
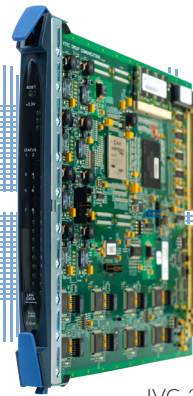


IVC-32-HX Interface Card

For Eclipse® HX Matrix Systems



Linking
People
Together



IVC-32-HX Interface Card

Key Features and Benefits

- Up to 32 independently configurable AoIP channels per IVC-32-HX card
- Compatible with Eclipse-HX Delta, Median and Omega frames
- Each channel optimized for LAN, WAN and Internet
- G.722 audio compression/decompression on all channels
- IP connection to V-Series panels, Agent-IC and Concert clients
- IP connection to Eclipse-HX and LQ Series
- Intercom plus 2 auxiliary channels for V-Series panels
- N+1 card redundancy
- AES-128 encryption on all channels
- FEC (Forward Error Correction) on all channels
- Silence suppression on all channels

Interface cards are 6RU frame cards for the Eclipse HX-Delta, Median and Omega system frames that establish intelligent connections for high density, high performance and high reliability.

Description

Each IVC-32-HX card channel can support a range of intercom end points, including V-Series panels, Agent-IC clients, LQ Series devices, Concert clients and other Eclipse-HX systems. Eclipse HX Configuration Software (EHX) configures the channel for its intended application and also provides a dedicated IP Manager screen to monitor connections and add users.

Connection to V-Series Panels

All V-Series user panels support two matrix connections as standard, one RJ-45 for conventional direct cabling using CAT5 and a second for an Ethernet/IP connection. The Ethernet/IP option allows any diverse range infrastructure to be connected to the panel, including, local LANs, microwave links or 3G cellular networks. In each case, the system optimizes connection parameters for the selected network type. In addition to providing intercom over IP, V-Series panels can optionally route up to two auxiliary audio channels from the matrix, transforming each panel into an intercom panel and audio distribution node.

Connection to Agent-IC Mobile Clients

Agent-IC is a software-based intercom client for smartphone and tablet devices. Each Agent-IC device requires a single IVC-32-HX channel, which is configured by EHX. Audio is encrypted to AES-128 and silence suppression is available as an option to reduce data usage. Agent-IC clients are typically connected over WiFi, 3G or LTE networks.

Connection to LQ Series

LQ Series are IP interface devices. The IVC-32-HX card allows remote LQ Series devices to connect 2-wire, 4-wire, 2-way radio and/or third-party intercom systems over IP networks. The LQ Series devices can also be networked together to bridge multiple location conference and/or partyline channels.

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Connection to Concert

Concert is an independent server-based intercom platform which supports MS-Windows based intercom clients. In addition to functioning as a standalone intercom system, Concert can reroute its clients to connect to the Eclipse-HX matrix via an IVC-32-HX interface card. In this case, each Concert client requires a single IVC-32-HX channel configured by EHX.

Connection to Eclipse-HX Matrices

IVC-32-HX IP channels can also be configured to implement either trunk lines or intelligent tie lines to other Eclipse-HX systems. Trunk lines are allocated on demand to service inter-matrix intercom requests. Tie lines are nailed up connections, which are always available to connect audio resources in one matrix to another. Up to 64 matrices may be linked together to form one logical system.

Technical Specifications

Maximum cards per frame: 4, 6 for HX-Omega frames.

Ports per card: 32

Network

CODEC: G.722 CODEC, 16kHz sample rate (@64kbps)

Connectivity: CAT5

IP addressing: Static and DHCP

Network compatibility: Layer 1 and Layer 2: LAN, WAN, VPN infrastructure. Routable via 3G, 4G, LTE data services

Physical LAN: 100BASE-T Full-Duplex (Auto-negotiation not supported)

Audio

Audio Passband: 100Hz - 7kHz

Latency: 45ms for LAN connected V-Series panels

Minimum Network bandwidth required per duplex connection: 140kb/s per each direction

Ports required: 1

Protocols used: TCP/IP, UDP

Quality of Service: TOS set for Priority, Immediate and Critical

Power

(front and rear cards combined)

+3.3V 3.5A

+5V 0.7A

+12V 0.05A

Environmental

Operating Temperature:

+32° F to +104° F (0° C to +40° C)

Storage Temperature:

-67° F to +158° C (-55° C to +70° C)

Humidity: 40 - 90%, non-condensing

Dimensions

Height: 6RU (vertically in Eclipse HX-Median and Omega frames, or horizontally in Eclipse HX-Delta frames)

Depth:

Front Panel: 11.8in (300mm)

Rear Panel: 2.28 (58mm)

Weight

Front Card: 1.64lbs (0.75kg)

Rear Card: 9.2oz (0.26kg)

IVC-32-HX IP Connections

