

# EQX16 — 288x288

Enterprise Hybrid Video/Audio/IP Router in 16RU



The EQX platform is Evertz' flagship routing and distribution solution, designed for high availability by adopting extensive industry-leading redundancy for all critical system elements. With its time-proven robustness and redundancy, the EQX is ideal for mission critical and demanding 24/7 environments.

The EQX16 platform is a completely passive frame where all active components can be swapped. This makes it a high performance system that can be easily expanded to incorporate new technologies growing with your company needs and industry demands. EQX16 can be configured for many different environments; it supports 288x288 video IO with optional path-by-path redundancy, and it can even scale to 288x576 video IO. The EQX16-FRHBX-XL3 provides additional outputs via 27x XLINK connections for penalty free multiviewing; well suited for network and local broadcasters, mobile production, mobile flight packs, cable, military, government and corporate applications.



## High Performance, Format Agnostic Platform

- 12G-SDI, 6G-SDI, 3G-SDI, HD-SDI, SD-SDI
  - » SDI coax or optic signals and IP video SMPTE ST 2022-6 and ST 2110
  - » audio embedding and de-embedding, frame sync and other processing
- DVB-ASI, SMPTE ST 310M
- Input/output asymmetrical expansion in steps of 18
- Up to 27x X-LINK (864 monitoring outputs)
- Source-by-source intelligent auto-configuration:
  - » input equalization (on/off)
  - » output reclocking (on/off)
  - » ASI 177 flag (on/off)
  - » switch point (pre-defined or fully variable)

## Advanced System Control & Interfacing

- Main/redundant Ethernet for control
- 4x serial RS-422/232 for control
- Q-Link port for local emergency control panels
- Full VistaLINK® PRO command and control, supporting SNMP, AVM processing controls
  - » can be configured on separate main and redundant Ethernet ports
- Syslog for additional log for third-party and inSITE big data analytics
- Network hardening control for additional security
- MAGNUM unified control system
  - » VUE user interface
  - » virtual and physical router control panels

## High Availability, 24/7 Design

- Fully passive frame that is modular by design
- All modules are hot-swappable
- Path-by-path crosspoint redundancy
- Dual hot redundant frame controller
- Load-sharing redundant power supply (separate 1RU)
- Front hot-swappable cooling fans
- Comprehensive system monitoring bus
- VistaLINK® PRO SNMP:
  - » AVM monitoring of I/O and crosspoint modules
  - » temperature and fan monitoring
  - » power supply monitoring

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## Specifications

### Video Inputs:

Formats: SMPTE ST 259M, ST 292M, ST 310M, ST 424M, ST 2082, ASI, 10/25/100GbE

Signal Level: 800mV p-p

Impedance: 75Ω terminating

Return Loss: > 15db typical (5–1500MHz); > 10db typical (1.5–3GHz)

Cable Equalization: Belden 1694A @ 270MHz 300m to 500m; Belden 1694A @ 1.5GHz 100m to 200m; Belden 1694A @ 3GHz 90m to 150m

### Video Outputs:

Signals Supported: SMPTE ST 259M, ST 292M, ST 310M, ST 424M, ST 2082, ASI, 10/25/100GbE

Reclocking: Configurable

Non-Reclocking: Configurable

Impedance: 75Ω terminating

Return Loss: > 15db typical (5–1500 MHz); >10db typical (1.5–3GHz)

DC Offset: 0 ± 0.5V

Output Jitter: 0.2 UI

### Reference Timing:

Switching Ref.: Analog 525/625/tri-level HD looping connections

Connector: 2x BNC IEC 61169.8 Annex A

Signal Level: 1V p-p ± 3dB

Impedance: 75Ω terminating (active loop out optional)

Reference Timing: 4 independent timing planes, programmable output by output

### Control:

Q-Link: 4x 75Ω video cable for local emergency CP only

Serial RS-422/232: 4x D9 female

Ethernet: 10/100baseT, 4x RJ-45

### Physical:

Dimensions: 19" W x 28" H x 19.4" D (483 x 710 x 493mm)

Safety: TUV Listed to CAN/CSA-C22.2 No. 62368-1:2014, ANSI/UL 62368-1:2014, EN 62368-1:2014 +A11:2017, IEC 62368-1:2014

### Power:

Voltage: Auto ranging 100–240V 50/60Hz; up to 4x load sharing PS modules in 1RU frame, separate main input for each module or external 48V DC

Power: 1300W per PS module, 1100W for a green 16RU populated as a 288x288

Redundancy: Separate 1RU frame with up to 4 PS modules for 1:1 redundancy available

## Ordering Information

### PKG-EQX-16HBX-2FC-XPT

Package for a single EQX 16RU system. This package includes an EQX16-FRHBX-XL3 Frame, 2x EQX-FC controllers, and 1x 288x288 Crosspoint.

### Ordering Options:

#### EQX16-FRHBX-XL3

16RU EQX Frame using EQX-FAN-HBX modules and has 3 banks of XLINK (27 total XLINK). Includes Frame/MI and five fan bins. No power supplies, no I/O cards, no XPT, no FC.

#### EQX-FC

Redundant frame controller

#### EQX-PS-C

Next-generation high-efficiency Power Supply Module to be used only in the EQX-PS-FR-C.

Not compatible with other EQX power trays.

#### EQX-PS-FR-C

Next-generation high-efficiency EQX power supply tray, includes blue Anderson power 48V connector for EQX & EQXUHD frames supporting new EQX-PS-C, no power switch is used with this tray... NOT compatible with old EQX-PS.

#### EQX-XPTG-288x288

288x288 EQX crosspoint with new "EQX Green initiative" platform utilizing significantly less power and cooling than existing EQX-XPT-288x288A crosspoint.

#### EQX-XPTG-576x576

576x576 EQX crosspoint with new "EQX Green initiative" platform utilizing significantly less power and cooling than existing EQX-XPT-576x576A crosspoint.