

Linking
People
Together



Eclipse HX-Median

Key Features and Benefits

- 6RU Card Frame
- Slots for 2 CPU cards, 7 interface cards and 8 interface modules
- Up to 448 internal ports
- Dual-redundant CPU-HX processors fitted as standard
- Dual-redundant power supplies fitted as standard
- Alarms: Frame temperature, PSU failure
- 8 general purpose inputs and 8 relays
- Expandable to become a multi-frame system with redundant non-blocking fiber
- Intelligent trunking between systems over Telecom (E1/T1), IP (LAN, WAN or Internet), Analog or MADI
- Seamless integration with FreeSpeak II & FreeSpeak Edge
- Fully-compatible with Clear-Com V-Series Iris and I-Series panels
- Supports EHX software (Eclipse HX Configuration software)

The Eclipse® HX-Median is an advanced, mid-size solution for a high-quality, high-density digital matrix system that can have up to 448 audio ports in a 6RU rack space.

Description

The Eclipse HX-Median is a six rack unit (6RU) matrix intercom system frame with slots for 2 CPU cards, 7 I/O interface cards, and 8 interface module slots. Two internal power supplies are provided. RJ45 and fiber-optic connectors are located on the rear of the chassis, connecting the CPU and interface cards to intercom devices and media such as user keypanels, interfaces, 4-wire audio equipment, wireless equipment and fiber-optic cables.

Interface Cards

Serving as the central hub for connecting 16 to 448 ports of audio channels, the Eclipse HX-Median achieves this level of connectivity with any combination of multiple Eclipse HX types of I/O interface cards available.

Interface cards include: E-MADI64-HX (up to 64 bi-directional channels to any AES10 compatible device) card, E-DANTE64 (supports up to 64 bi-directional DANTE ports) card, E-QUE-HX (a wireless cell controller or a trunking line) card, MVX-A16-HX (analog RJ45) card and LMC-64-HX (for activity and level monitoring of audio feeds) card. The E-FIB-HX (fiber connection) card can connect Eclipse matrices together to expand existing intercom systems into larger systems. The E-IPA IP card supports up to 64 ports including AES67 / SMPTE 2110-30.

Interface Modules

The Eclipse HX-Median frame is designed with 8 available interface module slots for converting the 4-wire signals of the matrix to other types of signals that communicate with devices such as telephones, two-way radios, camera intercoms, partylines, and other forms of external communication. Extra GPIOs can be added to the matrix via interface modules with connection into the CPU rear.

Interface modules include: TEL-14 (telephone interface), CCI-22 (dual partyline interface), FOR-22 (4-wire interface), GPI-6 (general-purpose inputs), and RLY-6 (relay outputs).

Expandable Architecture and Connections

Eclipse HX-Frame Matrices can intelligently trunk with multiple types of media including 4-wires, E1/T1, IP, MAD1 or a redundant Fiber + Data ring. A single intelligent networked system may include any combination of Eclipse HX-Omega, Eclipse HX-Median and Eclipse HX-Delta. Networked system size varies from 72 to thousands of ports over many Eclipse frames.

Power and Redundancy

The system offers dual redundant external power supplies and CPU-HX fitted redundant processors to ensure no system failure at any point during critical use. One power supply unit can power an entire matrix, while the second unit provides a backup in case of failure or damage to the first unit. A built-in sensor is connected to both an audible failure alarm and a warning light, allowing the system operator to diagnose a potential problem and take action.

Software

The EHX Software provides configuration for all Eclipse HX matrices and networked systems.

Technical Specifications

0 dBu is referenced to 0.775 volts RMS

Matrix Capabilities

Maximum Expansion Cards: 7

Maximum CPU Cards: 2 (included)

Maximum Power Supply Units: 2 (included)

Maximum Fiber Expansion Cards: 2

Ports per MVX Port Card: 16

Maximum MVX Port Cards: 7

Maximum E-IPA, E-QUE, LMC-64 Port Cards: 4

Maximum E-DANTE64, E-MADI64 Port Cards: 7

Maximum RJ45 Ports per Matrix: 112

Maximum Timeslots: 490

Matrix Performance

Sample Rate: 48kHz

Resolution: 24bit

Frequency Response: at 48kHz sampling: 30Hz - 22kHz \pm 3dBu

Crosstalk (Adjacent Channel): < -70dBu

Nominal Level: 0dBu

Matrix Headroom: +18dBu

Distortion: <0.05 %, @ 0dBu, 300Hz to 10kHz;

<0.1 %, @ 0dBu, 100Hz to 20kHz

Off Noise: < -70dBu (20Hz - 22kHz)

On Noise: < -65dBu (20Hz - 22kHz)

Key Response, Intra-System: <40ms for audio route

Linked Systems: <60ms for audio between matrices

Environmental

Operating Temperature: 32°F - 104°F (0°C - 40°C)

Storage Temperature: -67°F - 158°F (-55°C - 70°C)

Humidity: 90% non-condensing

Dimensions

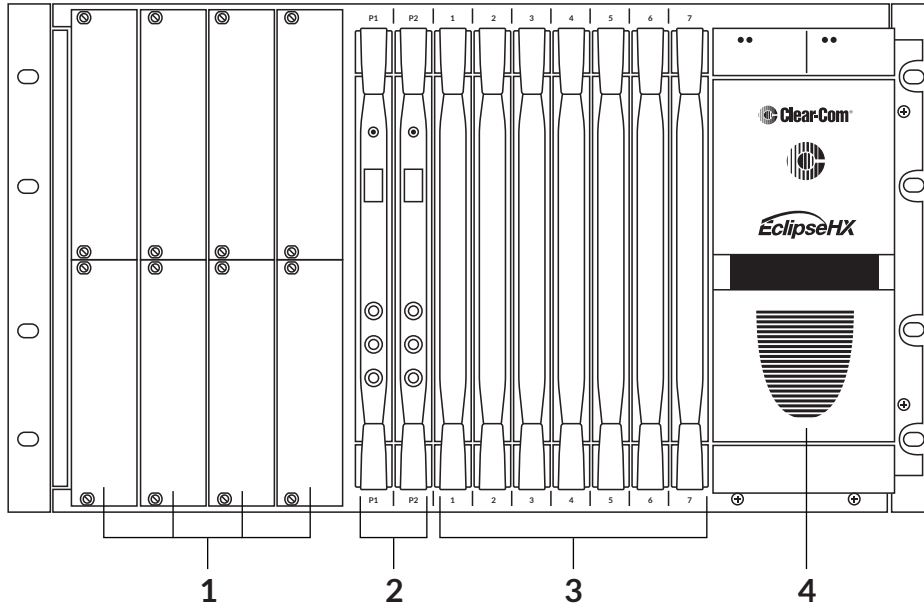
19 x 10.6 x 16in (WxHxD)

(482 x 264 x 410mm)

Weight

44lbs - 77lbs (20kg - 35kg)

Eclipse HX-Delta Front Panel



Legend

Front

1. Interface Module Slots
2. CPU Cards (P1 and P2)
3. Interface Cards
4. Twin Power Supplies (behind door)

Back

1. IEC Power Supply Connectors
2. Interface Card Connector Panel Slots
3. MVX-A16-HX Analog Interface Card Rear Connector Panel
4. CPU Card Rear Panel
5. Interface Module Slots

Order Codes

ECLIPSE-HX-MEDIAN-xxP

Eclipse HX-Delta Back Panel

