EQX10 — 180x180

Enterprise Hybrid Video/Audio/IP Router in 10RU

evertz

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.

EQX10 is a high performance platform that can be easily expanded to incorporate new technologies in accordance with industry demands. Developed to assist mission critical and demanding 24/7 environments systems, it supports 180x180 video IO with optional path–by–path redundancy, and can scale up to 180x360 video IO. The EQX10 provides additional 15x XLINK connections for penalty–free multiviewing and optional hybrid cosspoints with a 10x10 integrated ADMX for audio shuffling, 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
- Optional 10x10 integrated ADMX audio compatible with all existing TDM–enabled modules (EQX–XPTG–ADMX10)
- Input/output asymmetrical expansion in steps of 18
- Up to 15x X–LINK (480 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*

AV SOLUTIONS
CONTRIBUTION & DISTRIBUTION
CONTROL, MONITORING
ENCODING, TRANSCODING, & MULTIPLEXING
FACILITY LINK FIBER TRANSPORT
INFRASTRUCTURE & CONVERSION
IP SOLUTIONS
LIVE MEDIA PRODUCTION
MEDIA ASSET MANAGEMENT & PLAYOUT
MULTIVIEWERS
RF SOLUTIONS
ROUTERS
WAN TRANSPORT

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 typ. (5–1500MHz); > 10db typ. (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 typ. (5–1500MHz); > 10db typ. (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 17.5" H x 19.4" D (483 x 445 x 493mm)
Operating Temp.:	0–40°C
Cooling:	Fan cooled, front to rear

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, 700W for a green 10RU populated as a 180x180
Redundancy:	Separate 1RU frame with up to 4 PS modules for 1:1 redundancy available

Compliance:

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; CISPR 22:2008/EN55022:2010 (Class A) & CISPR 24:2010/EN55024:2010; IEC 60950–1:2005 (2nd Ed.) + Am 1:2009; CAN/CSA C22.2 No.60950–1/A1:2011, UL 60950–1/R:2011–12

Ordering Information

PKG–EQX10–QT2–X–2FC–XPT–ADMX

Package for a single EQX 10RU system. This package includes an EQX–10FR, with AXR/AXM rearfins for ADMX and MADI IO, EQX10–XLINK9–RP and QT2 fan bins, 2 frame controllers, and 1 EQX10–XPTG–ADMX10+AX5.

PKG–EQX10–QT2–X–2FC–XPT

Package for a single EQX 10RU system. This package includes an EQX–10FR, with EQX10–XLINK9–RP and QT2 fan bins, 2 frame controllers, and 1 EQX10–XPTG–180X288.

Ordering Options:

EQX10–FRQT2–AX

10RU EQX Frame, 180x180 regular main/redundant paths, standard 4 Xlink, 2 are fed by the main XPT, 2 are fed by redundant XPT, populated with ADMX rear plates EQX10–QT2 fans.

EQX10–FRQT2

10RU EQX Frame, 180x180 regular main/redundant paths, standard 6 xlink, 3 are fed by main XPT, 3 are fed by redundant XPT, populated with EQX10–QT2 fans.

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–180x288

Green Crosspoint Module, made compact for the EQX10

EQX–XPTG–ADMX10

A 180x244 video XPT with an integrated ADMX 10x10 that is to be used exclusively in the EQX10FR and EQX10FR–XLINK frames.

+AX5

License option for the EQX10–XPTG–ADMX10 to add an additional 5x5 audio ports available via DIN connectors and are software selectable to be either TDM or MADI.