPTE 259M, SMPTE 292M, SMPTE 310M, SMPTE 424M, ASI
Optical Formats	SMPTE 292M, G-Link, any optical signal between 3Mb/s and 3Gb/s
Signal Level	800mV p-p
Impedance	75Ω terminating
Return Loss	>15db typical (5-1500 MHz) >10db typical (1.5-3GHz)
Cable Equalization	Belden 1694A @ 270 MHz 300m Belden 1694A @ 1.5GHz 100m
Connectors	BNC IEC 61169-8 Annex A

Video Outputs:

Signals Supported	Same as Input
Reclocking	Configurable
Non-Reclocking	Configurable
Signal Level	800mV p-p ± 10%
Impedance	75Ω terminating
Return Loss	>15 db typical (5-1500 MHz) >10db typical (1.5-3GHz)
DC Offset	0 ± 0.5V
Output Jitter	0.2 UI
Connectors	BNC IEC 61169-8 Annex A

Reference Timing:

Switching Reference:	Analog 525/625/tri-level HD Looping connections
Connector:	2 BNC IEC 61169-8 Annex A
Signal Level:	1 V p-p ± 3dB
Impedance:	75Ω terminating active loop out optional
Reference Timing:	4 independent timing planes, programmable output by output

Control:

Q-Link:	4 x 75Ω video cable (max length 500m)
F-Link:	2x RJ45
Serial RS422/232:	2x D9 female
Ethernet:	10/100baseT, 2x RJ45

Physical:

Height:	
EQX-26FR:	45.5" (115.5cm) 26RU
EQX-16FR:	28" (49cm) 16RU
Width:	19" (483mm) 19" Rack Mount
Depth:	19.4" (493mm) over hinges and BNCs
Weight:	
EQX-26FR:	374Lbs (171Kg) Fully Loaded
EQX-16FR:	218Lbs (99Kg) Fully Loaded
Operating Tem:	0°C to -40°C
Cooling:	Fan cooled, front to rear

Electrical - Router:

Input Voltage:	48 VDC
Maximum Input Current:	
EQX-26FR:	75 amps
EQX-16FR:	100 amps

Typical Input Power:	1500W for fully loaded 288x288 config 3000W for fully loaded 576x576 config
Redundancy:	Separate 1RU frame with up to 4 PS modules for 1:1 redundancy available

Electrical - External Power Supply:

Configuration:	Up to 4 load sharing PS modules in 1RU frame
Connector:	IEC 60320 - separate mains input for each PS module
Input Voltage:	Auto ranging 100 ó 240V nominal, 50/60Hz
Max Input Current:	13.2 A (@ 120 VAC), 7.2 A (@ 220 VAC) per PS module at 1200W load
Output Voltage:	48 VDC
Output Power:	1200W per PS module

Ordering Information - Contact factory for system configuration

576x576- 26RU Frame:

EQX26-18X18S	18 input, 18 output SDI/ASI Video Router
EQX26-18X18H	18 input, 18 output HD/SDI/ASI Video Router
EQX26-18x18-3G	18 input, 18 output 3G/HD/SDI/ASI Video Router
EQX26-18x36-3G-F	18 input, 36 output 3G/HD/SDI/ASI Video router with Fiber I/O

288x288 - 16RU Frame:

EQX16-18X18S	18 input, 18 output SDI/ASI Video Router
EQX16-18X18H	18 input, 18 output HD/SDI/ASI Video Router
EQX16-18x18-3G	18 input, 18 output 3G/HD/SDI/ASI Video Router
EQX16-18x36-3G-F	18 input, 36 output 3G/HD/SDI/ASI Video router with Fiber I/O

Ordering Options (to expand 26RU up to 576x576, 16RU up to 288x288):

EQX-PS-FR	1RU frame which holds up to 4 power supply modules (EQX-PS)
EQX-PS	Power Supply module 4 for 26RU frame & 2 for 16RU frame
EQX-FC	Redundant frame controller for 26RU and 16RU frame
EQX-XPT-576x288	Redundant crosspoint module for 26RU frame
EQX-XPT-288x288	Redundant crosspoint module for 16RU frame
EQXS64-1x2-3G	Multi-Channel Passive Splitter/Combiner

Available for either 16RU frame or 26RU frame:

EQX-IP18S	18 Input SDI/ASI Module
EQX-IP18H	18 Input HD/SD/ASI Module
EQX-IP18-3G	18 Input 3G/HD/SD/ASI Module
EQX-OP18S	18 Output SD/ASI Module
EQX-OP18H	18 Output HD/SD/ASI Module
EQX-OP18-3G	18 Output 3G/HD/SD/ASI Module

Ordering Options (to expand 26RU up to 1152x1152):
Contact Factory

For fiber optics options contact factory
Greater than 576x576, contact factory

The Xenon brings many advanced new capabilities to the world of routing switchers, building on a new generation design that starts with a solid, multi-format router core.

Xenon: Excel Beyond Expectations

In today's broadcast environment, a router must be reliable, resilient and cost effective. The Xenon excels in all of these areas while offering the flexibility of multiformat operation, and the ability to add Signal Processing Technology.

Great care has been taken in the design of the Xenon to avoid single points of failure. Active assemblies are all hot swappable from the front of the frame. Power, control, cooling and reference generation are available in redundant configurations.

Features & Benefits

Configuration
The Xenon allows any mix of formats within a frame in independent blocks of 32 inputs or outputs. Any of the supported formats, 3G/HD/SD/AES/Analog can be expanded to fill an entire 128x128 frame. Additionally the Xenon supports optical routing from 3Mb/s to 3Gb/s in blocks of 32 inputs or outputs.

The Xenon is housed in a 4RU frame, switching up to 64 sources to 64 destinations, or in an 8RU frame switching up to 128 sources to 128 destinations. Additional input and output modules can be installed into the router at anytime.

Control
The Xenon router includes, as standard, an internal Frame Controller module which supports four Q-Link ports, two Ethernet ports and two Serial ports mounted on the rear of the router.

The Xenon has a number of control options, they are:
Remote Control Panel: Any panel(s) from the entire range of Quartz remote control panels can be used with the Xenon router connected via Q-Link.

External third party control: The Xenon router can be remotely controlled via an external third party control device, such as an automation system, when connected to the router's serial port.

Expansion
The input and output stages of the Xenon can be expanded in steps of 32 at any time by adding additional I/O modules. The Xenon can not be expanded beyond its frame size.

Power Supply
The power supplies for the Xenon are internal. The 4RU & 8RU frame can be fitted with an optional redundant power supply with separate AC power inlet & alarm output.

Designed for Performance Ultra Wide Band Routing
By offering a format independent data path, the Xenon supports signals from 3Mb/s all the way up to 3Gb/s including SD-SDI, HD-SDI, 3G-SDI, DVB-ASI, SMPTE 310M digital video formats as well as optical formats and other high data rate signals.

Video
Xenon supports 3G, HD, SD and ASI video routing. It is available as 3G/HD/SD or HD/SD or SD only, offering cost savings for those who do not require 3G and or HD capability. For those applications requiring the signal to be reclocked, reclocking modules can be added in blocks of 8 outputs.

Audio
Xenon supports AES Audio routing. Balanced AES or unbalanced AES on BNCs are supported in any mixture in blocks of 32 inputs or outputs. AES routing within the Xenon is performed as mono channels so signals can be shuffled amongst AES pairs. Xenon also supports Analog audio I/O. the audio is converted and routed as digital so that analog sources can route to AES destinations and AES sources can route to analog destinations. Analog blocks are in groups of 32 stereo pairs.

The Xenon audio router can be expanded beyond a single 128x128 frame by cascading multiple frames together with an external interface. Using this advanced solution provides the capability to route up to 8192x8192 mono audio channels within a single system.

Signal and System Monitoring
Xenon supports SNMP signal monitoring and comprehensive system monitoring, including power supply voltages, interior temperatures and fan speeds. System status may also be monitored remotely by a network based remote connection over TCP/IP or a direct serial connection to a PC. User-configurable closing contacts are also provided for connection to an external alarm system.

X-LINK
X-LINK outputs are an additional set of outputs from Evertz® standard router platforms. They are for the purpose of providing connectivity to monitoring devices. X-LINK outputs do not reduce the number of outputs on the router, X-LINK outputs are in addition to the standard video router outputs.

Feature Summary
- Multiple signal formats within a single frame
- Optional output reclocking in blocks of 8 outputs
- All outputs can switch in one TV frame
- Dual reference inputs
- Advanced audio features including Soft Switching
- Dolby-E™ signal compatible
- Redundant internal controllers
- Q-Link, Ethernet and RS-485 control interfaces
- Deterministic switching
- SNMP and system monitoring
- Powerful and intuitive WinSetup Software