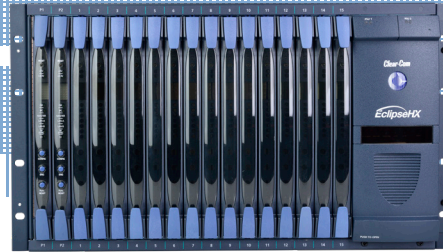


Linking
People
Together



Eclipse HX-Omega

Key Features and Benefits

- 6RU Card Frame
- Slots for 2 CPU cards and 15 interface cards
- Up to 490 audio ports
- Dual-redundant CPU-HX processors fitted as standard
- Dual-redundant power supplies fitted as standard
- 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 MAD1
- Seamless integration with FreeSpeak II, FreeSpeak Edge, Agent-IC and Station-IC
- Fully-compatible with Clear-Com V-Series and V-Series Iris panels
- Supports EHX software (Eclipse HX Configuration software)

The Eclipse® HX-Omega is an advanced, large-size solution for a highly scalable and high-density digital matrix system that can have up to 490 audio ports in a 6RU rack space.

Description

The Eclipse HX-Omega is a six rack unit (6RU) matrix intercom system frame with slots for two CPU cards and 15 interface cards. Two internal power supplies are provided. RJ45 and fiber-optic connectors are located on the rear of the chassis, connecting the matrix to a wide range of interfaces and user panels by a variety of media.

Interface Cards

Serving as the central hub for connecting 16 to 490 ports of audio channels per 6RU system, the Eclipse HX-Omega 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-IPA-xx-HX (16-64 IP connection), and MVX-A16-HX (analog RJ45) card. The E-FIB-HX (fiber connection) card can connect Eclipse matrices together to expand existing intercom systems into larger systems.

Interface Modules

External to the HX-Omega matrix frame, interface modules are supported in optional 1RU and 3RU IMF frames. Interface modules convert the 4-wires from an MVX-A16 matrix port to other types of signals that communicate with devices such as telephones, two-way radios, camera intercoms, partylines, and other forms of external communication.

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, IP, MAD1, Dante 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 or Eclipse HX-Delta Lite. 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

0dBu is referenced to 0.775 volts RMS

Matrix Capabilities

Maximum Expansion Cards: 15
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: 15
Maximum E-IPA Port Cards: 5
Maximum E-QUE, IVC-32 Port Cards: 6
Maximum E-DANTE64, E-MADI64 Port Cards: 7
Maximum RJ45 Ports per Matrix: 240
Maximum Timeslots: 490

Matrix Performance

Sample Rate: 48kHz
Resolution: 24bit
Frequency Response: at 48kHz sampling: 30Hz - 22kHz ± 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 267 x 410mm)

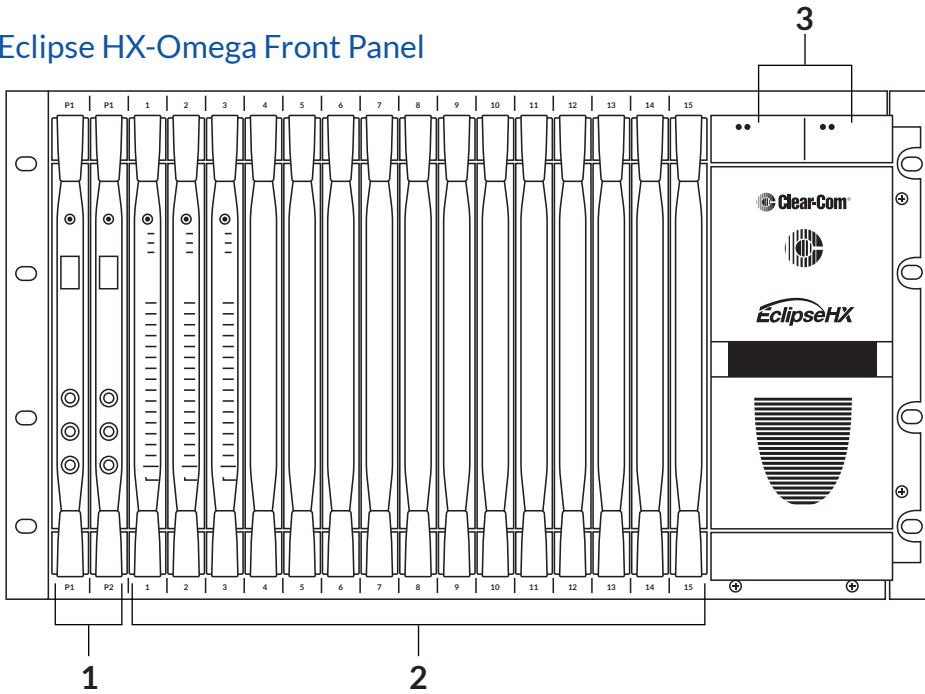
Weight

44 - 77lbs (20 - 35kg)

Eclipse HX-Omega

Eclipse HX Digital Matrix Solutions

Eclipse HX-Omega Front Panel



Legend

Front

1. CPU Cards (P1 and P2)
2. Interface cards
3. Twin power supplies (behind door)

Back

1. IEC power supply connectors
2. Interface card rear connector panel slots
3. CPU card rear panel

Order Codes

Eclipse HX-Omega

Eclipse HX-Omega Back Panel

